Abila Millennium

Installation Guide

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Contents

Chapter 1: Getting Started

The *Abila Millennium Installation Guide* includes combined instructions for both new installations and upgrade installations of Abila Millennium. The most current version of this guide is available for download from the Abila Knowledgebase or from the Millennium product page.

Chapter Overview

Chapter 1: Getting Started—This chapter describes the Abila Millennium components, system requirements, and the Help system.

Chapter 2: Installing the Web Server (IIS) and Database Server—Preliminary tasks, considerations and instructions for installing and upgrading the Web Server (IIS) and Database Server.

Chapter 3: Installing the Reporting Server—Tasks, considerations and instructions for installing and upgrading the Reporting Server component of Abila Millennium.

Chapter 4: Configuring Workstations for Millennium—Configuration settings for workstations and mobile devices that will access Abila Millennium.

Chapter 5: Display and System Settings—Additional Display Options, System Options, and System Information settings to perform in Abila Millennium software after the Web Server (IIS), Database Server, and Reporting Server components have been installed and configured. Also includes the passwords for the File Search, Log Off User, Merge ID, and User Dump utilities.

Appendix Overview

Appendix A: IIS Services and Features—Use the information in this section to verify that the appropriate roles and features

Appendix B: Creating the Web SQL ODBC Connection to your Database—Instructions for creating the Web SQL ODBC connection to your database; instructions are for both SQL Server and Oracle platforms.

Appendix C: Abila Millennium and SMTP—About Simple Mail Transfer Protocol (SMTP) in relation to Abila Millennium.

Appendix D: Installing and Running the Queue—Includes information about running the reporting Queue as a Windows Service, or running the Queue as an application.

Appendix E: Defining Printers—Includes information about using the Printers utility (Printers.exe) to define Abila Millennium printers.

Appendix F: Installing the Sample Database—Includes instructions and considerations for installing the Abila Millennium sample database.

Appendix G: Database Changes—Contains the database changes for recent releases of Abila Millennium.

Abila Millennium Components

When you install Abila Millennium, you will be setting up the following components.

- **Web Server (IIS)**—The Web Server (IIS) component provides content to the client workstations. After you install the Abila Millennium files, you need to configure the Web Server (IIS) to run and serve the content correctly.

- **Database Server**—The Database Server hosts the Abila Millennium database.

- **Reporting Server**—The Reporting Server enables you to generate the reports you need. This server can access data in your production Abila Millennium database, or you can replicate that data to another database and this server can access the replicated database. In some smaller configurations, you can install and run the Reporting Server and Web Server (IIS) on the same machine.

- **Client Workstation**—You can access Abila Millennium from any computer with a supported browser.

Note:
Support for the Abila Auto Update utility has been removed from Millennium. You will no longer receive updates about Millennium from this utility. However, the installation process will not uninstall the Abila Auto Update. If you have no other Abila products, you can remove the utility from the Millennium server by using the Windows Control Panel.

System Requirements

System performance is affected by a variety of factors including hardware, network configuration, database size, number of concurrent users, and competition for resources by other programs. The latest Abila Millennium system requirements are available at
http://www.abila.com/solutions/millennium.

These requirements can be scaled up depending on the size and complexity of your data and processing requirements. You should meet or exceed these system requirements for Abila Millennium.

Important! Windows XP and SQL Server 2005 are no longer supported .

Notes:
Microsoft Internet Explorer 11.0 is required for Millennium Version 2017.1. Earlier versions of Microsoft Internet Explorer will not work with the Millennium Reporter. In addition, *Compatibility View must be turned off*. See "Remove Compatibility View" (page 42) for more information.

The Help System

The Abila Millennium online help provides an easy way to get help when you need it. There is a wealth of information available that you can use daily to help you in your work. By exploring and reviewing online help, you learn to use the system quickly, effectively, and efficiently.

Once you have successfully logged on to the system, the Abila Millennium Explorer displays in a narrow pane to the left of the display pane (the display pane is the larger one to the right). When the Abila Millennium Explorer is first shown, each Explorer item is listed with a small graphic. The **Help** item gives you access to the Abila Millennium Help system as well as other informative fund-raising topics. Expand the **Help** Explorer item, and select **Help Contents**. Abila Millennium **Help Contents** opens in a new browser window or tab. Click a topic link, or use the **Contents**, **Index**, and **Search** components (in the Help system's navigation pane) to find and display the information you need.

The navigation toolbar (across the top) contains several controls. If you point to each control, a tip will tell you what the control does. Once you have located and displayed a topic, use **Quick Search** to help pinpoint the information that you want. Return to **Help Contents** at any time by clicking **Home** 🏠. As you move from one topic to the next, the navigation toolbar and the navigation pane will persist. However, you can click the **Navigation** button 🖥 to hide the navigation pane, and click that button again when you want to re-display the navigation pane.

Help can also be accessed from data display pages by pointing to any **Edit** button 🗐 and clicking **Help**. The topic related to the area of the system in which you are working opens in a new browser window or tab. For example, if you are entering a new Proposal for a constituent, then the *Proposal* topic will be shown. The topic includes the **Open topic with navigation** link at the top of the page. Click this link if you want to display the topic with the Help system's Navigation pane and Navigation toolbar.

Help can also be accessed when performing system-related tasks. This includes setting System Options and System Information. Click the **Help** ❓ button to display the topic (or section within the topic) that

relates to the system task that you are performing. The topic will open in a new browser window or tab, and also include the **Open Topic with navigation** link.

Chapter 2: Installing the Web Server (IIS) and Database Server

This chapter discusses the installation of the Web Server (IIS) component of the Abila Millennium system. Installing the Web Server (IIS) involves performing the following tasks. Each task will have its own set of steps to complete and concepts to consider.

- Preparing to install Abila Millennium on the Web Server (IIS) computer.

- Preparing the Abila Millennium database for conversion to version 2017.1.

- Running the Installation program to install the necessary files on to the Web Server (IIS). You will also have the option to have the installation program convert your database to version 2017.1.

- Creating the Anonymous Access User and Queue User accounts.

- Configuring the Web Server (IIS) and related files so that Abila Millennium runs in your environment, and so that you can access other Abila Millennium components.

- Manually convert your Abila Millennium database to version 2017.1. Follow these steps if errors were encountered during the database conversion process, or if you did not choose to have the installation program do the database conversion program for you.

- Considerations for upgrading SQL Server organizations that maintain custom views for Abila Millennium data entry purposes.

Once you have completed the tasks that are detailed in this chapter, proceed to install the Reporting Server (Chapter 3: Installing the Reporting Server), configure individual workstations so that Abila Millennium can be accessed by your users (Chapter 4: Configuring Workstations for Millennium), and then complete the additional display and system configuration tasks that are outlined in Chapter 5: Display and System Settings.

Preparing to Install the Web Server component on the IIS Server

Before installing the Web Server component of Abila Millennium, complete the following:

1. Verify that the target Millennium Web Server (IIS) meets or exceeds the current system requirements. The latest Abila Millennium system requirements are available at http://www.abila.com/solutions/fundraisingcrm/millennium/system-requirements/.

2. Verify that you have the most current version of this guide. The current version is available for download at http://kb.abila.com.

3. Back up the Web Server (IIS) computer so that the system can be restored.

4. Verify that the IIS roles and features are correctly installed on the web server. This includes the **Web Server (IIS)** Role and the applicable (to your server) **ASP.NET** Application Development feature. See"IIS Services and Features" (page 52) for a complete list of necessary roles and features.

    a. Open the IIS Manager (**Start>Server Manager>IIS**).

    b. Scroll to the **Roles and Features** section, and compare the installed features with the list in "IIS Services and Features" (page 52).

    c. Install any missing roles or features by using the Add Roles and Features wizard or by using Windows PowerShell commands.

5. **Upgrading organizations**, you must be running Abila Millennium version 2014.1, 2015.1, or 2016.1. You cannot upgrade directly from a version that is earlier than version 2014.1.

    If you are on version 2013 or earlier, you must incrementally upgrade your Web Server (IIS) *and* convert your database through all of the major versions that were released after your version, up to and including version 2014.1. For example, if your Abila Millennium version is 7.9, install version 2013 and version 2014.1 before installing 2017.1.

6. **Upgrading organizations**, if you do not own a Sage product, you can uninstall Sage Advisor Update from the IIS computer.

    Note: Sage E-marketing and Sage Payment Solutions are two examples of Sage products that you may currently own. If you own at least one Sage product, then do not remove Sage Advisor Update.

7. For **Online Constituent Directory** (OCD) organizations that are upgrading: back up the custom OCD templates (to another location) before installing the upgrade..

    These templates are located in the **\inetpub\wwwroot\mill\ecomm** directory.

8. For the organizations that use custom report templates (.txt files) and are upgrading: back up the custom report templates (to another location) before installing the upgrade.

    These templates are located in the **\inetpub\wwwroot\mill\java\customtemplate** directory.

9. For the organizations that use Site-Specific Help procedures and are upgrading: back up Site-

Specific Procedures (to another location) before installing the upgrade.

Site-Specific Help procedures are help *html* files that begin with *SSP* or *ssp*, and are located in the **\inetpub\wwwroot\mill\help** directory.

10. Crystal Reporting software (used by report writers at your organization) *cannot* be installed on the Web Server (IIS) computer.

    If Crystal Reporting software is currently installed, remove it before installing Abila Millennium. See *KB article 1086* for information about Crystal compatibility.

11. Review the database engine settings in the *Database Engine Settings* section below. Configure your settings accordingly.

12. Review the considerations and complete the steps in the *Preparing to Convert the Database* section of this chapter.

Database Engine Settings

Microsoft SQL Server

1. The collation on the **milldata** and **millreports** database must match, and we recommend using **Latin 1_ General_BIN**. However, if the **master** and **tempdb** databases have a collation other than **Latin 1_ General_BIN**, you may need to select a different collation. To eliminate collation issues when joining on chapter columns between databases, the **milldata**, **millreports**, **master**, and **tempdb** databases should have the same collation. Regardless of character set, use a **BIN** (binary) sort.

2. Set the compatibility level on the **milldata** and **millreports** databases to the level that corresponds to your SQL Server version.

    a. Open SQL Server Management Studio.

    b. Right-click on the name of the Abila Millennium (**milldata**) database and select **Properties**.

    c. Select the **Options** tab. Verify the **Compatibility Level** is set to the correct level.

    d. Repeat **Steps 2b** and **2c** for the **millreports** database.

3. The **Auto Shrink** Microsoft SQL Server database option can degrade performance and cause Abila Millennium utilities and reports to stop running. Disable **Auto Shrink** on the Abila Millennium database (**milldata**) and manage the database size manually.

a. Open SQL Server Management Studio.

b. Right-click on the name of the Abila Millennium (**milldata**) database and select **Properties**.

c. Click the **Options** page.

d. Under **Automatic**, set **Auto Shrink** to **False**.

Oracle

The recommended NLS_CHARACTERSET is WE8MSWIN1252 to support the special characters that are used by the application.

Preparing to Convert the Database

1. If you are installing Abila Millennium for the first time, you must identify or create the database for the application to use.

2. Create the Web SQL ODBC connections at the Web Server (IIS) computer. Upgrading organizations may only need to verify that the correct Web SQL ODBC connections are present. If necessary, refer to Appendix B: Creating the Web SQL ODBC Connection to your Database for procedures.

3. If you are upgrading Millennium, review the following tasks and considerations to prepare your database for conversion:

    a. Back up the data database (**milldata**).

    b. For SQL Server organizations, back up your **millreports** database.

    c. The {transaction number + create user} combination is used when linking secondary data to the gifts/dues row. Duplicate {transaction number + create user} combinations can cause data integrity issues when linking secondary data. During the upgrade database conversion process, the **Gift** table and **Dues** table will be checked for duplicate {transaction number + create user} combinations. An error message will tell you if your tables contain duplicates, and a table of duplicates will be created in your Abila Millennium database. Manually correct your duplicate entries by making the {transaction number + create user} combination unique, and delete any incorrectly linked secondary data.

    d. If you are upgrading Millennium, the database conversion adds the following *system-required* entries into the report_groups and memory_names lookup tables. If drivX (where X is any value, or blank) codes already exist in your report_groups lookup table, or the abila1, abila2, abila3, or abila4 codes already exist in your memory_names lookup table, manually change

your codes before you upgrade or certain Millennium Drive features will not function properly. If you already have the same values as our standard values for abila1, abila2, abila3 and abila4, you can change our standard values after you upgrade.

Lookup Table	Code	Value
report_groups	driv	Drive **Note:** Reports that are saved into this report group and published in PDF or HTML format can be viewed in Millennium Drive.
memory_names	abila1	Total Giving
	abila2	Consecutive Years Giving
	abila3	Largest Gift
	abila4	Total Giving Year to Date

e. If you are upgrading from version 2014.0.x, the database conversion adds three standard numeric Summary utility definitions and a standard Years utility definition that use the abila1, abila2, abila3 and abila4 memory names.These definitions will be used when running the new **Consecutive Years Giving Abila2, Largest Gift Abila3**, **Total Giving Abila1**, and **Total Giving Year to Date Abila4** Financial reports. These new Financial reports run the **Summaries** utility or the **Years** utility to create records in the Summaries data table that will display in Millennium Drive.

Organizations can have only one Years Utility definition. If you already have one, the database conversion program *will not overwrite* it.

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Note: If you have an existing Years Utility definition, and you want Consecutive Years Giving to display in Millennium Drive, then you will need to either edit your definition for **Consecutive Years** (after the upgrade) to use the abila2/Consecutive Years Giving memory name, or customize the Millennium Drive **Summary** page to display your **Consecutive Years** definition.

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f. The database conversion adds any updates required for the upgrade. There were no specific database changes for version 2016.1. For information about previous changes, see Appendix G: Database Changes

Installing the Web Server (IIS) Files

The Web Server (IIS) installation program allows you to install or upgrade Abila Millennium on the Web Server (IIS) computer.

1. Complete the steps that are listed under the *Preparing to Install Abila Millennium on the Web Server (IIS)* section of this chapter (above).

2. Review the considerations and complete the steps that are listed under the *Preparing to Convert the Database* section of this chapter (above).

