Sage ERP MAS 90
Sage ERP MAS 200
Sage ERP MAS 200 SQL

Installation and System Administrator's Guide

4MASIN450-08

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Contents

Chapter 1

Introduction

How to Use This Manual

This manual provides the information necessary for installing Sage ERP MAS 90, Sage ERP MAS 200, and Sage ERP MAS 200 SQL. This manual also contains information and troubleshooting tips on the configuration of the various operating systems and environments in which the Sage ERP MAS software is supported. The instructions contain detailed technical information on the configuration of operating systems and environments.

The screens used in this manual are from Sage ERP MAS 200; similar screens appear in Sage ERP MAS 90 and Sage ERP MAS 200 SQL. Note that Business Insights Reporter and the eBusiness Manager, Electronic Reporting, Fixed Assets, Job Cost, Material Requirements Planning, Payroll, TimeCard, and Work Order modules are not available for Sage ERP MAS 200 SQL.

For a complete listing of operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

Graphic Conventions

The following icons are used throughout this manual to indicate different types of information.

The **NOTE** symbol is followed by additional information about a topic.

The **WARNING** symbol is followed by information to help you avoid costly mistakes.

The **INFORMATION** symbol is used when a chapter does not apply to all three Sage ERP MAS products. The symbol is followed by the product(s) to which the section does apply.

Text Conventions

The following table describes the text conventions used in this manual.

Text Convention	Explanation
Menus	Menus are shown in this format: Select menu > menu task name. **Examples:** • Select File menu > Change Company. • Select General Ledger Budget menu > Budget Maintenance.
Bold font	Indicates text entered at a field or text selected at a field. **Examples:** • At the Value field, type a search value, such as **01**, for the lookup. • In the Filter window, to delete a filter, select **<none>** at a filter's Column field.
Italic font	Indicates references to other manuals. **Example:** • For more information, refer to your *Getting Started Guide*.

Installation Overview

Read this guide completely before installing or upgrading your Sage ERP MAS system. Before installing your Sage product, your hardware must be properly configured, and the appropriate operating system software must be fully installed and operational. *Incorrect configurations of protocols and services running on the server can cause major delays in the implementation of your Sage ERP MAS system.*

The installation procedures in this document address Windows® environments. For a complete listing of operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

In this guide, you will notice references to MAS90 when dealing with installation paths or system file names for Sage ERP MAS 200 and Sage ERP MAS 200 SQL.

In some parts of this guide, the Sage ERP MAS Integration Engine is referred to simply as the Integration Engine.

Contents of Product DVD

The Sage ERP MAS 90, 200, and 200 SQL product DVD contains the following:

NOTE
The installation DVD includes setup programs for three Sage ERP MAS products; however, you will be able to install only the product for which your product key is valid.

- Installation programs for Sage ERP MAS 90, 200, and 200 SQL. To access these programs, select a product from the Autorun screen.
- Installation program for SageCRM 7.1 Server. To access this program, select a product from the Autorun screen.
- Documentation for Sage ERP MAS products, which includes a PDF version of this guide, as well as the *Getting Started Guide* and the *Customer Upgrade Guide*. To access the documentation, select a product from the Autorun screen, and then click Documentation on the product screen.

- Installation programs for eBusiness Web Services and the Sage Web Engine. To access these programs, select a product from the Autorun screen, and then select Productivity Applications. To access the installation guides for these products, select Documentation from the product screen.
- Documentation for SageCRM, which includes the *Installation and Upgrade Guide* and the *System Administrator Guide*. To access the SageCRM documentation, use Windows Explorer to locate the CRM\Documentation folder on the Sage ERP MAS product DVD.
- Productivity applications, such as Crystal Reports® Designer and Acrobat Reader. To access these programs, select a product from the Autorun screen, and on the product screen, select Productivity Applications.

General Installation Tips

Keep the following in mind when installing your Sage ERP MAS system:

- If your serial number includes leading zeros, be sure to include all zeros when typing the number.
- When specifying where to install Sage ERP MAS, do not nest a destination folder in folders named MAS90 or SOA.
- Installing Crystal Reports Designer is optional; however, it must be installed on the workstation if you want to create new reports and modify existing ones (see Installing Crystal Reports Designer on page 77).

⚠ **WARNING**
Do not integrate your purchased modules with nonregistered modules unless you plan to purchase those modules.

- You can install modules that have not been purchased and access most of them for 45 days before you are required to purchase and register them. The 45-day trial period begins the first time the module is accessed. The eBusiness Manager, Custom Office, Electronic Reporting, and Visual Integrator modules must be registered before they can be accessed. Modules that have been purchased are automatically selected for installation.

- If you are upgrading, all modules installed on your source system must be installed on the new installation. After you have upgraded to the current version, you can delete modules that are no longer needed.
- If the Customer Relationship Management module is installed, the Sage ERP MAS Integration Engine will also be installed.

Chapter 2

Installing Sage ERP MAS 90

Read this guide completely before installing and setting up Sage ERP MAS 90. A series of procedures must be completed for new installations. When upgrading a system, there are additional post-installation requirements for migrating existing data and converting it to the current version.

Installation Requirements

The computer where you are installing Sage ERP MAS 90 should have a minimum of 750 MB of free disk space, depending on the number of applications to be installed. Verify that you have 600 MB of disk space available for System Setup and Library Master, plus an additional 15 to 25 MB for each module to be installed.

For information on the specific operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

Pre-Installation Tasks

Perform these tasks before beginning the installation process.

- If you are upgrading from a prior version, read the *Customer Upgrade Guide*, which is available on the Sage ERP MAS product DVD.
- Verify that you have your packing list, which includes the serial number, customer number, user key, and product key, which are required to install Sage ERP MAS 90 for the correct number of users and to register the modules. This information is also available on the Sage Online Web page under Profile Mgmnt > Products.

- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com
  - The Supported Platform Matrix
  - The Integrated Solutions Compatibility Matrix
  - The current support library

WARNING
If you are upgrading from version 4.30 or earlier, you must install Sage ERP MAS 90 version 4.50 to a new location and then perform a parallel migration to migrate your existing data.

- If you are upgrading from Sage ERP MAS 90 version 4.40, determine whether to perform a parallel installation or an in-place installation.
- If you will be installing the Sage Web Engine, verify that IIS is installed and running.
- If a prior version of the Sage Web Engine is installed for the eBusiness Manager module, back up any customized templates in the IW folder to another location, and then uninstall the Sage Web Engine. After the 4.50 Sage Web Engine is installed, move the templates back to the IW folder.
- If you are installing the Payroll module, you must also install the Payroll Tax Table. Failure to install the Payroll Tax Table will cause a FILE PRU.SOA NOT FOUND message to appear when Payroll is first set up for a company.
- Third-party applications used with Sage ERP MAS 90 may require a drive mapping or UNC to the server where the data files are located. This drive must be mapped to a share point on the server above the MAS90 folder. Although Sage ERP MAS itself does not require a logical drive mapping, any application written to access the data files (including third-party or Sage developer partner applications) must have a valid logon to the server and may require a logical drive mapping or UNC.
- If you are installing on a Windows server, review Considerations for Installing on a Windows Server on page 14.
- If you are installing on a peer-to-peer network, review Considerations for Installing on a Windows Peer-to-Peer Network on page 15.

- If you are installing SageCRM, create a Windows user account with permissions to access both the server where Sage ERP MAS 90 will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage ERP MAS 90 server and the SageCRM server. You are asked to provide this information during the Sage ERP MAS 90 installation if the Customer Relationship Management module is selected for installation. For more information, see Installing SageCRM on page 43.

Installation Process

Run the Sage ERP MAS 90 installation wizard program to install a new instance of Sage ERP MAS 90 or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage ERP MAS 90

1 Start Windows; if you are installing to a Windows server, run the Setup program from the Windows server, not from a workstation connected to the server.

2 Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

3 Place the Sage ERP MAS product DVD in the DVD drive.

NOTE
When specifying where to install Sage ERP MAS, do not nest a destination folder in folders named MAS90 or SOA.

4 If Autorun is enabled on the server, the Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe**, where D:\ is the DVD drive. The wizard must be launched from the Autorun screen, not from the individual setup files on the DVD.

5 On the Autorun screen, click Sage ERP MAS 90.

6 On the Sage ERP MAS 90 screen, click Install Sage ERP MAS 90.

7 Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

The time required for installing depends on the number of modules selected. If several modules are installed, this process may take several minutes.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 90 screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application. For more information, see Productivity Applications on page 13.

Post-Installation Tasks

Perform the following tasks after installing Sage ERP MAS 90.

1. If you are upgrading, refer to your *Customer Upgrade Guide*.
2. Install any version 4.50 product updates available on the Sage Online Web site at: www.sagesoftwareonline.com
3. If you plan to run Workstation Setup so that additional computers can access the Sage ERP MAS 90 installation, create a share at least one folder above the MAS90 folder. This is required before running Workstation Setup. For more information, see Sage ERP MAS Security Permissions on page 145.
4. To run Microsoft Script links, you must have the Microsoft Windows Script Host processor on your system. For information on installing the Microsoft Windows Script Host processor, refer to the Microsoft Download Center Web site.
5. Install SageCRM if you plan to use that product (see Installing SageCRM on page 43).
6. Run Workstation Setup on any workstations that will access the Sage ERP MAS 90 installation (see Workstation Setup on page 11).
7. Install optional productivity applications, such as Crystal Reports Designer, on each workstation as needed. Installing Crystal Reports Designer is necessary only if you plan to create or modify reports.

8 If you are installing Federal and State eFiling and Reporting, you must install it on each Sage ERP MAS workstation. For more information, see Installing Federal and State eFiling and Reporting on page 89.

9 Create companies and activate modules (see Creating and Activating Companies on page 98).

10 Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 104).

11 Set up the modules for your companies. If you are converting your existing business management system to Sage ERP MAS 90, assemble the data you need to set up each module. For more information, refer to your *Getting Started Guide*.

Workstation Setup

NOTE
Run the Workstation Setup program after every Sage ERP MAS 90 software upgrade.

The Workstation Setup wizard installs the required software and common programs to the workstations that will access the Sage ERP MAS 90 installation. The workstation installation wizard copies all of the necessary Dynamic Link Libraries, ActiveX controls, and other components to the local Windows\System folder and sets up the initialization files for the workstation.

Workstation Setup Requirements

For workstation operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site. The workstation hard drive should have a minimum of 750 MB of free disk space. An additional 1 GB of disk space is required to install Crystal Reports Designer; 1.5 GB is recommended. Installing Crystal Reports Designer is necessary only for creating and modifying forms and reports.

If you have installed Sage ERP MAS 90 on only one computer, it is not necessary to run Workstation Setup to access Sage ERP MAS 90 on that computer; Workstation Setup is necessary only for additional workstations that will be accessing the installation.

WARNING
The Workstation Setup wizard will run only if it is executed from a mapped drive letter. Do not run the Workstation Setup wizard from a UNC path or through Network Neighborhood.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage ERP MAS 90 is installed; however, running the program from the product DVD may be faster for remote users.

To run Workstation Setup

1. Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
2. Map a drive letter to the share point above the MAS90 folder where the Sage ERP MAS 90 server component is installed.
3. Perform one of the following to start the installation:
   - To run the Workstation Setup wizard from the Sage ERP MAS 90 server installation folder (the preferred method):
     a. Use Windows Explorer to attach to the server share point where Sage ERP MAS 90 is installed, and locate the MAS90\Wksetup folder.
     b. Double-click Wksetup.exe to run the program; it takes a few seconds to launch.
   - To run the Workstation Setup wizard from the Sage ERP MAS product DVD:
     a. Place the Sage ERP MAS product DVD in the DVD drive. If Autorun is enabled on the computer, the Sage ERP MAS Autorun screen appears. If the Autorun screen does not appear, on the Windows Start menu, select Run, and type **D:\Autorun.exe** where D:\ is the DVD drive.
     b. On the Autorun screen, click Sage ERP MAS 90.
     c. On the Sage ERP MAS 90 screen, click Install Sage ERP MAS 90 Workstation.
4. Follow the steps in the Workstation Setup wizard.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 90 screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application. For more information, see Productivity Applications on this page.

Productivity Applications

The following third-party applications are required to perform certain tasks on the workstation. These applications can be installed from the Productivity Applications screen on the Sage ERP MAS product DVD.

- Adobe Acrobat Reader is needed to view Paperless Office documents, the online user guides, the module report samples, and module overview PDFs in the Help system.
- Crystal Reports Designer must be installed on each workstation where reports will be created or modified. For more information, see Installing Crystal Reports Designer on page 77.