3. *At the Web Server (IIS) computer*, log on as a site administrator with administrative privileges on the computer and with full access to all directories in **\inetpub\wwwroot\mill**.

4. Double-click on the self-extracting zip file. Enter the path and name of the directory into which to extract the installation files, or accept the default. The directory path and name cannot contain spaces. If they do, then an **Error during execution** message is displayed.

5. If the installation program does not start automatically, browse to the directory into which the installation files were extracted and click **AutoRun.exe**.

6. When the installation program begins, click **Install Millennium Web Server**.

7. The installation program checks for components that are needed on the computer before the IIS Server can be installed. If one or more of the following items are missing, the installation program will display the install requirements page.

   - Microsoft .NET Framework 4.5 Full

   - Microsoft Visual C++ 2012 Redistributable Package update 4 (x86)

   - Crystal Reports 2008 SP4 run time components

8. Click **Install** to install the prerequisite components.

9. On the welcome page, click **Next** to proceed.

10. The **Customer Information** page is shown only if you are installing Abila Millennium for the first time. Type the **Serial Number** and **Registration Number** that was provided to your organization. Click **Next**.

    If you are upgrading, the installation program will not show the **Customer Information** page to prompt you for your registration information.

11. On the **Destination Folder** page, indicate the location where Abila Millennium will be installed. You can accept the default location or click **Change** to specify a different one. Click **Next**.

12. On the **Install Options** page, select the database engine option that applies to your organization and check the **Start upgrade of your database to 2017.1 at end of installation** box if you want to automatically launch the conversion of the database to version 2017.1 after the installation program completes. Click **Next**.

    If you do not select this check box, then you must manually convert your database after installing the Web Server (IIS).

13. On the **Ready to Install the Program** page, click **Install**.

14. The system might display a pop-up message that asks if you want to **uninstall Crystal reports 2008 runtime**. Click **No** to prevent the upgrade process from removing existing Crystal runtime reports from the system.

15. When the installation is complete, the **InstallShield Wizard Completed** page displays to indicate that the Web Server (IIS) was successfully installed. Click **Finish**.

16. The database conversion program will launch automatically if you selected the **Start upgrade of your database to 2017.1 at the end of installation** option. Follow the steps appropriate for your database engine in *Manually Converting the Abila Millennium Database*, beginning with **Step 2**. For more information about recent database changes, see Appendix G: Database Changes.

    If database conversion errors occur:

    - Database conversion errors are written to a log file. Review **X:\inetpub\wwwroot\mill\tools\log\conv2017_1.log** for errors.

    - Correct errors as necessary.

    - Run **conv2017_1.exe** (the database conversion program) from the **X:\inetpub\wwwroot\mill\tools** directory.

17. Review the considerations in the *User Accounts* section of this chapter and create the Anonymous Access User and Queue User accounts as needed.

    Note: Creating the Queue User accounts is an optional step at this point in the installation process.

18. Perform the Web Server (IIS) configuration tasks to complete the installation and configuration process. Steps are provided in *Configuring the Web Server (IIS)*.

User Accounts

Anonymous Access User

The IIS Server and all Reporting Server computers must have a common user account to use as the Anonymous Access User. Use a domain account, or a local user account that can be recreated on the Reporting Server computers. An account that is recreated on Reporting Server computers must have the identical user name and password as the account on the IIS Server.

You must use a custom domain or user account as the Anonymous Access User if your system is distributed over different computers. You cannot use the IIS **IUSR** built-in account because the password on the built-in IIS user account cannot be set, so the account cannot be recreated on another computer.

Create a custom Anonymous Access User or identify an existing domain or local user account to use for Anonymous Access.

Queue User

The Queue User is the user who runs the Queue on the Reporting Server. A user account must exist on the Reporting Server for the Queue User. An *identical* user account must also exist on the Web Server (IIS) computer for every Queue User at your organization.

If the Queue runs as an application: the Queue User is the user who logs on to the Reporting Server computer. Identify the Queue User for each Reporting Server computer that is used by your organization. Verify that each Queue User has an identical account on the Web Server (IIS) computer. If not, then create one. The user name and password on the Web Server (IIS) computer must be identical to the Queue User name and password on the Reporting Server computer.

If the Queue runs as an application, you can identify the Queue Users when you install the Web Server (IIS), or you can identify your Queue Users when the Reporting Server is installed, and then return to the Web Server (IIS) computer to apply the necessary shares and permissions for the Queue Users.

If the Queue runs as a service: the Queue is installed as a service after the Reporting Server is installed. The program that is used to install the Queue as a service can create the Queue User on the Reporting Server and on Web Server (IIS) computers at that time.

If you install the Queue as a service, then you must return to the Web Server (IIS) computer to apply the necessary shares and permissions for the Queue User.

For more information about the Queue, review *Appendix D: Installing and Running the Queue*.

Configuring the Web Server (IIS)

The following steps configure the settings that are necessary for successful Abila Millennium operations. They apply to both new organizations and to organizations that are upgrading. For upgrading organizations, some of these steps may not be necessary to **_perform_**, but it is important to review all steps in order to insure that your settings are correct. These steps are performed at the Web Server (IIS) computer.

1. Access the Internet Information Services (IIS) Manager by navigating to **Start>Control Panel>Administrative Tools>Internet Information Services (IIS) Manager**. **_Run as administrator_**.

2. **Upgrading organizations (from version 2013 only)—**Remove the **Millsecure** ISAPI filter at the Default Web Site level:

   a. On the **Connections** pane, go to **Sites>Default Web Site>Features View** tab.

   b. In the **Features** list section, under IIS, click **ISAPI Filters**.

   c. On the **Actions** pane, click **Open Feature**.

   d. In the **Filters** list, click **Millsecure**.

   e. On the **Actions** pane, click **Remove**.

3. **Upgrading organizations (from version 2013 only)—**If the **Millsecure** ISAPI filter exists at the Server level, remove it:

   a. On the **Connections** pane, expand (if necessary) the name of the server. Select the **Features View** tab at the bottom of the center pane (if necessary).

   b. In the **Features** list section, under IIS, click **ISAPI Filters**.

   c. On the **Actions** pane, click **Open Feature**.

   d. In the **Filters** list, click **Millsecure**.

   e. On the **Actions** pane, click **Remove**.

4. Set the **Feature Delegation for Handler Mappings and for Modules** to **Read/Write** at the server level.

   a. Select the **Features View** tab at the bottom of the center pane (if necessary).

   b. In the Features View section, under Management, double-click **Feature Delegation**.

   c. To set the Feature Delegation for Handler Mappings and for Modules at the Default Web Site level only, on the **Actions** pane, click **Custom Site Delegation**.

   d. Select **Handler Mappings** on the delegation list. On the **Actions** pane, click **Read/Write**.

   e. Select **Modules**. On the **Actions** pane, click **Read/Write**.

5. The installation program added the Application Pool for Abila Millennium, and named it **MillAppPool**. Set the MillAppPool Identity to the Anonymous Access User and configure other settings for MillAppPool:

   a. On the **Connections** pane, expand (if necessary) the name of the server.

   b. Click **Application Pools**.

   c. In the center pane, click **MillAppPool**.

   d. On the **Actions** pane, click **Advanced Settings**.

   e. In the **Process Model** section, set **Identity** to the Anonymous Access User.

     i. Click **Identity**.

     ii. Click the ellipsis button.

     iii. Select the **Custom account** option.

     iv. Click **Set**.

     v. On the **Set Credentials** dialog, type in the Anonymous Access User **User name**, **Password** (and **Confirm password**), and click **OK**.

     vi. On the **Application Pool Identity** dialog, click **OK**.

   f. In the **(General)** section, set **Start Mode** to **AlwaysRunning** if using Windows Server 2012.

   g. If you are running on a 64-bit operating system, in the **(General)** section, set **Enable 32-Bit Applications** to **True**.

   h. Click **OK**.

6. At the Default Web Site level, verify that the **Status** for Anonymous Authentication is set to **Enabled** and set the **Anonymous Authentication Credentials** to the Anonymous Access User.

    a. On the **Connections** pane, expand **Sites**.

    b. Click **Default Web Site**. Select the **Features View** tab at the bottom of the center pane (if necessary).

    c. In the Features View section, under IIS, double-click **Authentication**.

    d. Click **Anonymous Authentication**.

    e. If the **Status** for Anonymous Authentication is not set to **Enabled** on the **Actions** page, click **Enable**.

    f. On the **Actions** pane, click **Edit**.

    g. Select the **Specific user** option.

    h. Click **Set**.

    i. On the **Set Credentials** dialog, type in the Anonymous Access User **User name**, **Password** (and **Confirm password**), and click **OK**.

7. Restart the IIS.

    a. On the **Actions** pane, under **Manage Web Site**, click **Restart**.

8. Verify that the World Wide Web Publishing Service is running. If you will be utilizing the Millennium Assignment Service, verify that the Assignment Service is running.

    a. **Start>Control Panel>Administrative Tools.**

    b. Double-click **Services**.

    c. In the Services list, locate **World Wide Web Publishing Service** (and **Millennium Assignment Service**, if wanted). Verify that the service status is **Running**. If not, right-click the service and click **Start**.

9. Enable "Log on Locally" rights for the Anonymous Access User (MillAppPool Identity).

    a. **Start>Control Panel>Administrative Tools>Local Security Policy**. *Run as administrator*.

    b. On the **Security Settings** pane, expand **Local Policies**. Click **User Rights Assignments**.

    c. Double-click the **Allow log on locally** (or **Log on locally**) security setting. Add the Anonymous Access User, and click **OK**.

10. Use **Table 1: IIS Server Security and Share Permissions** to share directories and to grant directory security and share permissions. Be aware that at the time you install or upgrade Abila Millennium, it is possible that not all Queue User accounts exist on the IIS Server computer. After you install a Reporting Server, you might need to return to the IIS Server to set these directory share and security permissions for the Queue User.

Directory	Share?	Security Permissions	Share Permissions
\inetpub\wwwroot\mill\bits	No	Anonymous Access User (MillAppPool Identity) - Full Control	
\inetpub\wwwroot\mill\de	No	Anonymous Access User (MillAppPool Identity) - Full Control	
\inetpub\wwwroot\mill\Docs (or the virtual directory containing the Docs folder, if you are not using the default location	Yes	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control All Users who will be attaching documents to data rows (attachments) - Write	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control

Table 1: IIS Server Security and Share Permissions

Directory	Share?	Security Permissions	Share Permissions
\inetpub\wwwroot\mill\Exports	Yes	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control
\inetpub\wwwroot\mill\Formats (SQL) or \inetpub\wwwroot\mill\OracleFormats (Oracle)	Yes	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control All Users who will be creating and editing report formats - Full Control	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control All Users who will be creating and editing report formats - Full Control
\inetpub\wwwroot\mill\reports	Yes	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control

Table 1: IIS Server Security and Share Permissions (continued)

Directory	Share?	Security Permissions	Share Permissions
\inetpub\wwwroot\mill\reports\import	No	Anonymous Access User (MillAppPool Identity) - Full Control	
\inetpub\wwwroot\mill\tools\log	No	Anonymous Access User (MillAppPool Identity) - Full Control	
\inetpub\wwwroot\mill\tools\WebReports	No	Anonymous Access User (MillAppPool Identity) - Full Control	
\windows\temp	No	Anonymous Access User (MillAppPool Identity) - Full Control Queue User - Full Control	
\inetpub\mailroot (only if using SMTP with Abila Millennium)	No	Anonymous Access User (MillAppPool Identity) -Write	

Table 1: IIS Server Security and Share Permissions (continued)

11. For Oracle organizations - grant the Anonymous Access User (MillAppPool Identity) *Read & Execute*, *List Folder Contents*, and *Read* on the **Security** tab of the directory in which the Oracle client tools are installed.

12. At the ***root for*** the **JSI FundRaising Systems, Inc**. registry key, grant **Full Control** permissions to the Anonymous Access User (MillAppPool Identity).

    a. Access the Registry Editor:

        i. Access the Run command by pressing the Windows logo key + R.

        ii. In the **Open** box, type **regedt32**, and click **OK**.

    b. Navigate to **HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node**.

    c. Right-click on **JSI FundRaising Systems, Inc.** and click **Permissions**.

    d. Under **Group or user names**, select the Anonymous Access User (MillAppPool Identity) name.

    e. Under **Permissions for <name of user>**, select the **Allow** check box for **Full Control**

    f. Click **OK**.

13. The SMTP Service must be installed and running on the Web Server (IIS) in order to utilize the Assignments e-mail Notifications feature. And, if your organization uses the Online Constituent Directory, SMTP Service must be installed and running in order to send log on credentials to the constituents who forget user names and/or passwords. SMTP is installed and configured by your organization's IT Department.

    a. You will need to inform them that it must be installed to **X:\inetpub\mailroot** in order for it to work with Abila Millennium.

    b. At the Web Server (IIS), verify that the SMTP Service is started.

        i. **Start>Control Panel>Administrative Tools.**

        ii. Double-click **Services**.

        iii. In the Services list, locate **Simple Mail Transfer Protocol (SMTP).** Verify that the service is **Running**. If not, right-click the service name and select **Start**.

    c. Review additional Setup, Configuration, and Testing considerations in *Appendix C: Abila Millennium and SMTP*.

14. SSL must be implemented for both Abila Millennium and Millennium Drive.
    When SSL is enabled, Java controls are not used when users log on to Abila Millennium. One benefit is that iPad users can access the full Millennium interface.

Manually Converting the Abila Millennium Database

conv2017_1.exe is the utility that converts your database to Abila Millennium 2017.1. You will run the conversion utility if you did not convert your database while installing the Web Server (IIS). You will also run **conv2017_1.exe** if database conversion errors occurred when installing the Web Server (IIS).

To manually convert your SQL Server database:

1. Navigate to **\inetpub\wwwroot\mill\tools** and double-click **conv2017_1.exe**.

2. Select the **MS SQL Server** Destination Type.

3. Type the Filegroup for **Data** and **Index** or leave as default.

4. Choose your error handling option.

   - Select the **Print to Log File** option for unattended execution.

   - Select the **Raise a message box** option if you wish to intervene if an error occurs. Errors will also be written to a log file if you select the **Raise a message box** option.

5. Click **File>Start**.

6. On the **Select Data Source** dialog, click the **Machine Data Source** tab and select the **Web SQL** ODBC connection.