Third-Party Applications for SageCRM

The following third-party applications are required to perform certain SageCRM tasks on the workstation.

- Mail Merge Plug-In is required to use the mail merge functionality. The first time a user encounters one of the features requiring the plug-in (for example, the My CRM menu > Calendar page displaying the Document Drop icon), they are prompted to download the plug-in. Instructions are provided on-screen. The user must be an administrator or power user of the client machine to install the Mail Merge Plug-In. The client browser must also be configured to accept plug-ins.
- Microsoft Office Applications are required for users who will be using the mail merge and document merge features supported by SageCRM; Microsoft Word and Excel should be installed on their workstations. The data upload feature accepts files in XLS format, created by Microsoft Excel.

- Microsoft Internet Explorer is required for users to access the SageCRM software.
- Outlook Plug-In is required for SageCRM Outlook Integration. Users can download the Outlook Plug-In from within SageCRM in the My CRM menu > Preferences tab. The user must be an administrator or power user of the client machine to install the Outlook Plug-In.

  If installing SageCRM Outlook Integration in a Terminal Services environment, administrator rights are required on the Terminal Services computer. All instances of Internet Explorer and Outlook must be closed to install the plug-in. At the time of the installation, exclusive access to the server is required for each user. After the plug-in is installed, administrator rights are no longer required.

Considerations for Installing on a Windows Server

The following are special considerations to be aware of before installing or upgrading Sage ERP MAS 90 on a Windows network.

For the hardware and service pack requirements for both the workstations and server, see the Supported Platform Matrix located in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

- Perform the DVD installation on Sage ERP MAS 90 directly at the server.
- When installing, close down all other visible desktop applications (for example, Microsoft Office applications). Do not shutdown antivirus and antispyware software unless it is actually interfering with the installation.
- At the server, create a share at a parent folder above the MAS90 folder. Do not create the share directly at the MAS90 folder. Every workstation will be required to map a drive to this share point.

- Each workstation must recognize the network drive on which Sage ERP MAS 90 is loaded using a mapped drive letter. Using Universal Naming Convention (UNC) paths is not supported.

  Example:

  Correct
  F:\Mas90\Home\Pvxwin32.exe

  Incorrect
  \\Servername\Sharename\Mas90\Home\Pvxwin32.exe

  If company data is moved to a different data location using Library Master Company Maintenance, the same drive letter must be used from all workstations to point to the alternate folders, including the server if it is used as a workstation.

  Make sure the drive mapping is created so it remains persistent after restarting the workstation. Generally this is accomplished either through a logon script or by selecting the Reconnect at Logon check box in the Map Network Drive window on the workstation.

Considerations for Installing on a Windows Peer-to-Peer Network

NOTE
Installing on a peer-to-peer network is supported only for Windows XP Professional.

For the hardware and service pack requirements for both the workstations and server, see the Supported Platform Matrix located in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

- The server and all workstations must be using the same operating system.
- When running with more than two users, the workstation acting as the server should be dedicated. Running Sage ERP MAS 90 on the server concurrently while other users are accessing Sage ERP MAS 90 from their own workstations may result in instability and performance issues.
- A maximum of five users is supported when running in the peer-to-peer environment.

- At the server, create a share at a parent folder above the MAS90 folder. Do not create the share directly at the MAS90 folder. Every workstation will be required to map a drive to this share point.

  If Windows XP Professional has Simple File Sharing enabled, when creating the share, select the Allow Network Users to Change My Files check box. To verify if Simple File Sharing is enabled, select Windows Start menu > My Computer. Then select Tools menu > Folder Options. Click the View tab and scroll to the bottom. Verify that the Use Simple File Sharing (Recommended) check box is selected.

  Each workstation must recognize the network drive on which Sage ERP MAS 90 is loaded using a mapped drive letter. Using Universal Naming Convention (UNC) paths is not supported.

  Example:

  Correct
  F:\Mas90\Home\Pvxwin32.exe

  Incorrect
  \\Servername\Sharename\Mas90\Home\Pvxwin32.exe

  If company data is moved to a different data location using Library Master Company Maintenance, the same drive letter must be used from all workstations to point to the alternate folders, including the server if it is used as a workstation.

  If you need to use the same drive letter on the server as on the workstation because you have moved company data to an alternate location, create a drive mapping to the share point on the server. Do not use the SUBST command.

Chapter 3

Installing Sage ERP MAS 200

Read this guide completely before installing and setting up Sage ERP MAS 200. A series of procedures must be completed for new installations. When upgrading a system, there are additional post-installation requirements for migrating existing data and converting it to the current version.

Installation Requirements

Sage ERP MAS 200 uses the TCP/IP protocol for all communications between the workstation and server. To run Sage ERP MAS 200, TCP/IP must be properly configured on both the Windows Server and all workstations that will run Sage ERP MAS 200 on the server. For more information, see TCP/IP Protocol on page 153.

If you are installing Sage ERP MAS 200 on a Windows Server with Terminal Services enabled, see Terminal Services Considerations on page 156.

The server where you are installing Sage ERP MAS 200 should have a minimum of 750 MB of free disk space, depending on the number of applications to be installed. Verify that you have 600 MB of disk space available for System Setup and Library Master, plus an additional 15 to 25 MB for each module to be installed.

For information on the specific operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

Pre-Installation Tasks

Perform these tasks before beginning the installation process.

- If you are upgrading from a prior version, read the *Customer Upgrade Guide*, which is available on the Sage ERP MAS product DVD.
- Verify that you have your packing list, which includes the serial number, customer number, user key, and product key, which are required to install Sage ERP MAS 200 for the correct number of users and to register the modules. This information is also available on the Sage Online Web page under Profile Mgmnt > Products.
- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com
  - The Supported Platform Matrix
  - The Integrated Solutions Compatibility Matrix
  - The current support library

WARNING
If you are upgrading from version 4.30 or earlier, you must install Sage ERP MAS 200 version 4.50 to a new location and then perform a parallel migration to migrate your existing data.

- If you are upgrading from Sage ERP MAS 200 version 4.40, determine whether to perform a parallel installation or an in-place installation.
- If you will be installing the Sage Web Engine, verify that IIS is installed and running.
- If a prior version of the Sage Web Engine is installed for the eBusiness Manager module, back up any customized templates in the IW folder to another location, and then uninstall the Sage Web Engine. After the 4.50 Sage Web Engine is installed, move the templates back to the IW folder.
- If you are installing the Payroll module, you must also install the Payroll Tax Table. Failure to install the Payroll Tax Table will cause a FILE PRU.SOA NOT FOUND message to appear when Payroll is first set up for a company.
- Configure TCP/IP as a protocol on your server and workstations. All workstations must be able to ping the server and vice versa. For information on pinging the server, see Basic Configuration on page 153.

- Third-party applications used with Sage ERP MAS 200 may require a drive mapping or UNC to the server where the data files are located. This drive must be mapped to a share point on the server above the MAS90 folder. Although Sage ERP MAS 200 itself does not require a logical drive mapping, any application written to access the data files (including third-party or Sage developer partner applications) must have a valid logon to the server and may require a logical drive mapping or UNC.

- If you are installing SageCRM, create a Windows user account with permissions to access both the server where Sage ERP MAS 200 will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage ERP MAS 200 server and the SageCRM server. You are asked to provide this information during the Sage ERP MAS 200 installation if the Customer Relationship Management module is selected for installation. For more information, see Installing SageCRM on page 43.

Installation Process

Run the Sage ERP MAS 200 installation wizard program to install a new instance of Sage ERP MAS 200 or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage ERP MAS 200

1. Log on to the server where Sage ERP MAS 200 will be installed using an account with administrator rights. You must run the Setup program from the Windows server, not from a workstation connected to the server.

2. Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

NOTE
When specifying where to install Sage ERP MAS, do not nest a destination folder in folders named MAS90 or SOA.

3. Place the Sage ERP MAS product DVD in the DVD.

4. If Autorun is enabled on the server, the Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe**, where D:\ is the DVD drive. The wizard must be launched from the Autorun screen, not from the individual setup files on the DVD.

5 On the Autorun screen, click Sage ERP MAS 200.

6 On the Sage ERP MAS 200 screen, click Install Sage ERP MAS 200.

7 Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

The time required for installing depends on the number of modules selected. If several modules are installed, this process may take several minutes.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 200 screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application. For more information, see Productivity Applications on page 27.

Post-Installation Tasks

Perform the following tasks after installing Sage ERP MAS 200.

1 If you are upgrading, refer to your *Customer Upgrade Guide*.

2 Install any version 4.50 product updates available on the Sage Online Web site at: www.sagesoftwareonline.com

3 Create a share at least one folder above the MAS90 folder. This is required before running Workstation Setup. For more information, see Sage ERP MAS Security Permissions on page 145.

4 Set up and run the Application Server (see Using the Application Server on page 59).

5 Install SageCRM if you plan to use that product (see Installing SageCRM on page 43).

6 To run Microsoft Script links, you must have the Microsoft Windows Script Host processor on your system. For information on installing the Microsoft Windows Script Host processor, refer to the Microsoft Download Center Web site.

7 Run Workstation Setup on any workstations that will access the Sage ERP MAS 200 installation (see Workstation Setup on this page).

8 Install optional productivity applications, such as Crystal Reports Designer, on each workstation as needed. Installing Crystal Reports Designer is necessary only if you plan to create or modify reports.

9 If you are installing Federal and State eFiling and Reporting, you must install it on each Sage ERP MAS 200 workstation. For more information, see Installing Federal and State eFiling and Reporting on page 89.

10 Create companies and activate modules (see Creating and Activating Companies on page 98).

11 Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 104).

12 Set up the modules for your companies. If you are converting your existing business management system to Sage ERP MAS 200, assemble the data you need to set up each module. For more information, refer to your *Getting Started Guide.*

Workstation Setup

NOTE
Run the Workstation Setup program after every Sage ERP MAS 200 software upgrade.

The Workstation Setup wizard installs the required software and common programs to the workstations that will access the Application Server installation. The workstation installation wizard copies all of the necessary Dynamic Link Libraries, ActiveX controls, and other components to the local Windows\System folder and sets up the initialization files for the workstation.

Workstation Setup Requirements

Do not install workstation components to a server or to a shared installation. Each workstation must have its own set of workstation components on a local hard drive.

If you are running Sage ERP MAS 200 through Terminal Services or Citrix, do not run the workstation installation wizard directly at the Terminal Services or Citrix server. Instead, run the workstation installation wizard only once through a remote session. Running the workstation installation wizard from a Terminal Services session will set up the correct registry entries for Crystal forms and reports access and copy the multi-user activation file from the Application Server to the Terminal or Citrix server. For more information, see Running in a Terminal Services or Citrix Environment on page 155.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage ERP MAS 200 is installed; however, running the program from the product DVD may be faster for remote users.

NOTE
If you have multiple installations of the same version of Sage ERP MAS 200, see Multiple Installations on page 24.

To run Workstation Setup

1 Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

2 Connect to the server using the UNC to the share point where Sage ERP MAS 200 is installed.

3 Perform one of the following to start the installation:

- To run the Workstation Setup wizard from the Sage ERP MAS 200 installation folder (the preferred method):

  a Use Windows Explorer to attach to the server share point where Sage ERP MAS 200 is installed, and locate the MAS90\Wksetup folder.

  b Double-click Wksetup.exe to run the program; it takes a few seconds to launch.

- To run the Workstation Setup wizard from the Sage ERP MAS product DVD:

  a Place the Sage ERP MAS product DVD in the DVD drive. If Autorun is enabled on the computer, the Sage ERP MAS Autorun screen appears. If the Autorun screen does not appear, on the Windows Start menu, select Run, and type **D:\Autorun.exe** where D:\ is the DVD drive.

  b On the Autorun screen, click Sage ERP MAS 200.

  c On the Sage ERP MAS 200 page, click Install Sage ERP MAS 200 Workstation.

4 Follow the steps in the Workstation Setup wizard.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 200 screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application. For more information, see Productivity Applications on page 27.

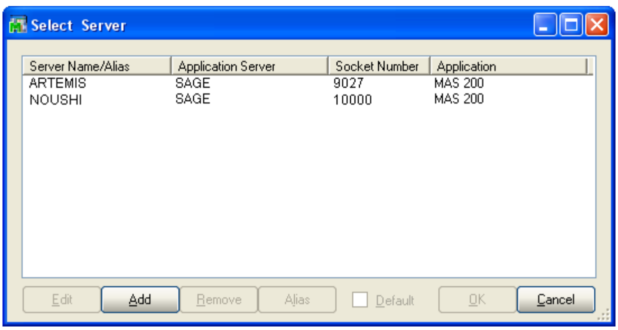
If you are running through Terminal Services/Citrix, you are prompted to indicate whether Sage ERP MAS 200 will be accessed through Terminal Server. Click Yes to copy the activation key file. This allows multiple Terminal Services/Citrix sessions to access Sage ERP MAS 200 at the same time. Click No to leave the activation set for a single user. If you typed NO ACCESS at the Server field in the Sage ERP MAS 200 Server Path page, this message does not appear.

Multiple Installations

A Sage ERP MAS 200 workstation can attach to multiple servers. For example, if your site has three servers and Sage ERP MAS 200 is installed on each server, you can connect to the appropriate server by clicking a single icon rather than having a separate icon for each installation.

Selecting a Server

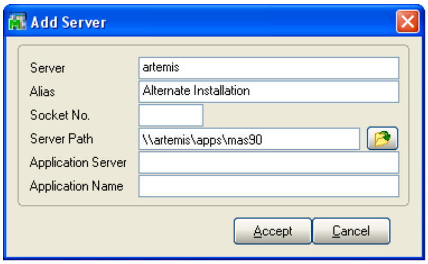
If the Workstation Setup wizard has been run for only one server, your system is configured automatically for that server. Running the Workstation Setup wizard again (from a different server path) allows you to select from multiple servers using the same workstation files. If multiple servers are found in your local configuration file, a dialog box similar to the following appears.



The dialog box lists both the server name and the socket number on which the program is running. Select the server and socket number pair to which to attach and click OK. If you do not want to start Sage ERP MAS 200, click Cancel to terminate the program. You cannot have multiple installations of the Sage ERP MAS 200 server component on the same server.

Editing, Adding, and Removing Servers

Use the Select Server window to edit, add, or remove entries in the window by clicking the appropriate button. Clicking Add displays a window similar to the following in which you can enter a server name, alias, and socket number.



After all the information is entered, click Accept to save the entry or click Cancel to return to the main selection window without adding this server entry.

The Edit feature functions similarly to the Add feature, except that the window contains all of the current information about the server and port ID. The Edit Server window can be used to modify existing data or change the socket number, if necessary. Click Remove in the Select Server window to remove the server entry from the configuration file.

Aliasing a Server

It may be practical to assign an alias to the server and socket number pairs. For example, you can label one installation as “Accounting” and a second installation as “Payroll.” You can assign an alias to any server and socket number pair in the list of installed servers by clicking Alias in the Select Server window.

Select the server and socket number pair to alias by selecting the line and clicking Alias. The following window appears.

Type the name of the alias to use for this server and socket number, and click Accept. If you do not want to alias this server, click Cancel.

The aliases associated with servers are local to each individual workstation. The configuration information is stored in the SOTA.INI file located in the \MAS90\Launcher folder. To use the same configuration files on multiple workstations, copy the SOTA.INI file to each workstation's \MAS90\Launcher folder.

Setting a Default Server

When multiple servers are present, you may want to set a default server and port ID to start up. Even if the server and port are set to Default, the Select Server window always appears; however, the selected server is the one chosen as the default. Click OK to start Sage ERP MAS 200 on the default server.

To set a server and socket number as the default, select the server and socket number pair by clicking the line, and selecting the Default check box. When Sage ERP MAS 200 is started from this workstation, the server and socket number selected as the defaults are highlighted.

Productivity Applications

The following third-party applications are required to perform certain tasks on the workstation. These applications can be installed from the Productivity Applications screen on the Sage ERP MAS product DVD.

- Adobe Acrobat Reader is needed to view Paperless Office documents, the online user guides, the module report samples, and module overview PDFs in the Help system.
- Crystal Reports Designer must be installed on each workstation where reports will be created or modified. For more information, see Installing Crystal Reports Designer on page 77.

Third-Party Applications for SageCRM

The following third-party applications are required to perform certain SageCRM tasks on the workstation.

- Mail Merge Plug-In is required to use the mail merge functionality. The first time a user encounters one of the features requiring the plug-in (for example, the My CRM menu > Calendar page displaying the Document Drop icon), they are prompted to download the plug-in. Instructions are provided on-screen. The user must be an administrator or power user of the client machine to install the Mail Merge Plug-In. The client browser must also be configured to accept plug-ins.
- Microsoft Office Applications are required for users who will be using the mail merge and document merge features supported by SageCRM; Microsoft Word and Excel should be installed on the workstation. The data upload feature accepts files in XLS format, created by Microsoft Excel.
- Microsoft Internet Explorer is required for users to access the SageCRM software.

- Outlook Plug-In is required for SageCRM Outlook Integration. Users can download the Outlook Plug-In from within SageCRM in the My CRM menu > Preferences tab. The user must be an administrator or power user of the client machine to install the Outlook Plug-In.

  If installing SageCRM Outlook Integration in a Terminal Services environment, administrator rights are required on the Terminal Services computer. All instances of Internet Explorer and Outlook must be closed to install the plug-in. At the time of the installation, exclusive access to the server is required for each user. After the plug-in is installed, administrator rights are no longer required.

Chapter 4

Installing Sage ERP MAS 200 SQL

Read this guide completely before installing and setting up Sage ERP MAS 200 SQL. A series of procedures must be completed for new installations. When upgrading a system, there are additional post-installation requirements for migrating existing data and converting it to the current version.

Installation Requirements

Microsoft SQL Server must be installed before installing Sage ERP MAS 200 SQL. Sage supports the installation of Sage ERP MAS 200 SQL and SQL Server on the same server as well as the installation of the two products on separate servers. For information on the version of Microsoft SQL Server available through Sage, see Microsoft SQL Server Runtime Edition 2008 on page 30.

Sage ERP MAS 200 SQL uses the TCP/IP protocol for all communications between the workstation and server. To run Sage ERP MAS 200 SQL, TCP/IP must be properly configured on both the Windows Server and all workstations that will run Sage ERP MAS 200 SQL on the server. For more information, see TCP/IP Protocol on page 153.

If you are installing Sage ERP MAS 200 SQL on a Windows Server with Terminal Services enabled, see Terminal Services Considerations on page 156.

The server where you are installing Sage ERP MAS 200 SQL should have a minimum of 750 MB of free disk space, depending on the number of applications to be installed. Verify that you have 600 MB of disk space available for System Setup and Library Master, plus an additional 15 to 25 MB for each module to be installed.

For information on the specific operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com

Microsoft SQL Server Runtime Edition 2008

If you purchased SQL Server directly from Sage, you will receive a separate installation DVD for Microsoft SQL Server Runtime Edition 2008. The only difference between this version and SQL Server 2008 Standard Edition is that Microsoft SQL Server Runtime Edition 2008 can be used only with Sage products. The performance of the two versions is the same, both come with the same database administration tools, and neither have restrictions on the database size.

Installation Requirements

Microsoft .NET Framework 3.5 is required and is included on the SQL Server installation DVD. If you select the Sage Configured installation type, .NET Framework 3.5 will be automatically installed if the installation wizard detects that your system has an older version.

Windows Installer 4.5 or higher is required and is included on the SQL Server installation DVD. If you select the Sage Configured installation type, Windows Installer 4.5 will be automatically installed if the installation wizard detects that your system has an older version.

SQL Server Installation Types

There are two installation types available: Sage Configured and Advanced. The Sage Configured option allows you to bypass the Microsoft SQL Server Setup program; SQL Server will automatically be optimally configured for Sage ERP MAS 200 SQL. For information on how parameters are defined, see Sage Configured Installation for SQL Server on page 159.

If you select the Advanced installation option, you will exit the Sage installation wizard. The Microsoft SQL Server Setup program’s Autorun screen will appear, and you can use that program to configure and install SQL Server.

If the installation wizard detects an existing SQL Server installation, you will have only the Advanced installation option.

Microsoft SQL Server Runtime Edition 2008 Installation Process

If you purchased SQL Server from Sage, follow the steps below to perform the installation.

To install SQL Server

1 Log on to the server, and close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation..

WARNING
If you install SQL Server or Sage ERP MAS 200 SQL on a server with an unsupported operating system, Sage Customer Support will be unable to assist you if you encounter any problems.

2 Place the Microsoft SQL Server Runtime Edition 2008 DVD in the DVD drive.

3 If Autorun is enabled on the server, the Microsoft SQL Server Runtime Edition 2008 Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe** where D:\ is the DVD drive.

4 On the Autorun screen, click Install Microsoft SQL Server Runtime Edition 2008.

A message dialog box appears if SQL Server is already installed on your system. The Sage Configured installation type will be unavailable; you must use the Advanced SQL Server Installation option.

5 Follow the steps in the installation wizard to install SQL Server. If you select the Advanced SQL Server Installation, you will use the Microsoft SQL Server Setup program to configure and install SQL Server.

NOTE
The SQL Server 2008 Setup window appears during the installation, which may take up to an hour.

If one or more of the required components are missing from your server, a message dialog box appears. Click Yes to install the missing components, or click No to exit the installation process.

6 If you are prompted to restart your system after components are installed, remove the installation DVD from the DVD drive, restart the computer, and then reinsert the DVD to resume the installation.

Pre-Installation Tasks

Perform these tasks before installing Sage ERP MAS 200 SQL.

- If you are upgrading from a prior version, read the *Customer Upgrade Guide*, which is available on the Sage ERP MAS product DVD.
- Verify that you have your packing list, which includes the serial number, customer number, user key, and product key, which are required to install Sage ERP MAS 200 SQL for the correct number of users and to register the modules. This information is also available on the Sage Online Web page under Profile Mgmnt > Products.
- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Support area of the Sage Online Web site at: www.sagesoftwareonline.com
    - The Supported Platform Matrix
    - The Integrated Solutions Compatibility Matrix
    - The current support library
- If you are upgrading from Sage ERP MAS 200 SQL version 4.45, determine whether to perform a parallel installation or an in-place installation.
- Configure TCP/IP as a protocol on your server and workstations. All workstations must be able to ping the server and vice versa. For information on pinging the server, see Basic Configuration on page 153.
- Third-party applications used with Sage ERP MAS 200 SQL may require a drive mapping or UNC to the server where the data files are located. This drive must be mapped to a share point on the server above the MAS90 folder. Although Sage ERP MAS SQL itself does not require a logical drive mapping, any application written to access the data files (including third-party or Sage developer partner applications) must have a valid logon to the server and may require a logical drive mapping or UNC.

- If you are installing SageCRM, create a Windows user account with permissions to access both the server where Sage ERP MAS 200 SQL will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage ERP MAS 200 SQL server and the SageCRM server. You are asked to provide this information during the Sage ERP MAS 200 SQL installation if the Customer Relationship Management module is selected for installation. For more information, see Installing SageCRM on page 43.

Sage ERP MAS 200 SQL Installation Process

Run the Sage ERP MAS 200 SQL installation wizard program to install a new instance of Sage ERP MAS 200 SQL or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage ERP MAS 200 SQL

1. Log on to the server where Sage ERP MAS 200 SQL will be installed using an account with administrator rights. You must run the Setup program from the Windows server, not from a workstation connected to the server.

2. Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

3. Place the Sage ERP MAS product DVD in the DVD drive.

4. If Autorun is enabled on the server, the Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe** where D:\ is the DVD drive. The wizard must be launched from the Autorun screen, not from the individual setup files on the DVD.

NOTE
When specifying where to install Sage ERP MAS, do not nest a destination folder in folders named MAS90 or SOA.

5. On the Autorun screen, click Sage ERP MAS 200 SQL.

6. On the Sage ERP MAS 200 SQL screen, click Install Sage ERP MAS 200 SQL.

7. A message dialog box appears if the operating system on the server is not supported. Click Yes to continue with the installation or click No to cancel the installation.

8 Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

The time required for installing depends on the number of modules selected. If several modules are installed, this process may take several minutes.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 200 SQL screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application. For more information, see Productivity Applications on page 41.

Post-Installation Tasks

Perform the following tasks after installing Sage ERP MAS 200 SQL.

1. If you are upgrading, refer to your *Customer Upgrade Guide*.
2. Install any version 4.50 product updates available on the Sage Online Web site at: www.sagesoftwareonline.com
3. Create a share at least one folder above the MAS90 folder. This is required before running Workstation Setup. For more information, see Sage ERP MAS Security Permissions on page 145.
4. Set up and run the Application Server (see Using the Application Server on page 59).
5. Install SageCRM if you plan to use that product (see Installing SageCRM on page 43).
6. To run Microsoft Script links, you must have the Microsoft Windows Script Host processor on your system. For information on installing the Microsoft Windows Script Host processor, refer to the Microsoft Download Center Web site.
7. Run Workstation Setup on any workstations that will access the Sage ERP MAS 200 SQL installation (see Workstation Setup on page 35).