7. On the SQL Server Login dialog, click **Options** to verify the database information.

8. Type sa in the **Login ID** box, and enter your password in the **Password** box.

9. Click **OK**. The conversion begins and the status bar displays the conversion progress.

10. If there are conversion errors, finish the installation and then review the error log file created in the **\inetpub\wwwroot\mill\tools\log** directory. Make data corrections as needed and then re-run the **conv2017_1.exe** file.

11. When the conversion has completed, click **OK**.

To manually convert your Oracle database:

1. Navigate to **\inetpub\wwwroot\mill\tools** and double-click **conv2017_1.exe**.

2. Choose **Oracle** as the destination type.

3. Fill in the Tablespace for **Data** and **Index**.

4. Choose your error handling option.

    - Select the **Print to Log File** option for unattended execution.

    - Select the **Raise a message box** option if you wish to 'intervene' if an error occurs. Errors will also be written to a log file if you select the **Raise a message box** option.

5. Click **File>Start**.

6. On the **Select Data Source** dialog, click the **Machine Data Source** tab and select the **Web SQL** ODBC connection.

7. On the **Oracle ODBC Driver Connect** dialog, verify the **Service Name** is correct.

8. Type MILLORA in the **User Name** box, and enter your password in the **Password** box.

9. Click **OK**. The conversion begins and the status bar displays the conversion progress.

10. If you receive conversion errors, finish the installation and then review the error log file created in the **\inetpub\wwwroot\mill\tools\log** directory. Make data corrections as needed and then re-run the **conv2017_1.exe** file.

11. When the conversion has completed, click **OK**.

Custom Views

This section applies only to upgrading *SQL Server* organizations who use custom views for Abila Millennium *data entry*. If you are not upgrading, or If you are an Oracle organization, or if you do not use custom views for data entry, then skip this section.

New columns are not added to custom views when the database conversion program refreshes database views. Therefore, if you have custom views that are *not* in the form of '*select * from*' on a Abila Millennium data table to which new columns have been added, you must manually add the columns to these views after the database has been converted. For more information about database changes, see Appendix G: Database Changes.

Chapter 3: Installing the Reporting Server

Installing the Reporting Server component of Abila Millennium involves performing the following tasks. Each task will have its own set of steps to complete. You must complete these tasks on every computer that will function as a Abila Millennium reporting server:

- Preparing to Install the Reporting Server

- Running the installation program to install the necessary files on to the Reporting Server computer.

- Configuring the Reporting Server.

- Configuring the Queue to run as a Windows Service or to run as an application.

After installing/upgrading and configuring each computer that will function as a Reporting Server, you will:

- Configure (or verify the configuration on) the Abila Millennium System Information page for Reporting.

- Test Reports.

Note: The following instructions apply to both new installations and to organizations who are upgrading. For upgrading organizations, some of the configuration tasks might not be necessary, but it is important to review all configuration steps to verify that your settings are correct.

Preparing to Install the Reporting Server

1. Complete the installation and configuration of the Web Server (IIS) and the Database Server.

2. Each Reporting Server must meet, or exceed, the system requirements. You can view the latest system requirements at abila.com/solutions/millennium.

3. Back up the computer so that the system can be restored (if needed).

4. Stop or close (if necessary) the Reporting Queue:

   a. If you are running the Queue as a service:

      i. **Start>Control Panel>Administrative Tools.**

      ii. Double-click **Services**.

      iii. In the **Services** list, locate and right-click **Millennium Queue Service**.

      iv. Click **Stop**.

   b. If you are running the Queue as an application: verify the **Queue.exe** application (the standard location for this application is in the **QUEUE** directory on the Reporting Server computer) is not running.

5. If you are running Abila Millennium Reporting Server versions 2014 to 2016, you can upgrade directly to version 2017.1. Reporting Server versions prior to 2014 must be *uninstalled* before you can install version 2017.1.

Installing/Upgrading the Reporting Server

The Reporting Server installation program allows you to install or upgrade an Abila Millennium Reporting Server. You must run this installation program on every computer that will function as a Reporting Server.

To install the Reporting Server on one computer:

1. Log on to the Reporting Server computer as the site administrator with administrative privileges on the computer.

2. At the Reporting Server computer, double-click on the self-extracting zip file. The installation program should start automatically. If it does not start, browse to the directory into which the install files were extracted, and launch **AutoRun.exe**.

3. Once the installation program begins, select **Install Millennium Reporting Server**.

4. The installation program performs a check for components that are required to be installed on the Reporting Server computer. If one or more of the following items are missing, the installation program will display the install requirements page.

- Microsoft .NET Framework 4.5 Full

- Microsoft Visual C++ 2012 Redistributable Package update 4 (x86)

- Crystal Reports 2008 SP4 run time components

5. Click **Install** to install the prerequisite components.

6. On the welcome page, click **Next** to proceed.

7. On the **Destination Folder** page, indicate the location where Reporting Server will be installed. You can accept the default location or click **Change** to specify a different one. Click **Next**.

8. Make sure you click **No** for the option to **Remove Crystal Reports**. Selecting **No** prevents the upgrade from removing existing Crystal reports from the system.

9. On the **Ready to Install the Program** page, Click **Install**.

10. When the installation is complete, the **InstallShield Wizard Completed** page displays to indicate that the Reporting Server was successfully installed. Click **Finish**.

11. Perform the configuration tasks to complete the Reporting Server installation and configuration process. Steps are provided in the *Configuring the Reporting Server* section in this chapter (below).

Configuring the Reporting Server

Complete the following steps to configure the Reporting Server:

1. If necessary, recreate the IIS Server Anonymous Access User (MillAppPool Identity) on the Reporting Server computer.

   Important!
   When you installed and configured the Web Server (IIS) component of Abila Millennium, you also created/identified an Anonymous Access User and then set the **MillAppPool Identity** to this Anonymous Access User. The IIS Server and all Reporting Server computers must have a common user account to use as the Anonymous Access user. You can use a domain account, or you can use a local user account that can be recreated on the Reporting Server computer. An account that is recreated on Reporting Server computers must have the same user name and password as the account on the IIS Server. If your system is distributed over different computers, then you cannot use the IIS **IUSR** built-in account.

2. At the Reporting Server computer, enable **log on locally** rights for Reporting Server's Anonymous Access User.

   a. **Start>Control Panel>Administrative Tools>Local Security Policy**. *Run as administrator*.

   b. On the **Security Setting** pane, expand **Local Policies**. Click **User Rights Assignments**.

   c. Double-click the **Allow log on locally** (or **Log on locally**) security setting. Add the Anonymous Access User account, and click **OK**.

3. The User Group to which the Queue User belongs must have *Read* and *Write* permissions to the **JSI**

FundRaising Systems, Inc. registry key. If the Queue User already exists on the Reporting Server computer (as in the case when the Queue will be run as an application, or when using an existing Queue User when you install the Queue as a service), verify that the Queue User is a member of a group that has the correct permissions to the **JSI FundRaising Systems, Inc**. registry key. If not, then the Queue User must be moved to a group with the correct permissions.

4. If you want to run the Queue as a service, follow the instructions in Appendix D: Installing and Running the Queue.

   Note: Running as a service ensures that the Queue is always available for processing reports.

5. At the Reporting Server computer, use **Table 2: Reporting Server Security and Share Permissions** to share directories and to grant directory security and share permissions. Remember that the Anonymous Access User on the Reporting Server is identical to the Anonymous Access User (MillAppPool Identity) on the Web (IIS) Server.

Directory	Share?	Security Permissions	Share Permissions
\QUEUE	Yes	Anonymous Access User - Full Control Queue User - Full Control	Anonymous Access User - Full Control Queue User - Full Control
\windows\temp	No	Queue User - Full Control	

Table 2: Reporting Server Security and Share Permissions

6. At the Reporting Server computer, create the 32-bit (*only*) ODBC Web SQL connection. If necessary, refer to *Appendix B: Creating the Web SQL ODBC Connection to your Database* for the steps.

7. The Reporting Server Queue User account must be recreated, with identical user name and password, on the Web Server (IIS) computer. This recreated Queue User account must also have specific shares and permissions to several of the directories on the Web Server (IIS) computer. If the Reporting Server Queue User does not already have an identical user account on the Web Server (IIS) computer, and/or the necessary shares and permissions for the Queue User have not yet been set on the Web Server (IIS) computer, then complete the following tasks at the Web Server (IIS) computer:

   a. Create the Queue User account on the Web Server (IIS) computer if it does not already exist. The name and password for the Queue User on the Web Server (IIS) computer *must be identical* to the name and password for the Queue User on the Reporting Server computer.

b. At the Web Server (IIS) computer, use **Table 3: IIS Server Security and Share Permissions for the Queue User** to grant directory security and share permissions to the Queue User,

Directory	Security Permissions	Share Permissions
\inetpub\wwwroot\mill\formats (SQL) or \inetpub\wwwroot\mill\oracleformats (Oracle)	Queue User - Full Control	Queue User - Full Control
\inetpub\wwwroot\mill\reports	Queue User - Full Control	Queue User - Full Control
\inetpub\wwwroot\mill\docs (or the virtual directory containing the Docs folder, if you are not using the default location	Queue User - Full Control	Queue User - Full Control
\inetpub\wwwroot\mill\exports	Queue User - Full Control	Queue User - Full Control

Table 3: IIS Server Security and Share Permissions for the Queue User

8. Verify that the following services are started.

a. The relevant database services (SQL Server or Oracle services) are started on the Database Server computer.

b. **queue.exe** (the application) is running on the Reporting Server computer if you are running the Queue as an application.

Or, **Millennium Queue Service** is started on the Reporting Server computer if you are running the Queue as a service.

c. The **World Wide Web Publishing Service** is started on the Web Server (IIS) computer.

lists the steps to follow to verify that a service is started on a Server.

Configuring System Information for Reporting

After the Reporting Servers have been installed and configured, log on to Abila Millennium as a system administrator and navigate to **Tools>System Upkeep>System Information**. Configure (or verify the existing configuration for) the **System Information** page to accurately reflect the following:

Reporting Information

Institution: The Name of your organization.

HTML Report Location: This is the directory where HTML and PDF report output files are stored. (This field must contain the UNC path to the IIS Reports directory (in the form: **\\<IIS Server name>\Reports**).

Report Template Format Location: This formats directory is the location of the standard Crystal Report format files (RPT) supplied by Abila as well any custom formats you create. Enter the UNC path to the IIS Formats directory (in the form: **\\<IIS Server name>\Formats** for SQL Server, or **\\<IIS Server name>\OracleFormats** for Oracle)

Default Format Location: Enter the UNC path to the default IIS Formats sub-directory (in the form: **\\<IIS Server name>\Formats\Bio** for SQL Server, or **\\<IIS Server name>\OracleFormats\Bio** for Oracle).

Default Export Path: This is the default UNC path your site will use when exporting report data in DOC, XLS or other output format (**\\<IIS Server name>\<Exports>**, where **<Exports>** is the name of the directory you created). The system will send exported data to this directory. *It will not send exported data to the location of published reports*. In order for the system to send report export files to the <Exports> directory, appropriate shares and permissions must be applied. If necessary, review "Configuring the Web Server (IIS)" (page 19) for information about the appropriate shares and permissions on the <Exports> directory.

Photos Location: Enter the full UNC path for the Docs Virtual Directory. The Docs Virtual Directory is the location of the Abila Millennium Attachments. In order for the system to display photos on reports, appropriate shares and permissions must be applied. If necessary, review the "Configuring the Web Server (IIS)" (page 19) for the appropriate shares and permissions on the <docs> directory.

Reporting Queues (SQL Server)

Queue: Your name for the specified queue.

Queue Location: Enter the UNC Path to Queue.exe. (in the form: **\\<Reporting Server machine name>\Queue**).

Database Computer: This is the name of the server (as identified in your network) where the milldata database or a replicated copy of the database is located.

If you have multiple database instances on the same server, you will specify the **<server name>\<instance name>**.

Data Database: Name of your database, (case sensitive); for example, **milldata**.

Primary Database Computer: Actual system name of the Database Server where production database resides.

If you have multiple database instances on the same server, you will specify the **<server name>\<instance name>**.

Reporting Queues (Oracle)

Queue: Your name for the specified queue.

Queue Location: Enter the UNC Path to Queue.exe. (in the form: **\\<Reporting Server machine name>\Queue**).

Database Alias: Enter the Net easy connect string for the reporting database. If your reporting database is not replicated, this information will be the same as the alias for the primary database.

ODBC DSN: Enter **Web SQL**.

Primary Database Alias: Enter the Oracle Net Service name for the production database.

Replicated Databases (SQL Server)

Replicated Database Computer: Name of replicated server.

Database: Name of database on the replicated server.

Note: If you set up a replicated database, this section of the System Information page is used to register - with Abila Millennium - the name of the computer and the name of the database on that computer where the replicated database is found.

Replicated Databases (Oracle)

Replicated Database Alias: the Net easy connect string for replicating database.

> **Note:** If you set up a replicated database, this section of the System Information page is used to register - with Abila Millennium - the Net easy connect string for the replicating database.

Reporting Printers

To define printers for Abila Millennium, refer to Appendix E: Defining Printers.

Queue: The exact name of the Queue on which the printer is to be registered.

Printer Description: A meaningful name that you want to use to associate the printer with this Queue.

Printer Location: The internal code for the printer. For examples - "Ne00", "Ne01".

Printer Name: The name of the printer as it is recognized on the Queue computer. For example - **\\printserver\printer**

Printer Driver: The name of the printer driver. Often, but not always, the driver will be **winspool**.

Testing Reports

Once you install and configure the Reporting Servers and configure the reporting related components on the System Information page, complete the following tests:

- Run an unmodified standard report that includes prompts and Crystal parameters to completion (**Single Line with Gift Totals**, for example). Test the report through every Queue that you have configured.

- Verify that you can print an unmodified standard report to each of the printers that you have defined.

- Run an On-Demand report (**Full Profile** for example) for a constituent.

> **Note:** Abila Millennium makes every attempt to ensure that your custom reports will run after upgrading to the latest version of Abila Millennium. However, due to the highly customizable nature of reports, we cannot guarantee that all custom reports will run after an upgrade without modification.