8 Install optional productivity applications, such as Crystal Reports Designer, on each workstation as needed. Installing Crystal Reports Designer is necessary only if you plan to create or modify reports.

9 If you are installing Federal and State eFiling and Reporting, you must install it on each Sage ERP MAS 200 SQL workstation. For more information, see Installing Federal and State eFiling and Reporting on page 89.

10 Create companies and activate modules (see Creating and Activating Companies on page 98).

11 Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 104).

12 Set up the modules for your companies. If you are converting your existing business management system to Sage ERP MAS 200 SQL, assemble the data you need to set up each module. For more information, refer to your *Getting Started Guide.*

Workstation Setup

NOTE
Run the Workstation Setup program after every Sage ERP MAS 200 SQL software upgrade.

The Workstation Setup wizard installs the required software and common programs to the workstations that will access the Application Server installation. The workstation installation wizard copies all of the necessary Dynamic Link Libraries, ActiveX controls, and other components to the local Windows\System folder and sets up the initialization files for the workstation.

Workstation Setup Requirements

Do not install workstation components to a server or to a shared installation. Each workstation must have its own set of workstation components on a local hard drive.

If you are running Sage ERP MAS 200 SQL through Terminal Services or Citrix, do not run the workstation installation wizard directly at the Terminal Services or Citrix server. Instead, run the workstation installation wizard only once through a remote session. Running the workstation installation wizard from a Terminal Services session will set up the correct registry entries for Crystal forms and reports access and copy the multi-user activation file from the Application Server to the Terminal or Citrix server. For more information, see Running in a Terminal Services or Citrix Environment on page 155.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage ERP MAS 200 SQL is installed; however, running the program from the product DVD may be faster for remote users.

NOTE
If you have multiple installations of the same version of Sage ERP MAS 200 SQL, see Multiple Installations on page 38.

To run Workstation Setup

1 Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

2 Connect to the server using the UNC to the share point where Sage ERP MAS 200 SQL is installed.

3 Perform one of the following to start the installation:

- To run the Workstation Setup wizard from the Sage ERP MAS 200 installation folder (the preferred method):

  a Use Windows Explorer to attach to the server share point where Sage ERP MAS 200 SQL is installed, and locate the MAS90\Wksetup folder.

  b Double-click Wksetup.exe to run the program; it takes a few seconds to launch.

- To run the Workstation Setup wizard from the Sage ERP MAS product DVD:

  a Place the Sage ERP MAS product DVD in the DVD drive. If Autorun is enabled on the computer, the Sage ERP MAS Autorun screen appears. If the Autorun screen does not appear, on the Windows Start menu, select Run, and type **D:\Autorun.exe** where D:\ is the DVD drive.

  b On the Autorun screen, click Sage ERP MAS 200 SQL.

  c On the Sage ERP MAS 200 SQL page, click Install Sage ERP MAS 200 SQL Workstation.

4 Follow the steps in the Workstation Setup wizard.

NOTE
If a message dialog box appears asking you to restart the computer, you must do so before the installation will be fully functional.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. After the installation is complete, the Sage ERP MAS 200 SQL screen appears. Click Productivity Applications, and then click Install Acrobat Reader to install the application For more information, see Productivity Applications on page 41.

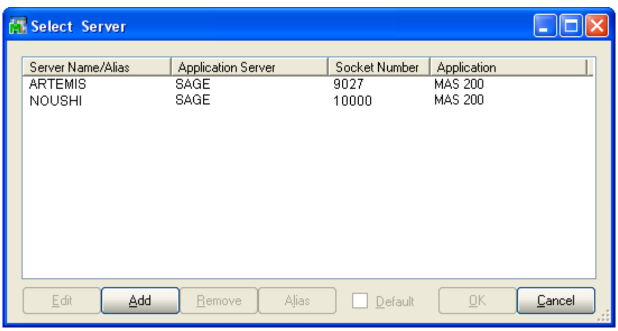
If you are running through Terminal Services/Citrix, you are prompted to indicate whether Sage ERP MAS 200 SQL will be accessed through Terminal Server. Click Yes to copy the activation key file. This allows multiple Terminal Services/Citrix sessions to access Sage ERP MAS 200 SQL at the same time. Click No to leave the activation set for a single user. If you typed NO ACCESS at the Server field in the Sage ERP MAS 200 SQL page, this message does not appear.

Multiple Installations

A Sage ERP MAS 200 SQL workstation can attach to multiple servers. For example, if your site has three servers and Sage ERP MAS 200 SQL is installed on each server, you can connect to the appropriate server by clicking a single icon rather than having a separate icon for each installation.

Selecting a Server

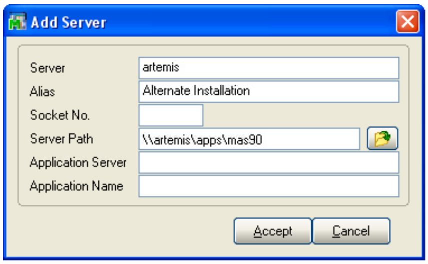
If the Workstation Setup wizard has been run for only one server, your system is configured automatically for that server. Running the Workstation Setup wizard again (from a different server path) allows you to select from multiple servers using the same workstation files. If multiple servers are found in your local configuration file, a dialog box similar to the following appears.



The dialog box lists both the server name and the socket number on which the program is running. Select the server and socket number pair to which to attach and click OK. If you do not want to start Sage ERP MAS 200 SQL, click Cancel to terminate the program. You cannot have multiple installations of the Sage ERP MAS 200 SQL server component on the same server.

Editing, Adding, and Removing Servers

Use the Select Server window to edit, add, or remove entries in the window by clicking the appropriate button. Clicking Add displays a window similar to the following in which you can enter a server name, alias, and socket number.



After all the information is entered, click Accept to save the entry or click Cancel to return to the main selection window without adding this server entry.

The Edit feature functions similarly to the Add feature, except that the window contains all of the current information about the server and port ID. The Edit Server window can be used to modify existing data or change the socket number, if necessary. Click Remove in the Select Server window to remove the server entry from the configuration file.

Aliasing a Server

It may be practical to assign an alias to the server and socket number pairs. For example, you can label one installation as “Accounting” and a second installation as “Payroll.” You can assign an alias to any server and socket number pair in the list of installed servers by clicking Alias in the Select Server window.

Select the server and socket number pair to alias by selecting the line and clicking Alias. The following window appears.

Type the name of the alias to use for this server and socket number, and click Accept. If you do not want to alias this server, click Cancel.

The aliases associated with servers are local to each individual workstation. The configuration information is stored in the SOTA.INI file located in the \MAS90\Launcher folder. To use the same configuration files on multiple workstations, copy the SOTA.INI file to each workstation's \MAS90\Launcher folder.

Setting a Default Server

When multiple servers are present, you may want to set a default server and port ID to start up. Even if the server and port are set to Default, the Select Server window always appears; however, the selected server is the one chosen as the default. Click OK to start Sage ERP MAS 200 SQL on the default server.

To set a server and socket number as the default, select the server and socket number pair by clicking the line, and selecting the Default check box. When Sage ERP MAS 200 SQL is started from this workstation, the server and socket number selected as the defaults are highlighted.

Productivity Applications

The following third-party applications are required to perform certain tasks on the workstation. These applications can be installed from the Productivity Applications screen on the Sage ERP MAS product DVD.

- Adobe Acrobat Reader is needed to view Paperless Office documents, the online user guides, the module report samples, and module overview PDFs in the Help system.
- Crystal Reports Designer must be installed on each workstation where reports will be created or modified. For more information, see Installing Crystal Reports Designer on page 77.

Third-Party Applications for SageCRM

The following third-party applications are required to perform certain SageCRM tasks on the workstation.

- Mail Merge Plug-In is required to use the mail merge functionality. The first time a user encounters one of the features requiring the plug-in (for example, the My CRM menu > Calendar page displaying the Document Drop icon), they are prompted to download the plug-in. Instructions are provided on-screen. The user must be an administrator or power user of the client machine to install the Mail Merge Plug-In. The client browser must also be configured to accept plug-ins.
- Microsoft Office Applications are required for users who will be using the mail merge and document merge features supported by SageCRM; Microsoft Word and Excel should be installed on the workstation. The data upload feature accepts files in XLS format, created by Microsoft Excel.
- Microsoft Internet Explorer is required for users to access the SageCRM software.

- Outlook Plug-In is required for SageCRM Outlook Integration. Users can download the Outlook Plug-In from within SageCRM in the My CRM menu > Preferences tab. The user must be an administrator or power user of the client machine to install the Outlook Plug-In.

  If installing SageCRM Outlook Integration in a Terminal Services environment, administrator rights are required on the Terminal Services computer. All instances of Internet Explorer and Outlook must be closed to install the plug-in. At the time of the installation, exclusive access to the server is required for each user. After the plug-in is installed, administrator rights are no longer required.

Chapter 5

Installing SageCRM

The SageCRM server(s) host the SageCRM program files, Internet Information Services (IIS) Web Server, and SQL Server database. These components should be installed on a separate server from the one with Sage ERP MAS installed. Depending on the number of users accessing the SageCRM server, it may be necessary to split the SageCRM SQL Server database and the IIS Web server across two or more machines.

Only one company in your Sage ERP MAS software can be integrated with a single SageCRM database. If you are integrating multiple companies with SageCRM, a separate SageCRM installation, key, and database are required for each company you are integrating.

Hardware Requirements

These guidelines are for call center-type users on a non-customized system. Product customizations can significantly impact the performance of SageCRM and should be carefully evaluated when specifying hardware.

- For the Web server, disk mirroring (RAID 1) is recommended. For the database server, a RAID 10 disk array system is strongly recommended. RAID 10 allows you to swap out a failed drive with minimal disruption to your production environment and improves performance. Larger sites should consider the use of a fiber channel SAN.
- Each site must have adequate backup and recovery capabilities.
- An Uninterruptible Power Supply is recommended.
- A "hot standby" system with a backup database is recommended. This standby system should have a very similar configuration to the primary production system, and can also be used for development and testing.

- The amount of disk space required varies based on the number of customer records, archiving plans, and backup policies. The disk space can also vary based on the amount of data stored for each customer. Estimate disk space needs before installation to allow for significant growth in the volume of data.
- Keep in mind the type of user who will be working with the system. For example, 200 call center users use the system more intensively than 200 sales and marketing users.

Using Multiple Servers

Follow these guidelines for determining the number of SageCRM servers to use. You should use test servers to replicate your intended server configuration before using live data.

- If your installation will be accessed by fewer than 50 users and the database size is less than 2GB, the database and Web server can be located on the same machine. The machine should have two dual core processors.
- If your installation will be accessed by more than 50 users, split the database server and Web server across two machines. The machines should each have two dual core processors.
- If your installation will be accessed by more than 200 users, use high-specification processors in each machine. If your installation will be accessed by several hundred users, multi-server SageCRM should be considered.

Software Requirements

NOTE Microsoft SQL Server Express is not supported.

Only Microsoft SQL Server databases are supported. SQL Server must be installed on the database server before SageCRM is installed. Microsoft Internet Information Services (IIS) must also be installed on the Web server. This guide assumes that you understand the SQL Server and IIS Web server environments.

SageCRM connects to the database using Microsoft Data Access Components (MDAC). If MDAC or its latest version is not already installed on your system, it is installed as part of setup.

Java 2 Runtime Environment is required; if it is not installed on the server, you are prompted to install it. You must then restart your system for Java 2 Runtime Environment changes to take effect. This software is required for the FOP software to function.

Microsoft .NET Framework is required; if it is not installed on the server, you are prompted to install it. This component is required for SageCRM.

Pre-Installation Tasks

Perform these tasks before beginning the installation process.

- Ideally, Sage ERP MAS 90, 200, or 200 SQL should be installed before installing SageCRM (see Installing Sage ERP MAS 90 on page 7, Installing Sage ERP MAS 200 on page 17, or Installing Sage ERP MAS 200 SQL on page 29).
- If you are upgrading from a prior version of SageCRM, you must remove all third-party customizations before beginning the upgrade. Contact your Sage business partner for assistance. For further information, see Upgrading SageCRM on page 48.
- Determine the name of the database server you will install to and the port number that SQL Server is using for TCP/IP connectivity.
- If the Customer Relationship Management module was selected when installing Sage ERP MAS, the Integration Engine should have been automatically started. If it is not running, perform the following steps to start it:

  a Select Windows Start menu > All Programs > Administrative Tools > Services.

  b In the Services window, select Sage MAS 90 and 200 Integration Engine. Click the Start Service button.