Chapter 4: Configuring Workstations for Millennium

This chapter discusses configuration settings and considerations for workstations and mobile devices.

Before workstations and mobile devices can be configured for Abila Millennium, the Web Server (IIS), Database Server, and Reporting Server components must be installed and configured. See *Chapter 2: Installing the Web Server (IIS) and Database Server* and *Chapter 3: Installing the Reporting Server* for information about installing and configuring these components.

After Abila Millennium is installed and configured on the Web (IIS) and Reporting Servers, any computer that meets the workstation system requirements can access the application with a web browser.

You can view the latest workstation requirements at http://www.abila.com/solutions/millennium.

Installing and Configuring Java

Recent versions of Millennium have removed much of the Java processing from the application. Several features, however still use Java, so this step is still an important part of the installation.

✓ Before you begin, we recommend you uninstall all instances of Java that are currently installed on the computer.

Important! This is what we recommend. However, you should evaluate the java needs of other software that you use before uninstalling java.

Use the following steps to remove existing versions of Java from the computer:

1. Access the **Java Control Panel** by using **Start>Control Panel>Java**. On the General tab, in the **Temporary Internet Files** section, click **Settings**.

2. On the **Temporary Files Settings** dialog, click **Delete Files**.

3. On the **Delete Files and Applications** dialog, select all enabled check boxes, and click **OK**.

4. Click **OK** to close the **Temporary Files Settings** dialog. Click **OK** to close the **Java Control Panel** (if necessary).

5. On the **Control Panel**, click **Programs and Features**. Uninstall all instances of Java that are listed.

To install the recommended version of Java, use the following methods:

- Install Java from java.com.

- You may be redirected to a test page on the java website to verify your installation.

To Configure Java for use with Abila Millennium, use the following steps:

1. Access the **Java Control Panel** by using **Start>Control Panel>Java**.

2. On the **General** tab, in the **Temporary Internet Files** section, click **Settings**. Select the **Keep temporary files on my computer** check box, and click **Apply**.

3. Click the **Update** tab. If the **Check for Updates Automatically** check box is selected, then clear it and click **Apply**.

4. Click **OK** to close the **Java Control Panel**.

Important! After configuring Java, close all open browser windows.

Java Security Warnings

Beginning with Millennium version 2016.1, a secure connection is required for the Millennium Web Server. The log in page, which previously used a java applet for non-secure sites, will no longer be available if a certificate is not installed for the application.

However, a number of java applets do continue to run in the application. You might be required to positively acknowledge (Run or Allow) any security warnings that Java displays to continue your work. The Java security warning includes a setting that allows you to disable the warning for the Abila Millennium website and the application named on the warning.

Configuring Your Browser Settings for Use with Abila Millennium

Important! Although Abila Millennium supports multiple browsers, if you are accessing the system as a Millennium system administrator or as the database administrator, please use Internet Explorer.

Configure Your Browser Settings for Internet Explorer

To configure your browser settings for Internet Explorer:

1. Open Internet Explorer.

2. Set the text size (**View>text size**) to avoid horizontal scrolling.

3. Click the **Gear icon** at the top right corner of your browser window, and click **Compatibility View Settings**. If this item is not available from the **Gear icon**, then click on the Internet Explorer **Tools** menu and click **Compatibility View Settings**.

4. On the **Compatibility View Settings** dialog:

    a. If the Millennium URL is shown in the **Websites you've added to Compatibility View** list, select it and click **Remove**.

    b. if the **Display intranet sites in Compatibility View** check box is selected, then clear it.

5. Click **Close**. For more information about removing Compatibility View, see "Remove Compatibility View" (page 42)

Click the **Gear icon** at the top right corner of your browser window, and click **Internet options**. Complete the remaining configuration tasks on the **Internet Options** dialog:

9. On the **General** tab: In the **Browser history** section, click **Settings**, select **Every time I visit the webpage**, and click **OK**.

10. Click **Apply**.

11. Click the **Privacy** tab. In the **Settings** section, set the Internet zone to **Medium**, **Low**, or **Accept All Cookies**.

12. Click **Apply**.

13. Click the **Security** tab. Select the **Trusted Sites** zone.

14. Click **Sites**. On the **Trusted sites** dialog:

    a. Add the Abila Millennium website.

    b. If you will be processing Credit Card and Bank Draft transactions, and entering credit card number and bank account numbers (using either Sage Payment Solutions or the free Sage

Exchange Vault only), add **https://www.sagevault.com** too.

c. Click **Close**.

15. Remain in the **Trusted Sites** zone on the **Security** tab. In the **Security level for this zone** section, click **Custom Level**. In the **Settings** box:

a. Under **ActiveX controls and plug-ins** set the following options:

i. Under **Automatic Prompting for ActiveX controls**, select **Enable**.

ii. Under **Download signed ActiveX Controls**, select **Enable** or **Prompt**.

iii. Under **Initialize and Script ActiveX Controls not marked as Safe for scripting**, select **Prompt**.

iv. Under **Run ActiveX Controls and Plug-ins**, select **Enable** or **Prompt**.

v. Under **Script ActiveX Controls marked safe for scripting**, select **Enable** or **Prompt**.

b. Under **Miscellaneous** set the following option:

i. Under **Include local directory path when uploading files to a server**, select **Enable**.

c. Click **OK**.

16. Click **Apply**.

17. Click the **Content** tab. In the **AutoComplete** section, click **Settings**.

a. Clear the **Forms** and **Usernames and passwords on forms** check boxes.

b. Click **OK**.

18. Click **Apply**.

19. Click the **Advanced** tab. In the **Settings** box:

a. Under **Browsing**, set the following options:

i. Select **Disable script debugging**.

ii. Clear **Display a notification about every script error**.

iii. Clear **Use smooth scrolling**.

    b.   Under **Security**, set the following options:

       i.   Select **Do not save encrypted pages to disk**.

      ii.   Select **Empty Temporary Internet Files folder when browser closed**.

    c.   Click **OK**.

20. Click **OK** on the **Internet Options** dialog, and then close Internet Explorer.

Configuring Your Browser Settings for Firefox

The following Abila Millennium features will not work with Firefox:

- Write a Letter

- Custom Display Designer

To configure your browser settings for Firefox:

1. Open Firefox.

2. From the **Tools** menu, click **Add-Ons** to open the **Add-ons Manager**. Click **Plugins**. Locate the **Java Platform SE** item. Click **Always Activate** if it is currently set to **Never Activate** or **Ask to Activate**. Close the **Add-ons** Manager.

3. From the **Tools** menu, click **Options**.

4. On the **Options** dialog, click **Security**. Disable saved passwords for the Abila Millennium website by using one of these two options:

    a.   In the **Passwords** section, clear the **Remember passwords for sites** check box.

    b.   In the **Passwords** section, Click **Exceptions**. Add the Abila Millennium website to exceptions list, and click **Close**.
       When you first log on to Abila Millennium click **Never for this site** when you are prompted to **Save Password**.

5. Remain on the **Options** dialog. Click **Privacy**. In the **History** section, from the **Firefox will** box, select **Use custom settings for history**.

    a.   Clear **Remember search and form history**.

    b.   Select **Accept cookies from sites**.

6. Remain on the **Options** dialog. Click **Content**. If **Block pop-up windows** is selected, click **Exceptions**. Add the Abila Millennium website on the **Allowed Sites - Pop-ups** dialog, and click **Close**.

7. Click **OK** to close the **Options** dialog.

8. Firefox now enables Javascript by default. If you need to verify that Javascript is enabled, type about:config and click Enter. In the **Search** box, type in javascript.enabled. Verify **Status** is set to **default** and **Value** is set to **true**.

9. Firefox requires the **LocalLink** extension in order to use the Abila Millennium Custom Utilities feature. **LocalLink** can be downloaded from addons.mozilla.org/en-US/firefox/addon/281.

10. Firefox requires the **IE Tab** extension in order to use the Abila Millennium Upload Contacts to Outlook and Integrate Millennium Tasks with Outlook features. **IE Tab** can be downloaded from addons.mozilla.org/en-US/firefox/addon/1419.

> **Caution!** Abila Millennium data maintenance forms have data checking routines in place to insure that you enter data that conforms to database and common sense rules. If you enter data that does not pass a data checking routine, an error message is displayed. Close the message and make the needed corrections. Firefox may show a **Prevent this page from creating additional dialogs** check box on the error message. If this check box is on the error message,*do not select it*! You could be by-passing data checking routines and suppressing legitimate error messages. This may result in either generating SQL errors as the form attempts to enter invalid data into your database, or entering nonsense data into your database!

Configure Your Browser Settings for Chrome

No changes need to be made to Chrome settings in order to successfully access Abila Millennium.

On-Demand Reports

To view On-Demand reports and reports that have been published to PDF, you must have Adobe Acrobat Reader installed. Obtain Adobe Acrobat Reader for free at get.adobe.com/reader/.

Write a Letter Feature

The **Write a Letter** feature works only for Internet Explorer. To use the system's **Write a Letter** feature, one of the following versions of Microsoft Word must be installed (on the client workstation): 2002, 2003, 2007, 2010, 2013, or 2016.

Mobile Access to Millennium

The mobile directory is in the following location on the Web Server (IIS) computer: **http://www.<Server Name>.com/mill/mobile**. If your organization is upgrading to version 2017.1 from version 2013 or earlier, this is a different directory location. Every user who accesses Millennium by using a mobile device will need to update the shortcut or Favorites destination to this new location.

> **Important!** Users who plan to access Millennium from a mobile device from outside your organization's network will need to first contact the network administrator for instructions on how to do so.

Remove Compatibility View

The Millennium web site will not work with Compatibility View in Internet Explorer (IE) Version 11. IE Version 11 is required to run the most recent updates of the product, including the Millennium Reporter. So you must remove any compatibility view settings that might have been previously set for the Millennium web site when you upgrade to this version of the product.

Use the following steps to remove the Compatibility View settings from Internet Explorer:

1. Open Internet Explorer.

2. Select **Settings>Compatibility View settings**.
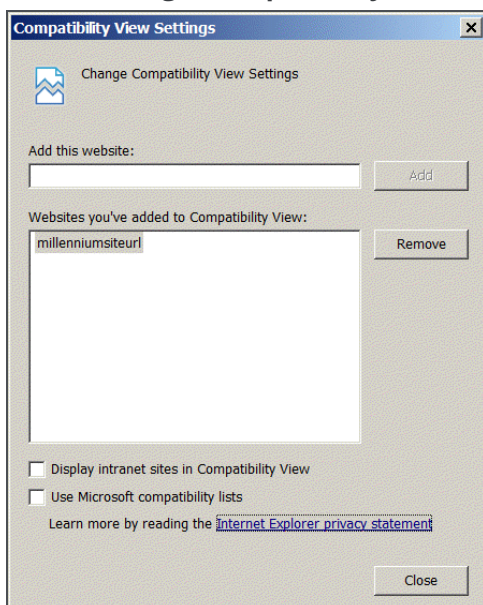
3. In the **Websites you've added to Compatibility View**, select the Millennium web site.

4. Click **Remove**.

5. Clear the check box option to **Display intranet sites in Compatibility View**.

6. Click **Close**.

Chapter 5: Display and System Settings

This chapter describes several additional installation considerations: Abila Millennium interface customizations, display options, and system options.

An Millennium system administrator should review the Display Options, System Options, and System Information.

— Back up the Database Server computer and your Millennium database so that the system can be restored if a problem occurs.

— Log on to the Database Server computer as the site administrator with administrative privileges on the computer.

— Log on as a Millennium system administrator.

Two utilities are included with the system to help you keep your ZIP code and address table up to date and this chapter provides an overview of these two utilities.

File Search, Log Off User, Merge ID, and User Dump are system administrator utilities that are accessed through the user interface. In this chapter you will find the passwords that are needed to log on to these utilities.

Saving Customized Displays and Forms

New columns have been added for **Summaries** (to the memories data table), and new columns have been added to the following lookup tables: **Action Type**, **Address Utilization**, **Attribute Types**, **Correspondence Names**, **Correspondence Type**, **Dues Types**, **Gift Types**, **Memory Names**, **Relationships**, **Table Groups**, **Tasks Type**.

If you are upgrading from version 2013.0.x or 2014.0.x, and you want to display or use the new columns, you must resave your customized data maintenance and display forms. To access the Custom Display Designer for Summaries, log on to the system as a Abila Millennium system administrator, and select in the Abila Millennium Explorer, **Tools>Display Design>Profiles**. Select **Profiles>Giving>Summaries**. To access the Custom Display Designer for Lookup tables, use **Tools>Display Design>Lookups**. Select **Lookups><the alias name of the lookup table>**.

Note: In earlier releases, **Action Type**, **Address Utilization**, **Correspondence Type**, **Dues Types**, **Gift Types**, **Memory Names**, and **Table Groups** maintenance and display forms could all be customized by using the **Standard Lookup** screen layout. Now you must use a separate screen layout to customize each of these tables. The **Attribute Types**, **Correspondence Names**, **Relationships**, and **Tasks Type** lookup tables have always used separate screen layouts.

System-wide Display Options

To access **Display Options** select **Tools>Display Design>Display Options**.

— **Default Screen Resolution**: Determines if the screen resolution is **High** or **Low**, used in reporting.

— **Spouse Button Label**: This option allows the system to display either '**Spouse**' or '**Spouse/Partner**' as the label on the **Spouse Button**. The default label display is '**Spouse**'.

— **Prospect Count Label**: The Favorites My Prospects display includes a count of the total number of prospects in the upper right corner of the display. This option allows you to display a custom label for this count.

— **Display Masks**: This determines how each encrypted columns data is displayed for **Social Security** number and **Bank Account** number for those users that have been assigned to the **Default Mask** display mask option. Enter a '9' for digits you want to display and enter '#' for digits you want masked.

Search Results Setup options

Search Results Setup options are displayed on and maintained from the **Display Options** page.

— **Search Results Display**: This option allows you to choose the columns to display on the **Search Results** page.

— **ADE Search Results Display**: This option allows you to choose the columns to display on your Advanced Data Examiner **Matching Levels Search results** display.

— **My Staff Display**: This option allows you to choose the columns to display on your Favorites **My Staff** listing.

— **My Prospects Display**: This option allows you to choose the columns to display on your Favorites **My Prospects** listing.

— **My Prospects Filters**: This option allows you to define what database fields are available to use to filter your Favorites **My Prospects** listing.

Table Options

To access **Table Options**, select **Tools>Display Design>Table Options**.

— If there are data tables not used at your organization, they can be removed from the Abila Millennium Explorer. This will not remove them from the database. Not all data tables can be removed from Abila Millennium Explorer.

— If you want to display a different name for your Custom Bio and your Custom Prospect tables, then you can type in the Display Name for either one of these two tables.

System Information

To access **System Information**, select **Tools>System Upkeep>System Info**.

— **Database Server**: Verify or edit the Database Server engine type.

— **Internet Directory**: Verify that the Internet Directory path is correct. Edit if changes are required. Enter the complete path name of the Internet Root Directory: **X:\inetpub\wwwroot\mill** (substitute the correct drive letter for X).

— **Millennium_Admin password**: The edit button allows you to modify the database password for the **millennium_admin** log on.

> **Important!** Always make **millennium_ admin** password changes through the Abila Millennium interface.

— **Registration Number**: This number is supplied with the Millennium Installation. It is a site specific number that activates the system and any addition features (such as the Advanced Data Examiner) that you have purchased. Verify that it has been entered correctly.

— **Serial Number**: This number is supplied with the Millennium Installation. It is a site specific number that works in conjunction with your registration number. Verify that it has been entered correctly.

System Options

To access **System Options**, select **Tools>System Upkeep>System Options**.

— **Remove Formatting from Comments**: Depending on the option selected, the system will remove tabs, line feeds and carriage returns from all comments when they are saved to the database (during insertion and update). Or, the comments are saved to the database in the same way as they are entered, but the formatting will be removed for display purposes only. Or the comments are saved to the database and displayed in the same way as they were entered.

— **Remove Formatting from Text Boxes**: Depending on the option selected, the system will remove tabs, line feeds and carriage returns from text that is entered in text box controls when the text is saved to the database (during insertion and update). Or, text is saved to the database in the same way as it is entered, but the formatting will be removed for display purposes only. Or text is saved to the database and displayed in the same way as it was entered.

— **Audit user log in attempts**: When this option is enabled, the system will record every attempt, successful or not, that is made to log on to Millennium.

— **Number of login failures before user lockout**: Lock users out of Millennium if they have made this number of unsuccessful attempts to log on. If you set this number to 0, then the system will not lock out users for failed log on attempts.

— **Duration of lockout**: This option can be set to allow locked out users another chance to log on to Millennium after a certain time length has passed. If you set the Duration of lockout to 0, and the Number of login failures allowed to a number greater than 0, then only a system administrator can unlock a locked out user.

— **Assignment Frequency**: This determines the amount time, in minutes, that the assignment server waits between assignment runs. The default is 5 minutes. This setting allows the system administrator to set an institutional limitation on all assignments for all users, as to the maximum frequency assignments will be checked.

— **Advisory Notification Return E-mail Address**: The Assignments and Advisory Notification components of My Millennium can be set up so that the system will generate e-mail messages to notify users when Advisories have been posted. If you wish for these notifications to have a return e-mail address, then enter it here.

— **Degrees of Separation Limitation**: This determines the number of 'degrees of separation' that each user may specify in hyperbolic Relation Tree displays. Maximum Degrees of Separation used in the Relation Tree is seven.

— **Check Preferred Names**: When set to **Yes**, the system warns users during data entry if a preferred name does not exist for a constituent or if a constituent has multiple preferred names.

— **Check Preferred Address**: When set to **Yes**, the system warns users during data entry if a preferred address does not exist for a constituent or if a constituent has multiple preferred addresses.

— **Allow Constituents who have Giving or Dues Data to be Deleted**: This option allows you to choose whether to allow the deletion of all data belonging to a specific constituent (by deleting the Basic Data row), when that constituent owns Giving or Dues transaction data rows.

— **Beginning month of Fiscal Year**: Select your fiscal year start month from the drop-down list.

— **Matching Tender Default**: Determines the default **Tender Type** for Matching Giving.

— **Display Matching Payment Schedule**: This option allows you to choose whether or not to allow for the creation of a pledge payment schedule for matching pledges that differs from the default payment schedule inserted by the system

— **Pull the Matching Ratios from the Corporation**: This check box determines whether or not the system uses the matching company or the match through constituent when creating match pledge or match potential transactions.

— **Automatically Journal Credits and Honors**: This option allows for the automatic journal of all honor and credit transactions that are linked to the Gift or Dues transaction that is being journaled.

— **Update Credits and Honors**: This option allows the system to automatically update linked credits and honors at the time of the transaction update.

— **Update Payment Transactions**: This option allows the system to automatically update the Purpose, Campaign, Class1 and Class 2 fields on payments when those fields are updated on the associated allocation.

— **Default Benefit Delivery Date**: When this option is checked and a benefit is inserted, the Benefit Delivery Date will automatically be filled in with the same date as the Membership Renewal Date.

— **Allow ID number's to be Copied from the Search Results Screen to the Clipboard**: Yes or No to allow users to save ID numbers from the results of a constituent Profile Search, as a string, to the Clipboard.

— **Tasks Integration with Outlook**: This option tells the system to allow users to integrate Millennium Tasks with Microsoft Outlook. If integration is allowed, it can be Manual or Real-time. Users who access Millennium by using Firefox must have IE Tab Extension installed.

— **Allow Contacts to be Uploaded to Outlook**: This option tells the system to allow users to upload constituent contact information (name, address, phone number, and so forth) to Microsoft Outlook. Users who access Millennium by using Firefox must have IE Tab Extension installed.

— **Enter the home institution** - If your organization has an active entry in the **Institutions** lookup table, you can identify one of the entries as your home institution. When constituent Education records are viewed in Millennium, the system will highlight the records that have an **Institution** equal to your organization's home institution.

Auditing options

Auditing options are displayed on and maintained from the **System Options** page.

— Check the box next to the name of each table for which you want to turn on audit logging.

Password Options

Password options are displayed on and maintained from the **System Options** page.

— **Allow users to change their password**: Enables users to change their own Abila Millennium passwords. If enabled, you also have the option to **Force all Users to change password at next login** as well as **Set Force password flag to 'Off' for all Users**.

— **Required password length**: If the change password option is enabled, you may specify the minimum password length here (up to 30 characters).

— **Password will expire in**: This setting determines the frequency (# of days up to 999) before a user must change their password. Enter **0** days to indicate passwords never expire.

— **Minimum number of alphabetic characters**: Specify the minimum number of alphabetic characters you wish the user to incorporate into their new password.

— **Minimum number of numeric characters**: Specify the minimum number of numeric characters you wish the user to incorporate into their new password.

Sage Payment Solutions OR SPS Vault Only Account options

Sage Payment Solutions and SPS Vault Only options are displayed on and maintained from the **System Options** page. Your site may have one or the other, but not both.

— **ID**: This number is supplied if you have purchased the Sage Payment Solutions module. It is a site specific number that activates this module.

— **Key**: This number is supplied if you have purchased the Sage Payment Solutions module. It is a site specific number that activates this module.

— If you maintain an SPS Vault Only account, enter and update contact information for the account.

— **Allow accounts to be saved for future use**: This option makes the account number available for use with future transactions with a **Tender Type** of credit card or bank draft.

Initium Software Options

— Organizations that use the Initium Software Instant Address service will enter the URL provided by Initium on the **Initium Setup** page. This page is accessed from the **System Options** page.

Serialized Tax Receipting Options

Serialized Tax Receipting options are displayed on and maintained from the **System Options** page.

— **Enable Serialized Tax Receipting**: Clear the check box if you do not want to utilize Serialized Tax Receipting at your site. If you want to utilize this feature, then fill out the remaining fields.

— **Next Receipt Number**: View the next receipt number, or click the **Edit** button to reset it. The value must be numerical, and a maximum of 10 digits.

— **Receipt Prefix**: View the receipt prefix, or edit it by clicking the **Edit** button. The receipt prefix must be alphanumeric.

— **Charitable information to be printed on each receipt**: Enter the information as you want it to display on the receipts.

WealthEngine Options

WealthEngine options are displayed on and maintained from the **System Options** page.

If your organization uses a proxy service account to access WealthEngine, then you will provide information for the following fields:

— **Username**: This is the user name used at your organization to activate this module and it is supplied by WealthEngine.

— **Password**: This is the password used at your organization to activate this module and it is supplied by WealthEngine.

— The **User** box that lists the names of all users, and the **Import** and **Search** options are used to grant WealthEngine access to Abila Millennium users.

If your organization uses named accounts to access WealthEngine, then you will provide information for the following fields instead:

— **Account name** fields: These are named accounts used at your organization and they are supplied by WealthEngine

— The **User** box that lists the names of all users, and the **Import** and **Search** options are used to assign WealthEngine account names to Abila Millennium users. Once a Abila Millennium user has been assigned to a Wealth account name, he/she must then access **My Millennium** to record his/her WealthEngine password in Abila Millennium.

Utility Passwords

Abila Millennium provides several utilities accessed through the interface, and are for use by system administrators. Each utility has a password:

- **File Search**: director

- **Log Off User**: logger

- **Merge ID**: merger

- **User Info Dump**: dumper

Appendix A: IIS Services and Features

Use the information in the following sections to help you establish the IIS services and features required for Abila Millennium.

System Services

The following IIS system services must be installed and active when you install Millennium.

Display Name	Service Name	Start
Application Host Helper Service	AppHostSvc	Automatic
ASP.NET State Service	aspnet_state	Manual
IIS Admin Service	IISADMIN	Automatic
Simple Mail Transfer Protocol (SMTP)	SMTPSVC	Automatic
Windows Process Activation Service	WAS	Automatic
World Wide Web Publishing Service	W3SVC	Automatic
Web Management Service	WMSVC	Manual

Role Services

The following IIS role services must be installed and active when you install Millennium.

Name	Components
Common HTTP Features	• Default Document • Directory Browsing • HTTP Errors • HTTP Redirection • Static Content
Health and Diagnostics	• Custom Logging • HTTP Logging • Logging Tools • ODBC Logging • Request Monitor • Tracing
Performance	• Dynamic Content Compression\ • Static Content Compression
Security	• Basic Authentication • Request Filtering

Name	Components
Management Tools	• IIS Management Console
	• IIS Management Scripts and Tools
	• Management Service
Application Development	• .NET Extensibility 3.5
	• .NET Extensibility 4.5
	• Application Initialization
	• ASP
	• ASP .NET 3.5
	• ASP .NET 4.5
	• CGI
	• ISAPI Extensions
	• ISAPI Filters

Features

The following IIS features must be installed and active when you install Millennium.

Name	Path
.NET Framework 3.5 Features	.NET Framework 3.5 (includes .NET 2.0 and 3.0)
.NET Framework 4.5 Features	• .NET Framework 4.5 • ASP .NET 4.5 • WCF Services\TCP Port Sharing
Remote Server Administration Tools	• Feature Administration Tools • SMTP Server Tools (Required for SMTP Server)
SMTP Server	SMTP Server
Windows Process Activation Service	Process Model
WoW64 Support	WoW64 Support

Appendix B: Creating the Web SQL ODBC Connection to your Database

Use the tasks in this topic to create an ODBC connection to your Millennium database.

SQL Server

1. Create a 32-bit *Web SQL* ODBC connection pointing to your **Abila Millennium** database. (The *standard* name for the Abila Millennium database is **milldata**).

    a. Open the **ODBC Data Source Administrator**:

        i.   Access the Run command by pressing the Windows logo key + R

        ii. In the **Open** box, type in **C:\windows\SysWOW64\odbcad32.exe**, and click **OK**.

    b. Select the **System DSN** tab, and click **Add**.

    c. On the **Create New Data Source** dialog, select **SQL Server Native Client,**, and click **Finish**.

    d. On the **Create a New Data Source to SQL Server** dialog:

        i.   Type **Web SQL** in the **Name** box.

        ii. Type a description for the connection in the **Description** box if you want.

        iii. In the **Server** box, select the name of the SQL Server where the Abila Millennium database resides, and click **Next**.

    e. On the **Microsoft SQL Server DSN Configuration** dialogs:

        i.   Select the **With SQL Server authentication**… option.

        ii. Verify that the **Connect to SQL Server to obtain default settings**… check box is selected.

        iii. Type in the **sa** user name in the **Login ID** box and the sa password in the **Password** box, and click **Next**.

        iv. Select **Change the default database to**, and select the name of your Abila Millennium database.

     v. Verify that **Use ANSI quoted identifiers** and **Use ANSI nulls, paddings and warnings** check boxes are selected, and click **Next**.

     vi. Clear the **Perform translation for character data** check box, and click **Finish**.

  f. The **ODBC Microsoft SQL Server Setup dialog** displays. Review the configuration. Click **Test Data Source** to test the connection.

  g. Once you have a successful connection, click **OK**.

  h. Click **OK** to close the **ODBC Data Source Administrator**.

Oracle

1. Create the Oracle Net Service connection to the Abila Millennium database.

2. Create a 32-bit *Web SQL* ODBC connection pointing to your **Abila Millennium** database.

  a. Open the **ODBC Data Source Administrator**:

     i. Access the Run command by pressing the Windows logo key + R

     ii. In the **Open** box, type in **C:\windows\SysWOW64\odbcad32.exe**, and click **OK**.

  b. Select the **System DSN** tab, and click **Add**.

  c. On the **Create New Data Source** dialog, select the **Name** that begins with **Oracle in OraClient**, and click **Finish**.

  d. On the **Oracle ODBC Driver Configuration** dialog:

     i. Type **Web SQL** in the **Data Source Name** box.

     ii. Type a description for the connection in the **Description** box if you want.

     iii. In the **TNS Service** name field, select the Net Service name for your **Abila Millennium** database.

     iv. Type **millora** in the **User ID** box.

     v. Clear the **Enable Query Timeout** check box

     vi. Click **Test Connection** to test the connection.

e. Once you have a successful connection, click **OK** on the **Oracle ODBC Driver Configuration** dialog.

f. Click **OK** to close the **ODBC Data Source Administrator**.