Tasks to perform if installing on a Windows 2008 Server Network

Perform the following pre-installation tasks if you are installing SageCRM on a Windows 2008 Server Network:

- Install the following server roles, if not already installed.
  - ASP.NET
  - ASP (set Enable Parent Paths to True)
  - ISAPI Extensions
  - Windows Authentication (if Auto Logon is used)
  - IIS 6 Management Console
  - IIS 6 Management Compatibility
- In IIS, ensure that the Anonymous Authentication Credentials are either using Application Pool Identity or are hard-coded with a local administrator account.
- If Windows Firewall is used, set the Incoming connections option to Allowed.
- Verify that the Application Server port ID is open, and create an inbound rule, if necessary.
- Verify that the SQL Server port ID is open, and create an inbound rule, if necessary.
- Verify that the Integration Engine port ID is open, and create an inbound rule, if necessary.
- If 64-bit is used, run IIS in 32-bit compatibility mode. For more information, refer to your SageCRM *System Administrator Guide*.
- Perform the DVD installation of SageCRM directly at the server.

Installation Process

NOTE
Sage ERP MAS supports the United States dollar currency only.

Perform this installation at the server that hosts the IIS Web server. This section refers only to a new installation. For information on upgrading, see Upgrading SageCRM on page 48.

To install SageCRM

1. Go to the IIS Web server where you are installing the SageCRM software.
2. Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
3. Place the Sage ERP MAS product DVD in the DVD drive of the server.
4. If Autorun is enabled on the server, the Sage ERP MAS Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe**, where D:\ is the DVD drive.
5. On the Autorun screen, select your Sage ERP MAS product.
6. On the product screen, click Install SageCRM 7.1 SP1.
7. If Microsoft .NET Framework is not installed on the server, you are prompted to install it. Click OK to launch and complete the Microsoft .NET Framework installation wizard.
8. Follow the steps in the installation wizard to install SageCRM.

WARNING
Stopping the IIS server disconnects all users who are currently using any Web site connected to the IIS server.

Note the name of the SageCRM SQL Server database and logon information. When setting up the Customer Relationship Management module in Sage ERP MAS, you will be required to provide this information.

If Internet Information Services (IIS) is running on the server, you are prompted to stop IIS before the installation process begins. Click OK to stop the IIS server and perform the installation. After the installation has completed, IIS will be restarted automatically.

Post-Installation Tasks

Set up the Customer Relationship Management module in your Sage ERP MAS installation. Sage ERP MAS and SageCRM will not be integrated until after you set up the module in CRM Options. For more information, see Set Up Customer Relationship Management for a new Company in the Sage ERP MAS Help system.

Set up and create users, territories, and security profiles in the SageCRM software. One SageCRM user must be created for each salesperson defined in your Sage ERP MAS software. For more information, refer to the SageCRM *System Administrator Guide*, which is available in the CRM\Documentation folder on the Sage ERP MAS product DVD.

Upgrading SageCRM

If your existing installation has third-party customizations, they must be removed before beginning the upgrade. Contact your Sage business partner for assistance.

Upgrading from Extended Enterprise Suite 1.3 or 1.4

If you are upgrading from Sage Extended Enterprise Suite version 1.3 or 1.4, you must first install SageCRM 7.0 D2 before upgrading to SageCRM 7.1 SP1 for Sage ERP MAS version 4.50.

For information on upgrading to SageCRM 7.0 D2, see the SageCRM Updates section in the Extended Enterprise Suite Support area at Sage Online (www.sagesoftwareonline.com).

⚠ **WARNING** You must upgrade Sage ERP MAS before you can log into SageCRM.

To upgrade from SageCRM version 7.0 D2 to version 7.1 SP1

1 Go to the IIS Web server where you are installing the SageCRM software.

2 Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.

3 Place the Sage ERP MAS product DVD in the DVD drive of the server.

4 If Autorun is enabled on the server, the Sage ERP MAS Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe**, where D:\ is the DVD drive.

5 On the Sage ERP MAS Autorun screen, select a product, and then click Install SageCRM 7.1 SP1.

6 On the Install SageCRM 7.1 SP1 screen, select the option to upgrade from your existing version. The installation wizard may take a few seconds to launch.

7 Click Next to proceed with the installation.

8 On the page where you select a setup type, select Upgrade Previous version of CRM.

9 Proceed through the remaining steps to complete the installation.

A message dialog box may appear recommending that any triggers in the SageCRM database be disabled before the upgrade. The following triggers have been enabled by Sage to facilitate integration between SageCRM and Sage ERP MAS; it is not necessary to disable these triggers.

- Users - trguUsersSyncMAS90
- Company - trguCompanySyncMAS90
- Person - trguPersonSyncMAS90
- Address - trguAddressSyncMAS90
- Address_Link - trguAddressSyncMAS90
- Email - trguEmailSyncMAS90
- Phone - trguPhoneSyncMAS90
- Opportunity - trguOpportunitySyncMAS90
- Custom_Captions - trguCaptionsSyncMAS90

Upgrading from Extended Enterprise Suite 1.2 or prior

Sage does not support upgrading from versions of Extended Enterprise Suite prior to version 1.3. If you are on version 1.2 or prior, you must upgrade to version 1.4 and then update that installation with SageCRM 7.0 D2 before upgrading to SageCRM 7.1 SP1. For more information, refer to the Extended Enterprise Suite Support area at Sage Online at: www.sagesoftwareonline.com

Chapter 6

Uninstalling and Reinstalling

Uninstalling Sage ERP MAS requires uninstalling each component separately. The server and workstation uninstall routines will remove all program files and registry entries made by the Sage ERP MAS installation routines. You will have the option of removing Sage ERP MAS data files if you uninstall the server component. All Sage ERP MAS client workstation files are removed automatically by the workstation uninstall program.

Overview of Uninstalling Process

The installation process below describes all the procedures that must be performed to uninstall Sage ERP MAS.

1. If you are using SageCRM, in Library Master Company Maintenance, remove all Customer Relationship Management module data for the Sage ERP MAS company. This step must be performed for all Sage ERP MAS companies. For more information, see Remove Data in the Help system.

2. If you are using Sage ERP MAS 90 and 200 Fixed Assets, uninstall Sage ERP MAS 90 and 200 Fixed Assets from the server and each workstation. For more information, refer to your *Fixed Assets Installation and System Administrator's Guide*.

3. Uninstall Sage ERP MAS from the Application Server and each workstation (see Uninstalling the Sage ERP MAS Server Component on page 52).

4. Uninstall the SageCRM software, if it is installed (see Uninstalling SageCRM on page 54).

Uninstalling the Sage ERP MAS Server Component

The uninstall program performs a complete deletion of all Sage ERP MAS related files. By default, the data files created by Sage ERP MAS are not removed; however, you will receive an option to remove the data files.

NOTE
If the Integration Engine is running, stop the engine before uninstalling Sage ERP MAS.

To uninstall the server component

1 Ensure that all users are logged out of the system.

2 In the Windows Control Panel, double-click the Programs and Features icon.

3 Select the Sage ERP MAS server component from the list. Click Uninstall to start the uninstall process. If you have more than one installation of Sage ERP MAS on your server, each installation will be identified by its installation path.

4 The uninstall splash screen appears briefly and is replaced by the Confirm Uninstall dialog box. Click OK.

5 The Uninstall Options page appears. Select the type of uninstall to perform. If you choose to remove a registry entry, you will be removing the registry entry from all installations of Sage ERP MAS. Click Next.

NOTE
When uninstalling Sage ERP MAS 200 SQL from the server, the SQL database is not removed. Use the Microsoft database tools to remove the SQL database.

The uninstall program will begin removing the components of the server application according to what is contained in the Uninstallation Log. This includes the following components:

- All system files installed by Sage ERP MAS. This reduces the usage count of the shared system files, except for core components.
- All files copied during installation
- The program folder and program items created during installation
- Folders created during installation, specifically the MAS90 folder

If you selected the check box to remove all registry entries, all data folders will remain in the MAS90 folder. If you select the Remove Company Data check box, the entire MAS90 folder structure will be deleted.

If there are any files that the uninstall program was unable to delete, a message appears stating that you can click the Details button to view a listing of the files and/or registry entries that could not be removed; otherwise, a message stating that the uninstallation process was successful appears. If you choose to retain company data, the uninstall program will not remove the MAS90 folder created during the installation. This folder will appear in the Details Listing and is normal.

Uninstalling the Workstation Component

The uninstall process for the Sage ERP MAS workstation component is similar to the server component uninstall process.

To uninstall the workstation component

1 In the Windows Control Panel, double-click the Programs and Features icon.

2 Select the Sage ERP MAS workstation component from the list. Click Uninstall to start the uninstall process.

3 You are prompted to confirm your selection. Click Yes to confirm that you want to remove the indicated software application. Click No to cancel this operation.

4 Some registry entries may be needed by other installations of the Sage ERP MAS workstation; therefore, the uninstall program will prompt you before removing those entries. If the message dialog box appears, click Yes to remove the registry entries that are shared with other installations of Sage ERP MAS on this workstation. Click No to keep those registry entries.

If there are any files or registry entries that the uninstall program was unable to delete, a message dialog box appears stating that you can click Details to view a listing of those files and/or registry entries; otherwise, a message stating that the uninstallation process was successful appears.

Uninstalling SageCRM

Before uninstalling, verify that all users are logged out of SageCRM, and shut down Internet Information Services (IIS). The SageCRM uninstallation program removes the SageCRM files and SQL database.

To uninstall SageCRM

1. In the Windows Control Panel, double-click the Programs and Features icon.
2. Select CRM Server, and then click Uninstall.
3. Follow the steps in the wizard to uninstall SageCRM.
4. When the uninstallation is complete, select the View Uninstall Log File check box to view logging information. Click Finish.
5. The log file is displayed. If you need to manually delete any files, details are specified in the log. Review the log file to make sure there are no errors. Resolve any errors listed in the log file before reinstalling SageCRM. Unresolved errors may prevent future installations of SageCRM from functioning correctly.

Reinstalling the Sage ERP MAS Application Server

If you previously installed the 4.50 version of the software, you can install over the existing 4.50 installation or install a new copy of the software. Installing over an existing 4.50 version of the software streamlines the installation process.

Before reinstalling the Application Server, if the Sage Web Engine is installed for the eBusiness Manager module, back up any customized templates in the IW folder to another location, and then uninstall the Sage Web Engine. After the 4.50 Sage Web Engine is installed, move the templates back to the IW folder.

To reinstall the Application Server

1 In the Sage ERP MAS product DVD Autorun screen, select a product.

2 On the product main page, select the option to install that product.

3 Select whether to add, reinstall, update, or uninstall all modules.

- Select Add if you purchased additional modules and are adding them. You will be required to enter a new product key.
- Select Reinstall to reinstall previously installed modules. The product key information from the selected installation is used unless the information is invalid or has expired. You will not be able to enter new product key information using this option. Proceed to step 4.
- Select Update to update a previous installation of the Application Server. The product key information from the selected installation is used unless the information is invalid or has expired. You will not be able to enter new product key information using this option. If the information is invalid, see Installing Sage ERP MAS 200 on page 17 to perform a new installation.
- Select Uninstall to completely uninstall Sage ERP MAS. To uninstall modules individually, use the System Configuration task on the Library Master Setup menu. For further information, see Uninstalling the Sage ERP MAS Server Component on page 52.

4 Select Reinstall and click Next. If the Integration Engine is running, a message dialog box appears stating that you must stop the Integration Engine before continuing. Stop the Integration Engine using the following steps:

a Select Windows Start menu > All Programs > Administrative Tools > Services.

b In the Services window, select the Integration Engine. Click the Stop Service button.

5 In the message dialog box, click OK.

6 Proceed through the remaining steps in the installation wizard to complete the reinstallation.

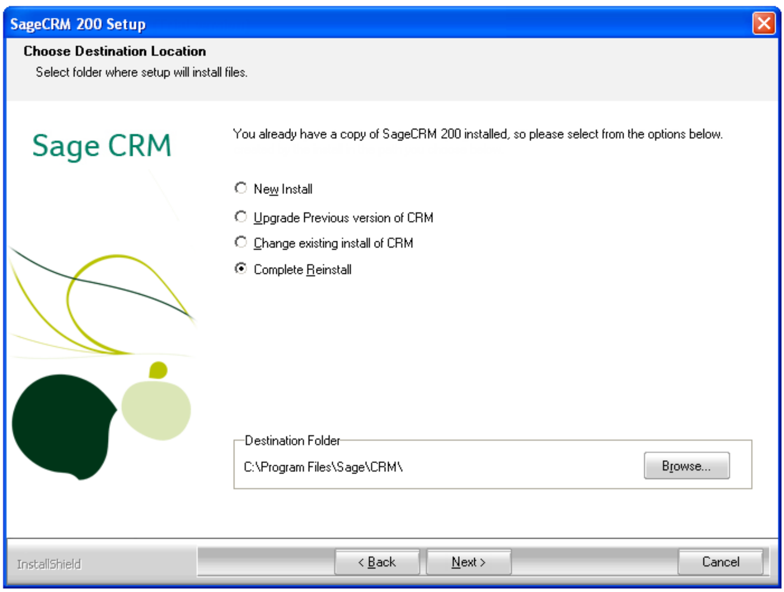
7 When the reinstallation is complete, restart the Integration Engine using the following steps:

   a Select Windows Start menu > All Programs > Administrative Tools > Services.

   b In the Services window, select the Integration Engine. Click the Start Service button.