Appendix C: Abila Millennium and SMTP

Simple Mail Transfer Protocol (SMTP) is the network protocol used to send email across the internet. Abila Millennium will use SMTP to send Advisory email notifications to users who set up Assignments and choose to be notified by email once the conditions of an assignment have been met.

SMTP is a Windows Feature. The process to install SMTP varies slightly depending on the version of Windows Server. You can install the SMTP server as part of the web server installation. If you do not install SMTP as part of the web server installation, you must return to the Server Manager and add SMTP as an IIS feature before you can send email from Millennium.

Consult with your IT department and make sure they are aware of the following SMTP requirements for Abila Millennium:

* To work with Millennium, SMTP must be installed to the default location: **\inetpub\mailroot**. There are several sudirectories also installed at this location.

  > **Important!** Millennium users must have write access to this directory and its subdirectories for emails to be sent from the application.

* SMTP must be running, and the frequency for delivery must be set to **Immediate**.

Note: You must be an administrator on the server to complete the tasks described in the following sections.

SMTP for Windows Server 2012

Use the tasks in this section to install and configure the SMTP Server on Windows Server 2012.

Set Up the SMTP Server

To Install SMTP on the Windows Server where Millennium is installed, use the following steps:

1. Log in to the Windows server where Millennium is installed. You must be an administrator on this server to perform this task.

2. In the task bar, click the **Server Manager** icon . The **Server Manager** dashboard opens.
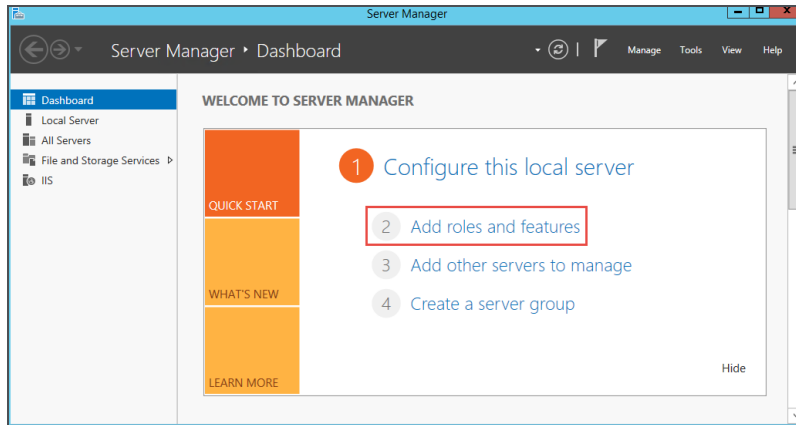
3. Click **Add roles and features**. The **Add roles and features** wizard opens.

4. If the **Before you begin** panel appears, click **Next** to proceed to the **Select installation type** panel.
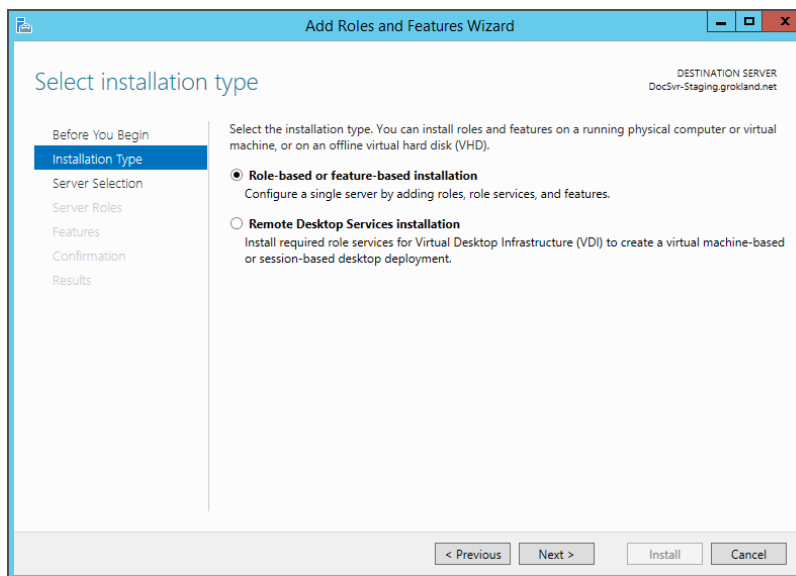

5. Select **Role-based or feature-based installation** and click **Next**. The **Select destination server** panel opens.
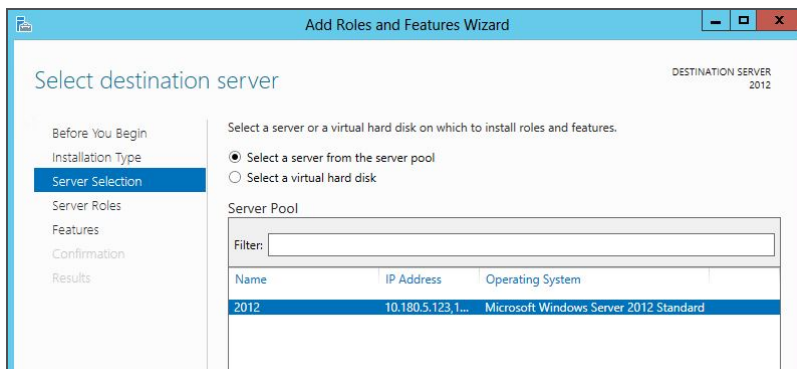
6. In the **Select destination server** panel, select the server on which SMTP will be installed and click **Next**. The **Select server roles** panel opens.
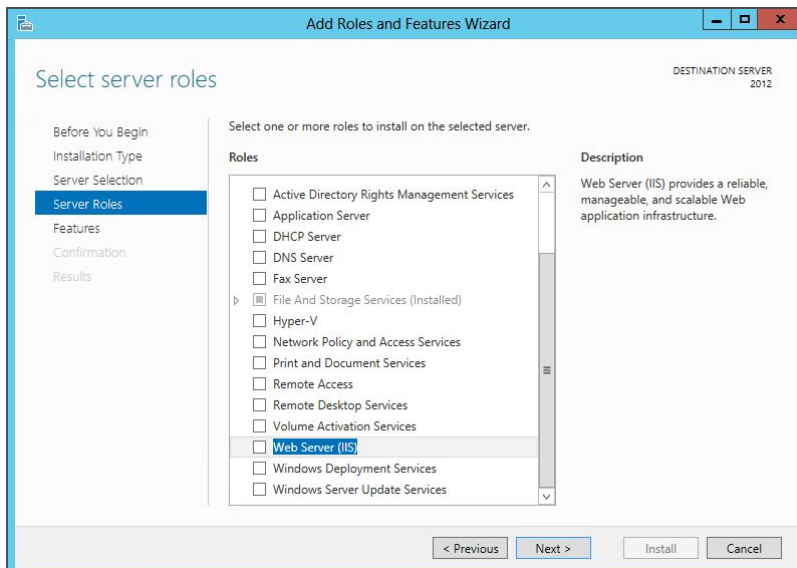
7. If you have already installed IIS on this server, proceed to Step 8. Otherwise, use the following steps to install the web server:

    a. Select the **Web Server (IIS)** role. The system prompts you to add the features required for the web server.
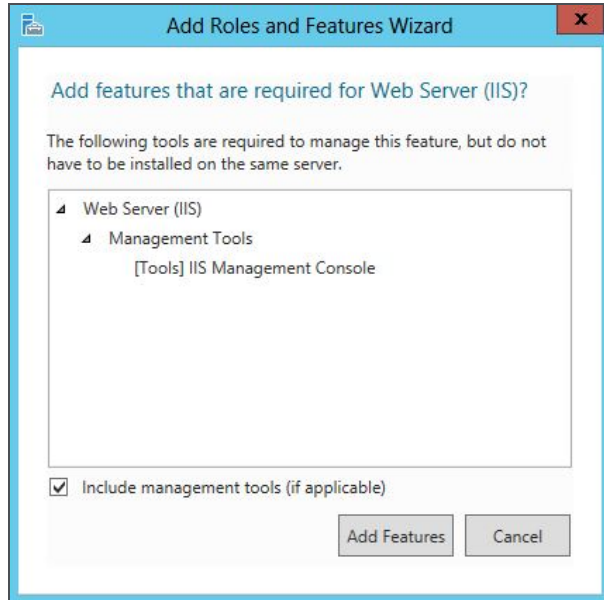
b. Make sure the Include management tools check box is selected and click **Add Features** to return to the wizard.

8. Click **Next** to open the **Select features** panel. Use the following steps to add the SMTP Server
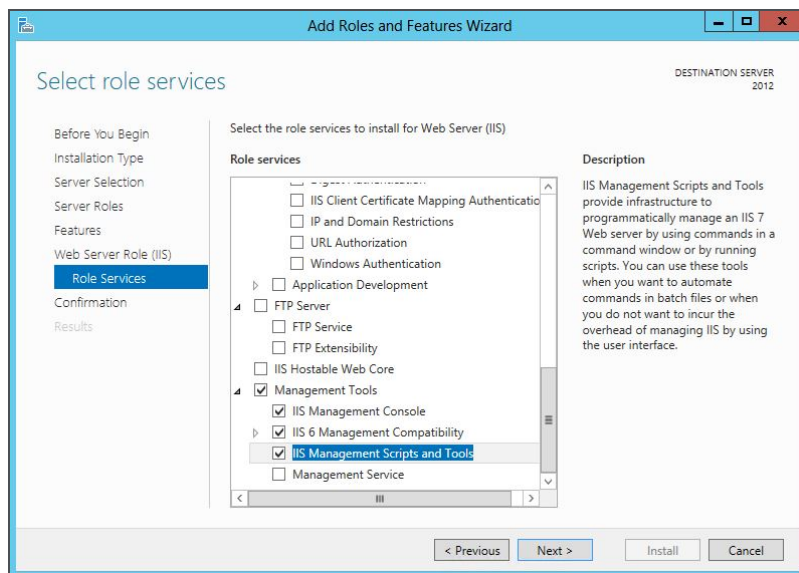
a. Scroll the list to find and select **SMTP Server**.
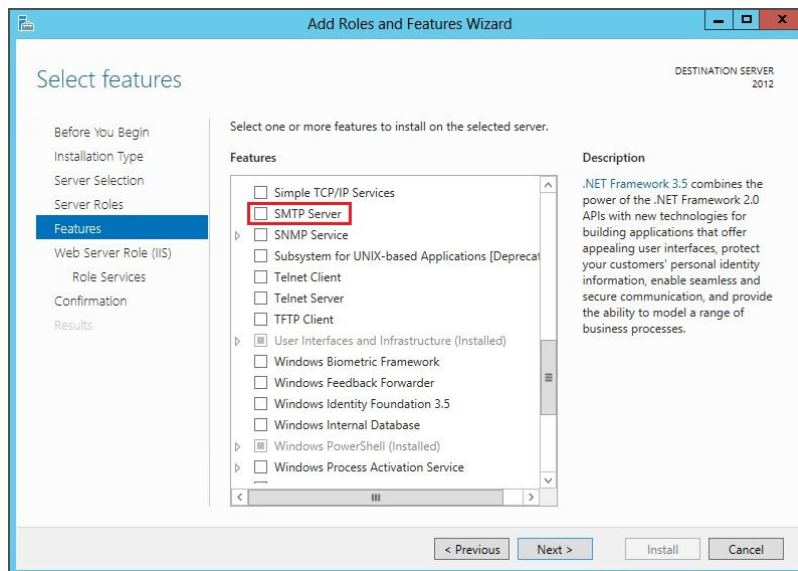
b. The system prompts you to add the features required for the SMTP server.
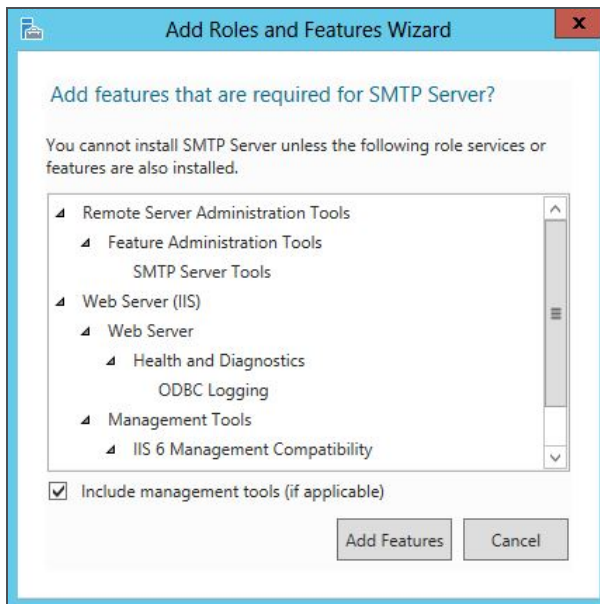
a. Make sure the **Include management tools** check box is selected and click **Add Features** to return to the wizard.

9. Click **Next** to proceed to the **Select role service** panel.

10. Scroll to **Management Tools** and select the following items:

    - **IIS Management Console**

    - **IIS 6 Management Compatibility**

    - **IIS Management Scripts and Tools**

11. Click **Next** to open the **Confirmation** panel. The panel allows you to verify your choices.

12. Click **Install** to begin installing the selected roles and features.

Note: This installation might require you to restart the Windows server.
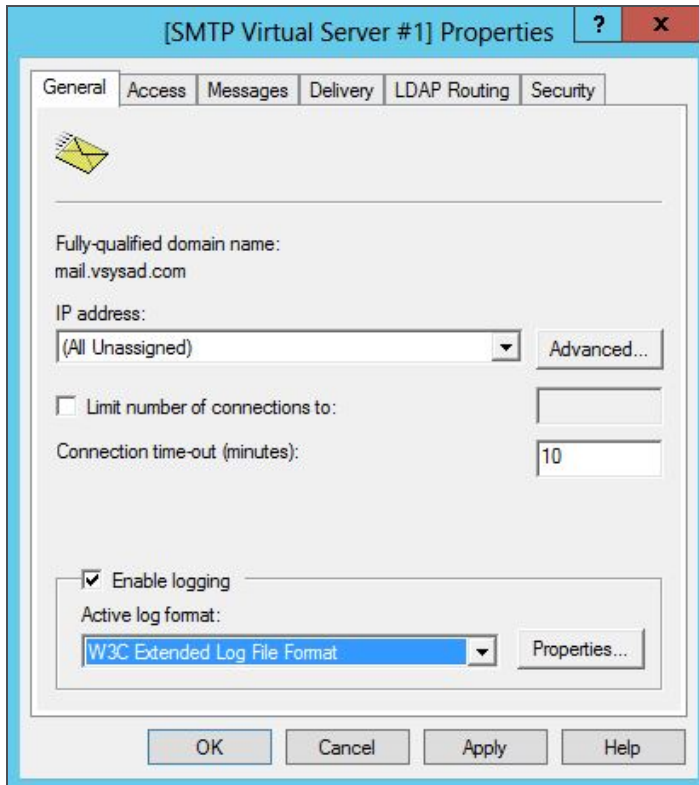
Configure the SMTP Server

After you install SMTP, use the following steps to configure the SMTP Server for use with Millennium:

1. From the Server Manager, click Tools>Internet Information Services (IIS) 6.0 Manager to open the IIS 6 Manager.
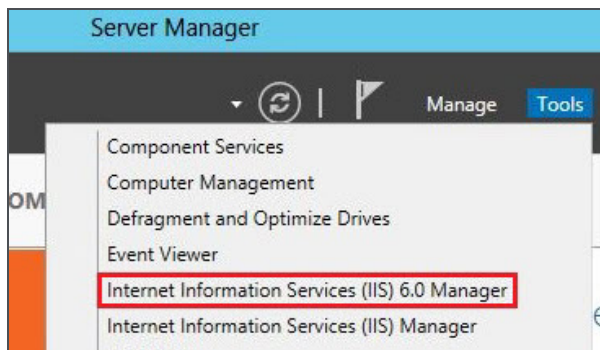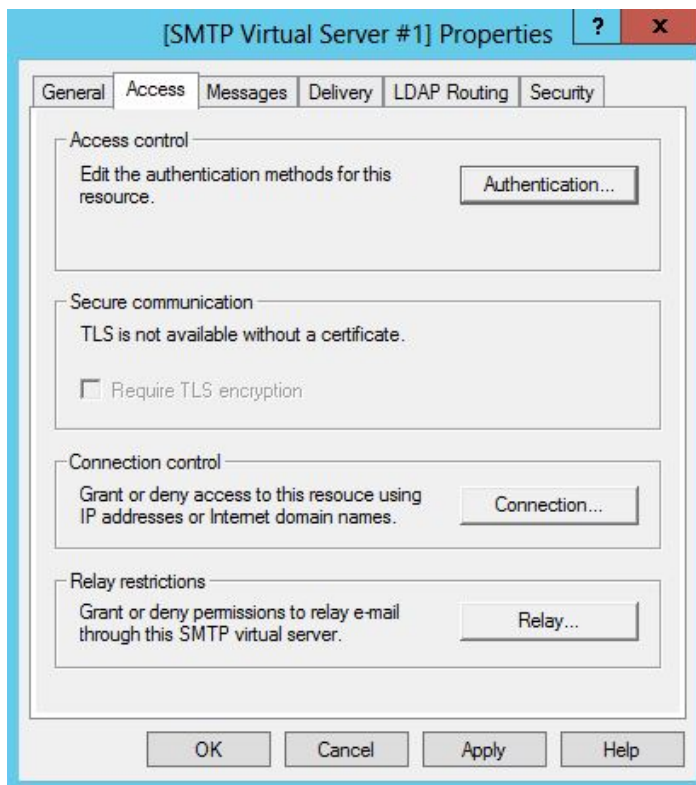
2. In the IIS Manager, expand the server name, right-click on **SMTP Server**, and select **Properties**.

3. In the **General** tab, accept the default settings, unless you want the SMTP Server to use a specific IP address. Accepting the default sets the IP address to **All Unassigned**.
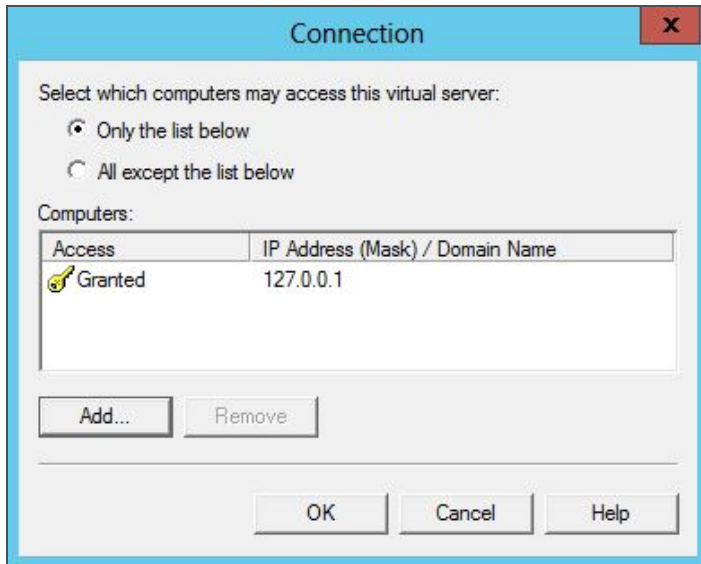
4. Select the **Access** tab.

5. Configure access settings as follows:

   a. Click **Authentication** to verify that **Anonymous access** is enabled and click **OK**.

   b. Click **Connection**, select the **Only the list below** option and click **Add**.

c. Enter 127.0.0.1 as the **IP address**, and click **OK**.

d. Click **OK** again to return to the **Access** tab.

e. Click **Relay**, select the **Only the list below** option and click **Add**.

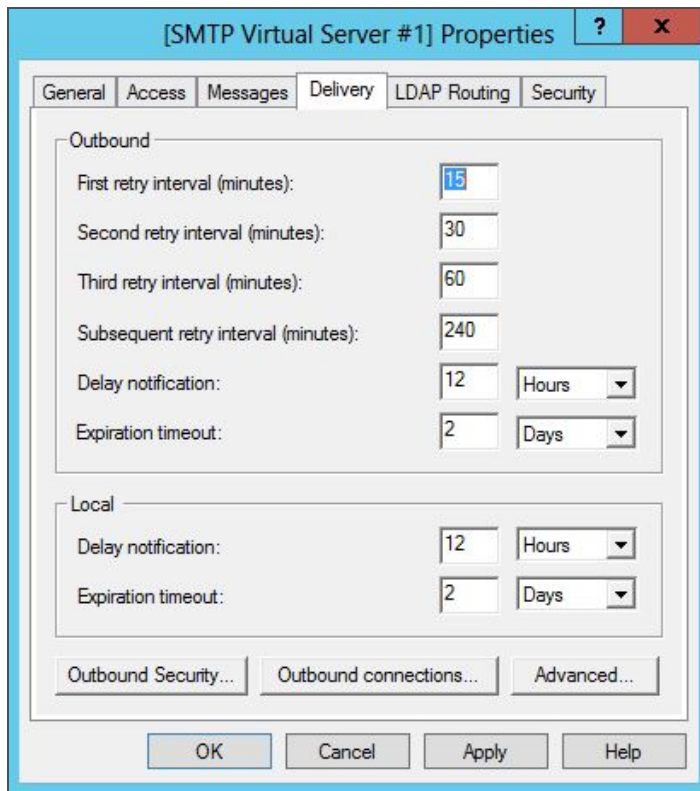f. Enter 127.0.0.1 as the **IP address** and click **OK**.
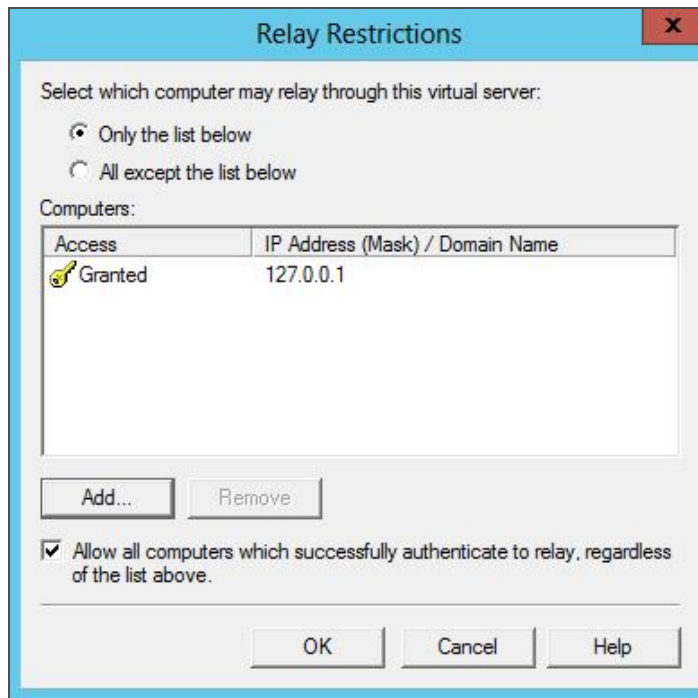
g. Click **OK** again to return to the Properties window.

6. Select the **Messages** tab and enter a valid email address at your organization for the **Non-Delivery Report**. Optionally, you can also set the **Badmail directory** on this tab.

7. Select the **Delivery** tab.
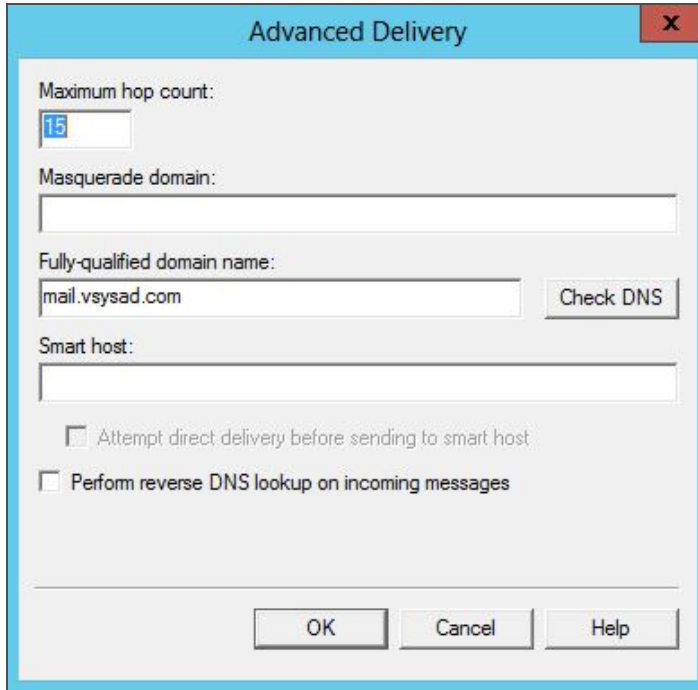
8. Configure delivery settings as follows:

   a. Click **Outbound Security** to verify that **Anonymous access** is selected. Because the **Connection** and **Relay** settings limit access to localhost, no other Outbound Security configuration is required.

b. Click **OK** to return to the **Delivery** tab.

c. Click **Advanced**.

d. Enter the fully-qualified domain name of the SMTP server. This is the host name or a record that has been created in your DNS zone file.

> **Important!** Confirm this entry with the party that manages DNS for your domain. The correct DNS resolution is crucial to successful email delivery. If your SMTP server cannot resolve the domains where it is trying to send messages, the email process fails.

e. Click on the **Check DNS** button to confirm that the domain name resolves successfully. If the domain name resolves, the system displays the following confirmation message.

9. Set the SMTP Service to **Automatic** so that the service starts when the server starts. Use the following steps:

   a. Open the Powershell console.

   b. Run the following command:

```
PS C:\Users\Admin> set-service smtpsvc -StartupType Automatic
```

   c. Run the following command to confirm that the SMTP service is running:

```
PS C:\Users\Admin> get-service smtpsvc
```

   d. If the SMTP Service is not running, the command returns a status of Stopped. If the service is stopped, use the following command to start it:

```
PS C:\Users\Admin> start-service smtpsvc
```

PTR Records for Reverse DNS Lookups

In addition to the correct host name, make sure that you configure a PTR record for reverse DNS lookups. The PTR record allows your SMTP Server's public IP address to resolve to your hostname.
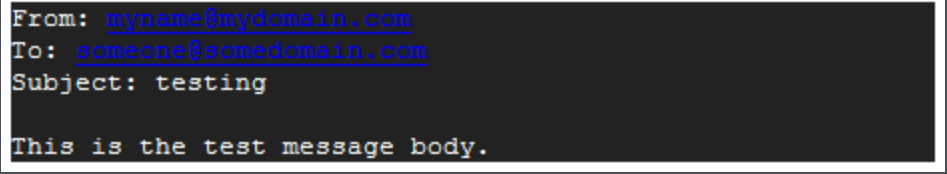
If you do not have a PTR record, email delivery can be delayed, or messages from your host might be blocked, and your host blacklisted.

For more information on testing DNS configuration, see Testing SMTP Server using SMTPDIAG tool.

Testing the SMTP Server

After Millennium is installed and the SMTP Server is enabled, use the following steps to test that the email process is working properly:

1. At the Web Server (IIS), verify that the SMTP Service is started.

   a. **Start>Control Panel>Administrative Tools**.

   b. Double-click **Services**.

   c. In the Services list, locate **Simple Main Transfer Protocol (SMTP).**The status should be set to **Started**.

2. Verify that the service is working.

   a. Create a text file with the following information (first change **From** and **To** in this sample to reflect your organization and test recipient email addresses)

```
From: myname@mydomain.com
To: someone@somedomain.com
Subject: testing

This is the test message body.
```

b. Drop the text file in the **\inetpub\mailroot\pickup** directory.

c. If the text is not delivered to the test recipient, then SMTP is not working. Contact the IT Department at your organization for further assistance.

Online Constituent Directory

On the IIS machine, the **inetpub\mailroot\pickup** directory will hold the text file that is generated when a constituent requests his or her log on information. This text file is used as the body of the email that will be sent to all constituents who request that their log on information be sent. Millennium users must have write access to the **inetpub\mailroot** and its subdirectories for this feature to work.

Appendix D: Installing and Running the Queue

The Abila Millennium Reporting Server installation will deliver all of the components that are necessary to run the Abila Millennium reporting Queue as either a Windows Service or as an application.

Installing and Running the Queue as a Service

The following information describes the purpose and procedures for running a reporting Queue as a Windows Service. (As an alternative, the Queue can be run in the foreground as an application.)