Reinstalling SageCRM

If you previously installed the SageCRM software, the following page appears after the License Agreement page of the SageCRM installation.



WARNING
Selecting the Complete Reinstall option will remove all data from the database.

To reinstall SageCRM

1 Select the Complete Reinstall installation option to reinstall over a SageCRM installation, and then proceed to the next step.

2 If you have more than one SageCRM installation, select the installation to reinstall. Click Next.

3 Follow the steps in the installation wizard to complete the reinstallation. For more information, see Installing SageCRM on page 43.

Changing an Existing SageCRM Installation

The SageCRM installation wizard allows you to change specific components in SageCRM without performing a full reinstallation. Components you can reinstall are the database, registry, program files, IIS aliases, and license key. Changing the license key allows you to add features or increase the number of licensed users.

To change an existing installation of SageCRM

1 Select the Change existing install of CRM option.

2 If you have more than one SageCRM installation, select the installation to reinstall. Click Next.

3 Follow the steps in the installation wizard to complete the reinstallation. For more information, see Installing SageCRM on page 43.

If you selected options other than the license key, you are prompted to back up components that will be affected. Perform the backup before you proceed.

Reinstalling the Workstation

If you previously installed the 4.50 version of the software, you can install over the existing 4.50 installation or install a new copy of the software. Installing over an existing 4.50 version of the software streamlines the installation process.

To reinstall the workstation

1 Use Windows Explorer to attach to the server share point where the Application Server is installed and browse to the MAS90\Wksetup folder.

2 In the Wksetup folder, double-click WkSetup.exe to run the workstation installation wizard. It takes the workstation installation wizard a few seconds to launch.

3 Follow the steps in the installation wizard to reinstall the workstation.

Chapter 7

Using the Application Server

This chapter applies to:
Sage ERP MAS 200
Sage ERP MAS 200 SQL

Application Server Overview

Sage ERP MAS 200 and 200 SQL are powered by the Application Server, a powerful program that allows multiple users to remotely access the server using TCP/IP. Users can be connected on an internal LAN or externally through an intranet or WAN. The Application Server also allows for encryption using SSL to protect your data if operating in an environment that is not secure, such as over the Internet.

Configuring the Application Server

Before you can start Sage ERP MAS 200 or 200 SQL, you must first configure the Application Server. The Application Server can be configured to run as a service; it must be configured using the following steps to access the Sage ERP MAS server.

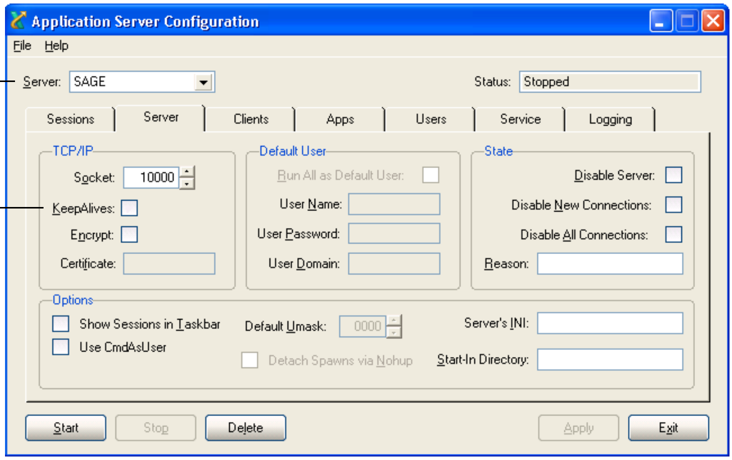
To configure the Application Server

1 On the server where Sage ERP MAS is installed, from the Windows Start menu, run the Application Server Configuration program. This program should be a shortcut in the Sage program group, unless you installed to a different location.

2 In the Application Server Configuration window, click the Server tab.

The server selected at this field is the logical name to identify the Application Server. This does not refer to the physical machine name of the server.

Verify the KeepAlives check box is cleared.



3 For security purposes, the first setting you should change is the socket number on which the Application Server listens for requests. By default, this is set to 10000, but can be any valid socket (port) between 9000 and 10000. Make sure the socket you choose is not being used by another service or application on this server.

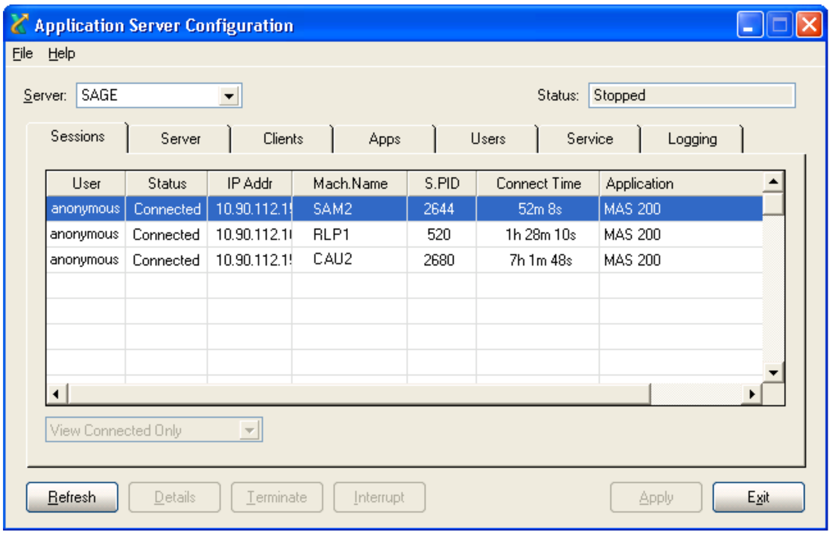
4 Click Start to start the Application Server. In the upper-right corner, the Status field changes from Stopped to Running. Click Exit to exit the Application Server Configuration program. Users can now access Sage ERP MAS after performing workstation setup.

The Application Server continues to run and will service incoming requests from Sage ERP MAS clients, even though you have exited the Application Server Configuration program.

In this current configuration, a user must remain logged onto the server where the Application Server is running. The user logged on to this server must have access to all resources required by Sage ERP MAS (all rights to all program and data folders in Sage ERP MAS).

After the Application Server has been configured once, you do not need to re-run the Application Server Configuration program to start the Application Server. You can start the Application Server by selecting the Application Server Startup menu item from the Windows Start menu. This starts the Application Server which will continue to run until the user is logged off or the server is shut down.

To view users currently running Sage ERP MAS and the tasks that users are running, click the Sessions tab.



Turning Off the Application Server

There may be instances when you want to turn off the Application Server, such as before installing an operating system update.

To turn off the Application Server

1 Run the Application Server Configuration program.

2 Click the Servers tab and then click Stop. The Status field changes from Running to Stopped.

You can also turn off the Application Server by closing the Application Server task that appears on the Task Bar of the server. To do this, right-click the task and click Close from the pop-up menu. The Application Server will shut down after a few seconds.

Configuring as a Service

Depending on your needs, you may want to start the Application Server as a service of the operating system. Running as a service has a number of advantages:

- The Application Server can be configured to start automatically so that if the server is rebooted, you do not have to re-start the Application Server.
- It is more secure because someone does not need to be logged onto the server in order for the Application Server to run.

To configure the Application Server as a service

1. Configure the Application Server. For instructions, see Configuring the Application Server on page 59.
2. Exit the Application Server Configuration program after the Application Server has been configured.
3. If you already have a Windows domain user account set up to run the Application Server, skip this step; otherwise, create a new domain user on your server that has appropriate access rights to run all the functions and features of Sage ERP MAS. This should include the Modify permission to the application folder, any folders where Sage ERP MAS data is located, the Windows folder, and access to the Registry. This account must also be granted the Log On as a Service right.

   If you are not running in a domain environment, create and use a local computer account for your workgroup; however, you must ensure this account can execute a UNC path to the MAS90 folder. Test this by entering the UNC path in Windows Explorer. If you are prompted for a user name and password, the account is not set up properly.
4. After a user is created, on the Windows Start menu, select All Programs > Sage > Application Server Service Setup. A dialog box appears.

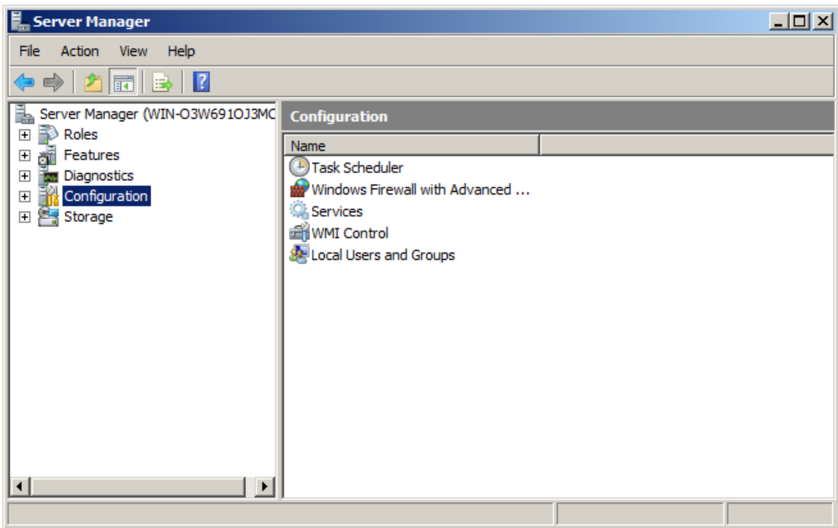
5 Select the path of the Sage ERP MAS installation, if it is different than the default Sage ERP MAS installation path. The Application Server Service installation wizard installs the service components necessary to run the Application Server as a service.

NOTE
Your screens may vary slightly depending on the version of Windows you are using.

6 Use the Services applet to configure the service.

a Right-click the Computer shortcut on the system's Desktop, and then select Manage. The Server Manager window appears.

b In the left pane of the Server Manager window, select Configuration. The Services item appears in the right pane of the window.

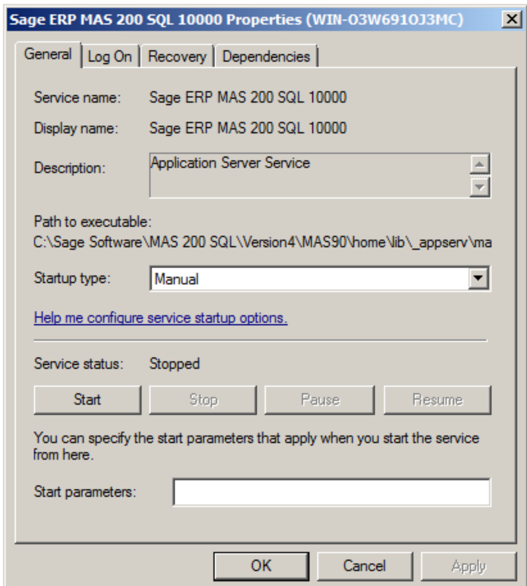


c Double-click Services. All of the services available on the server appear in the right pane of the window.

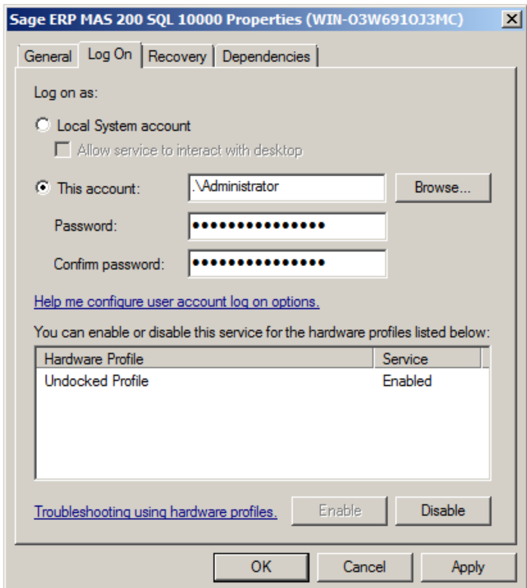
d Double-click either Sage ERP MAS 200 Service or Sage ERP MAS 200 SQL Service, depending on which product you are using. The properties window for the service opens.