Millennium Queue Service

Milqueue.exe is the Millennium Queue Service. This service ensures that the Abila Millennium Queue (**Queue.exe**) is always available on the Reporting Server computer so that reports can run successfully. When the Queue operates as a service, the status will not display on the Windows task bar when a report is run.

Queue Administration Program

QueueAdmin.exe is the Queue Administration Program. This program is installed along with the reporting queue and is stored in the Queue directory, which is **C:\QUEUE** by default. The **QueueAdmin.exe** program installs and maintains the Millennium Queue Service.

For the Millennium Queue Service to run properly, the QueueAdmin program must use a user account to initialize the Millennium Queue Service. You can specify either a domain account or a local account based on the configuration and location of the Abila Millennium Web Server (IIS), Database Server, and Reporting Servers. The Queue Admin program creates the user account as specified and verifies that the Millennium Queue Service is properly installed and running. The user account is created with only the privileges needed to run the Millennium Queue Service. Use this user account only for running the Millennium Queue Service.

Note: If you receive an error installing the Queue service, manually add the Queue User to the Reporting Server's Local Administrators group, and try installing again.

To install the Millennium Queue Service:

1. Verify that your Reporting Server computer meets or exceeds the system requirements. The latest Abila Millennium system requirements are available at:
   abila.com/solutions/millennium.

2. Log on to the Reporting Server as an administrator who has *Read* and *Write* permissions to the **JSI FundRaising Systems, Inc**. registry key on the Reporting Server.
   If you are going to create accounts on more than one computer at the same time, then log on as a user with Domain Admin privileges.

3. In the queue directory (this is **C:\QUEUE** by default), run **QueueAdmin.exe**. If you are using Windows Server 2012, right-click the program and run it as an Administrator.

4. Click **New User**.

5. If you want to create a local account, leave the **Compute Name** radio button set.

6. If you want to create a domain account, select the **Domain** option, and enter the name of the domain.

7. Enter a **User Name** and **Password**.

8. If you want to create a local account, enter the **IIS Server Name** in the **Additional Computer** field. The intention here is create the Queue User on the Web Server (IIS) computer so that they have access to write reports to the Web Server (IIS) computer.

9. Click **OK**.

10. Verify the password by typing it again and clicking **OK**.

11. The program creates the users as necessary and reports success or failure via a message box. If the **Local Account** option is chosen, two message boxes will appear, confirming the creation of the Queue Account and the IIS Account. Click **OK** to close the message box.

12. Upon returning to the **Millennium Queue Administrator** dialog box, the **User Name** and **Password** fields will change, based on the New User that was created. Verify that the **Install the Millennium Queue Service** radio button is selected. Click **OK** to Install the Queue Service. A status bar above the **OK** button will display certain Status messages. After the service has been installed, a message box will appear stating the successful completion on the Queue Service Installation. Click **OK**, and the **Millennium Queue Administrator** program closed. The Queue Service starts, and the Queue is available for reporting.

The **QueueAdmin.exe** program creates the **QueueAdmin.log** file in the queue directory (which is **C:\QUEUE** by default).

The **Milqueue.exe** program creates the **Milqueue.log** file in the queue directory (which is **C:\QUEUE** by default) when it starts the queue service. If a log on failure occurs, it is recorded in this log file.

The following registry key on the Reporting Server contains settings for the **Milqueue.exe** program to use each time it starts:

- HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\JSI FundRaising Systems, Inc.\Queue Service

Running the Queue as an Application

If you run the Queue as an application, navigate to your **X:\Queue** folder on the Reporting Server and double-click on **Queue.exe** to start the application.

Tip:
As a work-around to running the Queue as a Service, use the following steps:

1. Right-click on **Queue.exe** in the **X:\Queue** folder and select **Create Shortcut**.

2. Move this shortcut to the **Startup** folder for the Queue User on the Reporting Server.

When the server is restarted, the **Millennium Queue Administrator** application starts automatically.

Appendix E: Defining Printers

This Appendix describes using the **Printers.exe** utility to define your Millennium printers.

Note: You can add the Report Printer information on the Millennium **System Information** page without the assistance of the **Printers.exe** utility. But, you must know necessary **Description**, **Name**, **Location**, and **Driver information** for each printer that you will be adding.

Launching the Printers utility:

1. At your Reporting Server computer, navigate to the **Queue** folder and double-click **Printers.exe**. Click **OK** on the message dialog box to continue through the utility.

2. Click the **Machine Data Source** tab, select the **Web SQL Data Source Name**, and click **OK**.

3. You must log on as either the database administrator (**sa** for SQL Server or **MILLORA** for Oracle) or as a Millennium system administrator.

4. SQL Server - On the **SQL Server Login** dialog, type the user name in the **Login ID** box (if necessary), and password in the **Password** box, and click **OK**.

5. Oracle - On the **Oracle ODBC Driver Connect** dialog, type the user name in the **User Name** box (if necessary), and password in the **Password** box, and click **OK**.

6. **Reporting Printers Setup** dialog is shown, where all your printer setup functions can be performed.

Printers Utility Components

Available Printers

The **Printers Available for this Workstation** box lists the **Name**, **Driver**, and **Location** (each field is separated by an asterisk) of all printers that are recognized on this specific Reporting Server computer (the printers have been set up on the computer, through Windows).

Reporting Queues

The **Reporting Queues** box lists all Queues that have been created through Millennium. This Queue information is maintained in the **report_servers** table in the **MILLREPORTS** database to which the current ODBC connection is pointing. This includes Queues on other Reporting Server computers, as

well as on the current Reporting Server computer. When you select an entry from the list, corresponding information is shown in the **Printers Associated with the Selected Queue** box.

Printers Associated with the Selected Queue

The information in this list box includes the **Description**, **Name**, **Driver**, and **Location** (each field is separated by an asterisk) of all printers that are currently connected (via Millennium) to the Reporting Queue that is selected in the **Reporting Queues** box (above).

Action Buttons

The **Add**, **Edit**, **Delete**, and **Auto Fix** Action buttons are used to make changes to the Report Printers setup on the Millennium **System Information** page. The **Finished** button is used to close the Printers utility.

Printer Utility Procedures

(All procedures assume that you already launched the Printers utility from the Reporting Server computer Queue directory.)

To add a printer to a Queue:

1. In the **Printers Available for this Workstation** box, select the entry for the printer that you want to add.

2. In the **Reporting Queues** box, select the entry for the Queue to which you want to add the printer.

3. Click **Add**.

4. Type in a description for the printer.

5. Click **OK**. The printer has been added to the Queue, and will be listed in the **Printers Associated with the Selected Queue** box.

6. Click **Finished** to close the Printers utility.

To edit a Queue printer description:

1. In the **Reporting Queues** box, select the entry for the desired Queue.

2. In the **Printers Associated with the Selected Queue** box, select the entry for the desired Printer.

3. Click **Edit**.

4. Type in a new description for the printer.

5. Click **OK**. The printer description has been updated, and then new description is shown in the **Printers Associated with the Selected Queue** box.

6. Click **Finished** to close the Printers utility.

To Delete a Queue printer:

1. In the **Reporting Queues** box, select the entry for the desired Queue.

2. In the **Printers Associated with the Selected Queue** box, select the entry for the Printer that you want to delete.

3. Click **Delete**.

4. On the **Delete Printer** confirmation dialog, click **Yes**. The printer has been deleted and it is not listed in the **Printers Associated with the Selected Queue** box.

5. Click **Finished** to close the Printers utility.

Auto Fix

At times, the addition of a printer to a workstation (by using Windows, not by using Millennium) causes the network system to assign or even re-align the numbering scheme (the nomenclature) for the location of a printer. The **Auto Fix** function can be used to edit that location specification for a printer that has already been associated with a Queue so that it can be aligned with the location currently specified on the current workstation (as shown in the **Printers Available for this Workstation** list box at the top of the current dialog form).

There may also be incidents where the Printers utility was launched at one Reporting Server computer, and then used to add printers for a Queue that has been installed to a different Reporting Server computer. If this has happened, then you cannot count on the printers' location specifications to be correct. The **Auto Fix** function of this utility can be used to fix this.

To adjust location specifications for Queue printers:

1. In the **Reporting Queues** box, select the entry for the desired Queue.

2. Compare the printer locations in the **Printers Associated with the Selected Queue** box to the printer locations in the **Printers Associated with the Selected Queue** box.

a. If the printer locations are the same, a fix is not necessary.

   i. Click **Finished** to close the Printers utility.

b. If the printer locations are different:

   i. Click **Auto Fix**.

   ii. You will be told that Auto Fix should only be run from the computer where the selected Queue resides. If you are not on the correct computer, click **No**, click **Finished** to close the Printers utility, and then launch the Printers.exe application on the correct computer.

   iii. If you are on the correct computer, click **Yes**.

   iv. The utility will adjust the location for all printers for this Queue, in accordance with the locations in the **Printers Available for this Workstation** list. The adjusted location(s) will be shown in the **Printers Associated with the Selected Queue** box.

   v. Click **Finished** to close the Printers utility.

Appendix F: Installing the Sample Database

The sample database allows you to explore many Millennium features. You can install the sample database only on a Database Server that does not already have the sample database installed. There must be a minimum of 100 MB free disk space on the computer.

To install the sample database on the Database Server:

1. Back up the Database Server computer and your Millennium database so that the system can be restored if a problem occurs.

2. Log on to the Database Server *computer* as the site administrator with administrative privileges on the computer.

3. Log on to your database as the database administrator. **For SQL Server**, log on using the **sa** login. **For Oracle**, log on using the **MILLORA** login.

4. Complete the installation steps outlined in documents in the directory where the installation files were extracted:

   a. **For SQL Server**, see the *SQL millsample Install.doc* file.

   b. **For Oracle**, see the *Oracle millsample Install.doc* file.

5. After installing the sample database, copy the files from the **\Training\Docs** folder (in the directory where the files were extracted) to the **\inetpub\wwwroot\mill\docs** folder. These are the documents that support the document hyperlinks in the sample database.

6. Configure the sample database in the same way as you configured your production database.

Appendix G: Database Changes

The following sections describe the database changes for the current and previous version of Millennium.

Database Changes for Version 2017.1

The following database changes were made for Millennium Version 2017.1.

Table	Field	Type/Length	Description	Change
phone	phnactive	char(1)	Y/N	Added to support update/archive function.
internetaddress	intactive	char(1)	Y/N	Added to support update/archive function.
afo_account	afoaccount_ account_ key	char(320)	AFO account key	Field length increased to accommodate change in Abila Fundraising Online data.

Database Changes for Version 2016.1

There were no database changes for version 2016.1.

Database Changes for Version 2015.1

The following database changes were made for Millennium Version 2015.1.

Table	Field	Type/Length	Description	Change
address	addrinitum	char(1)	Initium status	Add fields to support improved Initium integration.
	addrindate	datetime	Initium date	

Table	Field	Type/Length	Description	Change
	addrinitvr	varchar(30)	Initium verification info	
	addrinitds	char(1)	Initium detail status	
	addrlat	varchar(20)	Address latitude	Increase field size to 20 characters maximum.
	addrlong	varchar(20)	Address longitude	Increase field size to 20 characters maximum.
contactinfo	continitum	char(1)	Initium status	Add fields to support improved Initium integration.
	contindate	datetime	Initium date	
	continitvr	varchar(30)	Initium verification info	
	continitds	char(1)	Initium detail status	
creditcard	credinitum	char(1)	Initium status	Add fields to support improved Initium integration.
	credindate	datetime	Initium date	
	credinitvr	varchar(30)	Initium verification info	

Table	Field	Type/Length	Description	Change
	credinitds	char(1)	Initium detail status	
speaker	spkrinitum	char(1)	Initium status	Add fields to support improved Initium integration.
	spkrindate	datetime	Initium date	
	spkrinitvr	varchar(30)	Initium verification info	
	spkrinitds	char(1)	Initium detail status	
event	evntinitum	char(1)	Initium status	Add fields to support improved Initium integration.
	evntindate	datetime	Initium date	
	evntinitvr	varchar(30)	Initium verification info	
	evntinitds	char(1)	Initium detail status	
event_guest	guestinitm	char(1)	Initium status	Add fields to support improved Initium integration.
	guestindte	datetime	Initium date	

Table	Field	Type/Length	Description	Change
	guestinitv	varchar(30)	Initium verification info	
	guestinitd	char(1)	Initium detail status	
activity	actvinitum	char(1)	Initium status	Add fields to support improved Initium integration.
	actvindate	datetime	Initium date	
	actvinitvr	varchar(30)	Initium verification info	
	actvinitds	char(1)	Initium detail status	
zipcodes	zip_lat	varchar(20)	Zip code latitude	Increase field size to 20 characters maximum.
	zip_long	varchar(20)	Zip code longitude	Increase field size to 20 characters maximum.
institutions	table_code	char(8)		Increase field size to match industry standard.
school	schlinstit	char(8)		Increase field size to match industry standard.

Table	Field	Type/Length	Description	Change
afo_account	afoaccountkey	numeric(13,0)	AFO account key	Add table for AFO integration.
	afoaccount_name	char(30)	AFO account name	
	afoaccount_type	numeric(5,0)		
	afoaccount_id_number	char(20)		
	afoaccount_account_key	char(30)		
	afoaccount_active	char(1)	AFO account status (Active check box)	
afo_forms	afokey	numeric(13,0)	AFO form key	Add table for AFO and Online Constituent Directory integration.
	afoname	char(50)	AFO form name	
	afoform	varchar(2000)	AFO form code snippet	
	afoactive	char(10)	AFO form status	
Online_Trans			Online transaction table	Add table for AFO Connector integration.
Online_Signups			Online signup table	Add table for AFO Connector integration.

Table	Field	Type/Length	Description	Change
Online_Parent			Online parent table	Add table for AFO Connector integration.
Online_ Register			Online registration table	Add table for AFO Connector integration.
Online_ PaymentCycle			Online payment cycle table	Add table for AFO Connector integration.
Online_ History			Online history table	Add table for AFO Connector integration.

Database Changes for Version 2014

In 2014.1, 65 columns were added to the memories table. If you are upgrading from 2013, these columns will be added to the database. Depending on the number of data records in the memories table, the database conversion program might take longer than usual.