There are two settings you may want to change:

- The startup type, by default, is set to Manual. To have the service start automatically whenever the system is restarted, change the startup method to Automatic. If the service is set to Manual, you will need to launch this window to start up the service each time the server is reset. You may want to set the service to Manual if you plan on performing maintenance on the server and do not want the Application Server service to start up after restarting.



- Change the logon user to the domain user that was created previously to run the Sage ERP MAS Application Server. Do not run the Sage ERP MAS Application Server service under the Local System account. The Local System account does not have access to certain network resources that Sage ERP MAS requires. Provide the user logon and password information where specified.



7 Click Apply to save any changes.

8 On the General tab, click Start to begin the service. The Service Status message changes to Started, and users can now access Sage ERP MAS.

Advanced Features

The Application Server has a number of additional features that can be useful for system administrators. You can enable some of these features for added security or logging purposes; however, these are not required to run Sage ERP MAS. To enable these features, you must log on to the server and start the Application Server Configuration program.

Session Tracking

In the Application Server Configuration window, on the Sessions tab, you can view a list of all the users who are currently in the system and which program they are running. This window also provides you with more detailed information about the machine name, IP address, and connection time for each process. This is useful when trying to find users on the system or people in a particular application. Master Console in Sage ERP MAS can also be used for this purpose.

Individual sessions can also be terminated if they appear to be locked up or become unresponsive. Terminating a process in this manner can cause data corruption issues and should only be done as a last resort. To terminate a session, select the session from the list and then click Terminate.

SSL Encryption

The Application Server can be configured to use SSL to encrypt data being sent to and from the Application Server. This can be extremely useful when using the Internet or any other unsecure medium to connect workstations to the server; however, SSL does add extra overhead in terms of performance. This feature should be enabled only if it is necessary. Using SSL in a secured, intranet environment or over an already protected tunneling protocol (like VPN) is not recommended due to the potential performance impact.

The SSL component of the Application Server uses the OpenSSL protocol and drivers. To use SSL, you must first configure the Sage ERP MAS Application Server to use SSL and then generate an SSL certificate. For more information, see Generating an SSL Certificate on page 67.

To configure the ERP Application Server to use SSL

1. Make sure all users are out of Sage ERP MAS. After SSL is enabled, a different connection string is required for each of the workstations connecting to the server. Workstations that do not have this additional information will not be allowed to connect to Sage ERP MAS.

2. Run the Application Server Configuration program.

3. In the Application Server Configuration window, click the Server tab and select the Encrypt check box. The Certificate field becomes enabled and allows you to type the path to the SSL certificate.

4. Provide the full path to the certificate relative to the server where Sage ERP MAS is installed. After the certificate is entered and validated, the server automatically updates its configuration.

5. On each workstation that will be connecting to Sage ERP MAS, change the Sage ERP MAS shortcut as follows: in the Target command line, add -SSL to the end of the parameter list.

If you receive an error trying to connect to the server after configuring SSL, perform the following:

- Verify that the workstation startup shortcut was modified.
- Verify which startup icon the user used when trying to connect to the server, and verify that the -SSL argument is in the target command line. Users may have more than one shortcut connecting them to the server that need to be modified.

NOTE
If you are unfamiliar with generating a certificate for secure transactions, consult a network consultant or business partner.

Generating an SSL Certificate

To use the SSL capabilities of the Application Server, create a .pem file that contains both the certificate and your private key in X509 format.

For information on generating an SSL certificate, use the Knowledge Base on the Sage Online Web site at www.sagesoftwareonline.com to search for the following text: How to generate an SSL certificate.

Chapter 8

Configuring the Client/Server ODBC Driver

This chapter applies to:
Sage ERP MAS 200

The Sage ERP MAS 200 server installs client/server ODBC driver components, which allow remote workstations to process Crystal Reports worktables using server-side ODBC processing. Report rendering is completed using a locally cached copy of the form or report and a local Crystal Reports print engine.

Server-Side Configuration

Set up the client/server ODBC driver to run as a client or as a service before configuring the server.

Running as an Application or Service

Determine whether to run the client/server ODBC driver as an application or as a service, and perform one of the following:

- To run the client/server ODBC driver as an application, in Windows Explorer, locate and double-click the pviosrv.exe file in the following location:

  ..\MAS90\Home\pviosrv.exe

- To run the client/server ODBC driver as a service, in Windows Explorer, locate and double-click the CSODBCService.exe file in the following location:

  ..\MAS90\Home\Lib_appserv\CSODBCService.exe

Configuring the Server

If you set up the client/server ODBC driver to run as a service, follow the procedure below to configure the server.

To configure the Server

1 From the Sage ERP MAS 200 server, right-click My Computer on the system's Desktop, and then select Manage.

- If you are using Windows Server 2008, the Server Manager window appears.

- If you are using Windows Server 2003, the Computer Management window appears.

2 Perform one of the following, depending on your version of Windows Server:

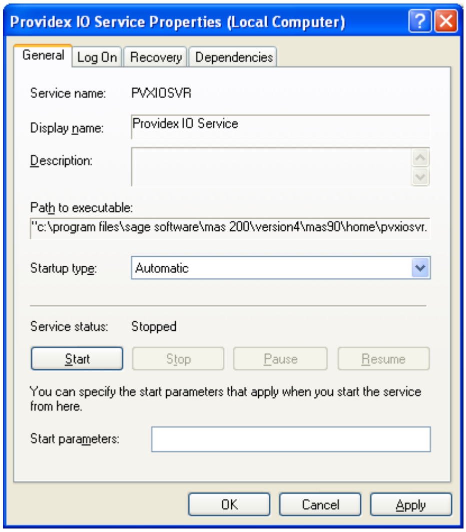
- If you are using Windows Server 2008, in the left pane of the Server Manager window, select Configuration. The Services item appears in the right pane of the window.

- If you are using Windows Server 2003, in the left pane of the Computer Management window, select Services and Applications. The Services item appears in the right pane of the window.

3 Double-click the Services item. All of the services available on the server appear in the right pane of the window.

4 Double-click the ProvideX IO Service item. The ProvideX IO Service Properties window appears.

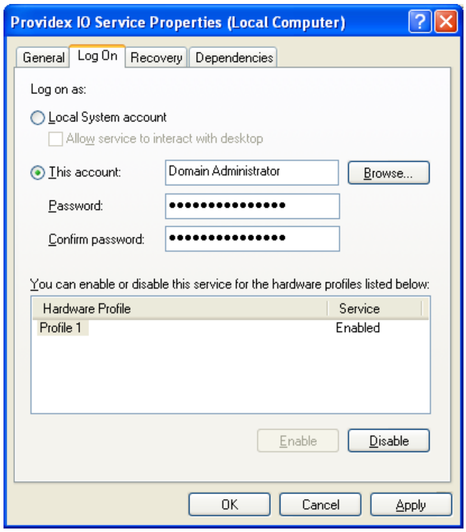
5 At the Startup type field, select Automatic, and then click the Log On tab.



6 Verify that the local system is not used.

a Select This account.

b Enter the domain account. This is the domain account that can execute the path to the MAS90 folder.



7 Click the General tab, and then click Apply.

8 Click Start and verify that the service starts successfully.

9 Click OK.

Workstation Configuration

Use the Library Master System Configuration task to configure the workstation and then test the ODBC data source.

To configure the workstation

1 On the Sage ERP MAS 200 Desktop, select Library Master Setup menu > System Configuration. The System Configuration window appears.

2 Click the ODBC tab, and then select the Enable C/S ODBC Driver check box.

3 At the ODBC Server Name field, enter the server name or IP address where the client/server ODBC application or service is running.

4 At the ODBC Server Port field, enter an accessible server port or leave the field blank to use the default port, 20222.

5 Select the Enable for All Users check box on the User Maintenance Preferences tab only if all users (both LAN and remote) will be using the client/server ODBC driver.

6 Close and restart the workstation client.

7 Access and test the ODBC data source.

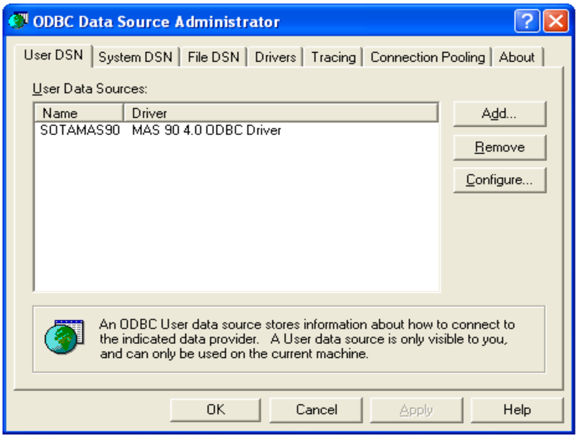
- If running a 32-bit system, perform the following steps:

  a Select Windows Start menu > Control Panel.

  b Double-click the Administrative Tools item.

  c Double-click Data Sources (ODBC). The ODBC Data Source Administrator window appears.

d On the User DSN tab, double-click the SOTAMAS90 item.



Note
If you encounter problems connecting to the client/server ODBC service, see Configuring the Workstation for the ODBC Driver Service on page 142.

e The ProvideX ODBC Driver Setup window appears. Click the Debug tab, and then click Test Connection.

If a message appears stating that the connection was successful, the client/server ODBC service is running correctly.

- If running on a 64-bit system, perform the following steps:

a On the Windows desktop, double-click the Computer icon.

b In the Computer window, locate the c:\windows\SysWOW64 folder.

c Double-click Odbcad32.exe. The ODBC Data Source Administrator window appears.

d On the User DSN tab, double-click the SOTAMAS90 item.

e The ProvideX ODBC Driver Setup window appears. Click the Debug tab, and then click Test Connection.

If a message appears stating that the connection was successful, the client/server ODBC service is running correctly.

Sharing Permissions

NOTE
For more information about setting permissions, see Sage ERP MAS Security Permissions on page 145.

On the Sage ERP MAS 200 server, you can set the share permissions to allow users to print server reports. You can grant permissions at the share point to allow for Read, Change, or Full Control access. When printing a version 4.x form or report, the user can print to any valid Windows printer, defer reports, or export or e-mail.

Users with no access to the Sage ERP MAS 200 share point on the server will be able to print to Deferred. To print or preview from Deferred Printing, users must have a minimum of Read access to the Sage ERP MAS 200 server share point.

Installing Crystal Reports Designer

Crystal Reports Designer is a powerful, graphics-oriented reporting program that allows users to customize their graphical forms. Crystal Reports Designer is fully integrated with Sage ERP MAS. Sage ERP MAS provides a number of customizable Crystal Reports forms as part of the standard installation.

The Workstation Setup program for Sage ERP MAS installs the standard Crystal Reports Run-Time Engine on each workstation, which allows all users to view and print reports created through Crystal Reports; however, to modify the standard forms included with Sage ERP MAS, or to create your own reports, you must install the Crystal Reports Designer.

Crystal Reports Designer will run with the Sage ERP MAS ODBC driver as well as the standard Microsoft SQL Server ODBC driver.

If you are using Sage ERP MAS 200 SQL, you will need read access to the applicable database. For information, see Modifying Crystal Reports in Sage ERP MAS 200 SQL on page 78.

Installing Crystal Reports Designer to the Workstation

To modify or create Crystal Reports forms and reports, install Crystal Reports Designer to the workstation and select the Typical installation option, which uses pre-assigned settings.

To install Crystal Reports Designer to the workstation

1. Place the Sage ERP MAS product DVD in the DVD drive.
2. If Autorun is enabled on the workstation, the Autorun screen appears; otherwise, on the Windows Start menu, select Run, and type **D:\Autorun.exe**, where D:\ is the DVD drive. Select a product, and then on the product screen, click Productivity Applications.
3. On the Productivity Applications screen, click Install Crystal Reports Designer.

NOTE
Select the Typical installation type.

4 The Crystal Reports XI Release 2 for Sage Setup page appears. Follow the steps in the installation wizard to install Crystal Reports Designer. A progress meter appears while the installation is in progress.

Modifying Crystal Reports in Sage ERP MAS 200 SQL

To modify reports in Sage ERP MAS 200 SQL using Crystal Reports Designer, you must either be logged on using a Windows account that has read access to the applicable SQL Server database, or you must have a separate SQL Server authenticated logon ID and password. Integrated Security is used by default; if your Windows account does not have rights to the database, a logon dialog box appears, allowing you to enter a different logon ID and password for database access.

Set up an OLE DB (ADO) Connection

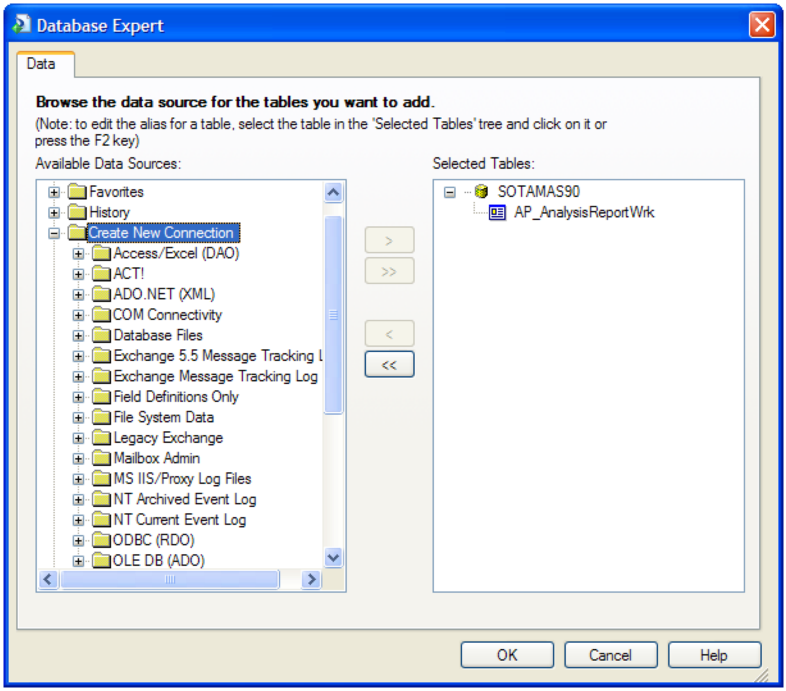
In addition to using Crystal Reports Designer to modify reports, you can also modify the reports through the operating system by setting up an OLE DB (ADO) connection to the SQL Server database. Only modifications such as moving items around on the report, changing font information, and hiding or showing information already in the data base is supported.

To set up an OLE DB (ADO) connection

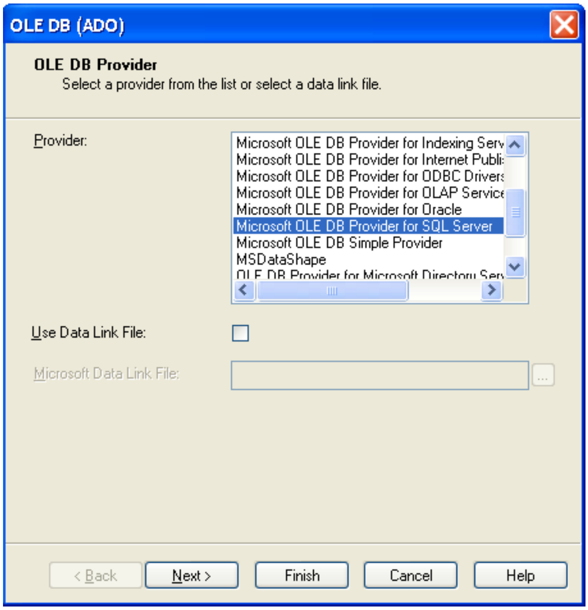
1 In Windows Explorer, browse to the .rpt file to modify in the MAS90\Reports folder, and open the file.

2 Select Database menu > Database Expert.

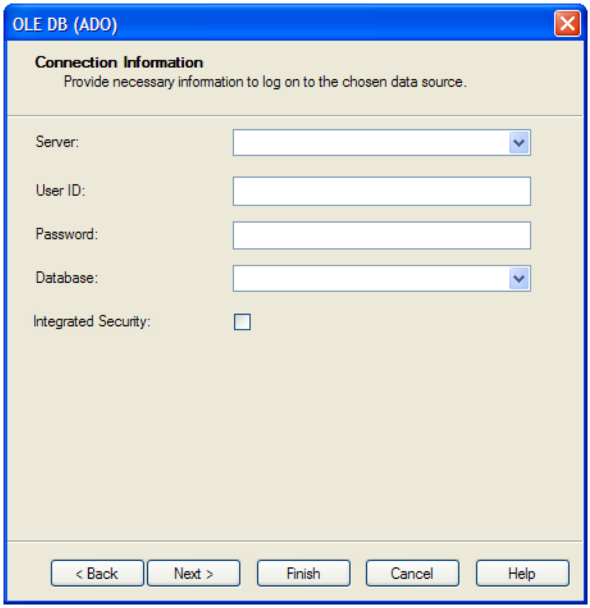
3 Expand Create New Connection and then expand OLE DB (ADO). This opens the OLE DB (ADO) window.



4 From the Provider list, select Microsoft OLE DB Provider for SQL Server and click Next.



5 Type the server name where the database is installed, select the database, and select the Integrated Security check box.



6 Click Finish and then, at the Database Expert window, click OK.

7 Save the report. The report is now linked to the SQL Server database. Any dictionary changes that have been made to the table are now available in Crystal Reports Designer.

Converting Crystal Reports from a Prior Version

When upgrading from a prior version of Sage ERP MAS, any custom Crystal reports and forms must be converted to run in version 4.50.

NOTE
For information on converting reports for that product, see Converting Reports for Sage ERP MAS 200 SQL on page 86.

Converting Reports

The MAS Crystal Report Conversion Wizard converts prior versions of Sage ERP MAS 90 and 200 Crystal Reports forms and reports to the latest data dictionary revisions and Crystal Reports format.

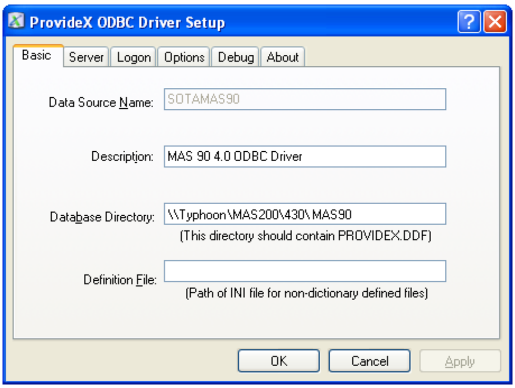
To convert reports

1 In the MAS90\Home folder, locate and double-click mascrcw.exe. The MAS Crystal Report Conversion Wizard appears. Click Next.

NOTE
This wizard runs the first time you access a Crystal Report created using a level of Sage ERP MAS prior to version 4.50.

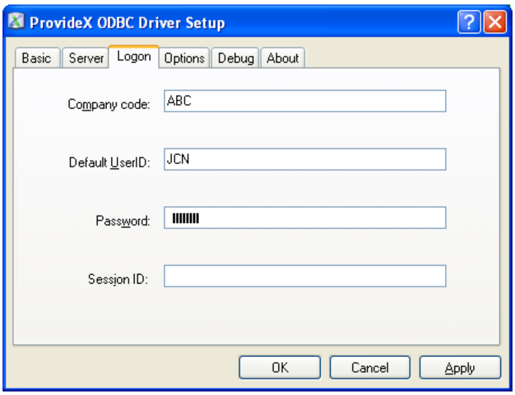
2 In the Choose a Data Source page, click Configure to open the ProvideX ODBC Driver Setup window.

3 At the Database Directory field, verify that the path is correct.

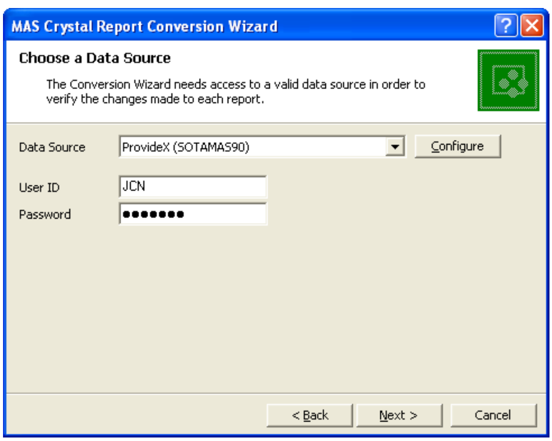


4 Click the Logon tab. At the Company code field, type your company code in uppercase. Verify that the company selected has the appropriate modules installed. For example, do not convert Manufacturing Crystal reports (W/O or B/M) for demo company code ABC. Those modules do not exist in company ABC, and the conversion will not complete on the reports.

At the Default UserID field, type the user logon and type the password at the Password field. Click OK.

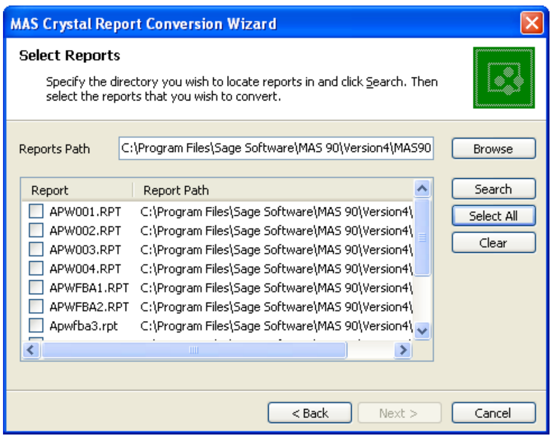


5 In the Choose a Data Source page, type the same user logon and password that you typed in the ProvideX ODBC Driver Setup window. Click Next.



6 At the Reports Path field, enter the path, or click Browse and select the folder to search for reports that require conversion. All forms and reports that have been previously converted and those that contain the current Sage ERP MAS version as a keyword will not be selected for conversion.

7 Click Search to generate a list of reports. Click Cancel to stop the search. You can select individual or multiple reports within the listing to convert. Select the report, or press CTRL to make multiple selections. Click Select All to convert all reports within the listing. Click Clear to clear the listing. To complete the conversion, click Next.



8 In the Completing the MAS Crystal Report Conversion Wizard page, perform one of the following:

- Click Finish to initiate the conversion process.
- Click Back to return to the previous wizard or page.
- Click Cancel to exit the wizard.

9 If you clicked Finish, the Converting Reports window appears. Click Print to get a listing of the selected reports and the conversion status of each report. The listing prints to the default Windows printer.

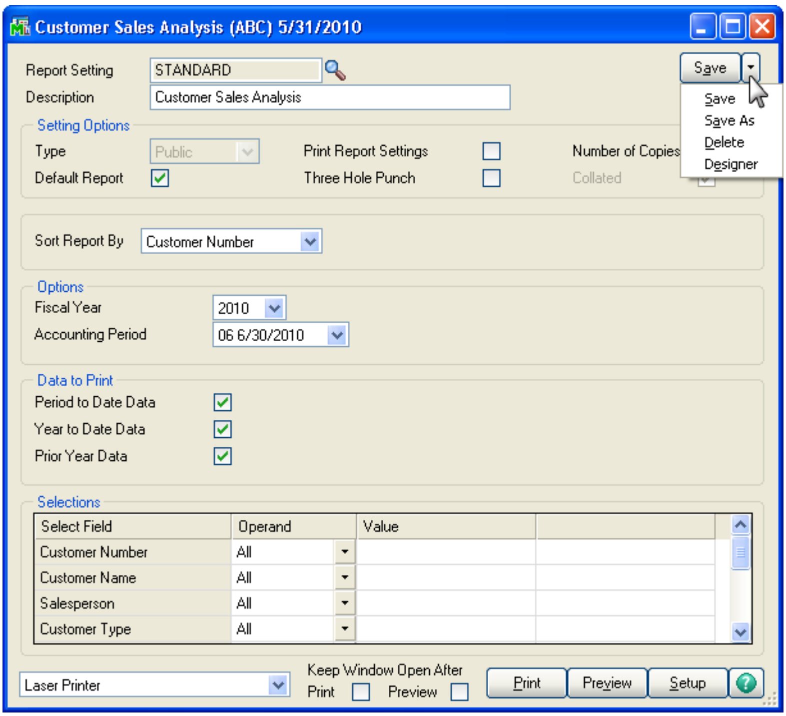
If a field name used within the report or form no longer exists in the data source, it will be noted on the listing and removed from the report or form. If the removed field is contained in a formula, a Crystal Reports error in printing message will appear when printing.

Successfully converted reports generate an unconverted backup file in the same folder with a file extension of .rp_. If Status:Complete appears, the report is successfully converted. If Status:Failed appears, note the error message and verify that the company you are logged onto using ODBC contains application data files for the selected report. If the conversion wizard cannot convert that report, the report must be manually converted. If errors are encountered during the conversion, the wizard will skip the report and continue with the next selected report.

Converting Reports for Sage ERP MAS 200 SQL

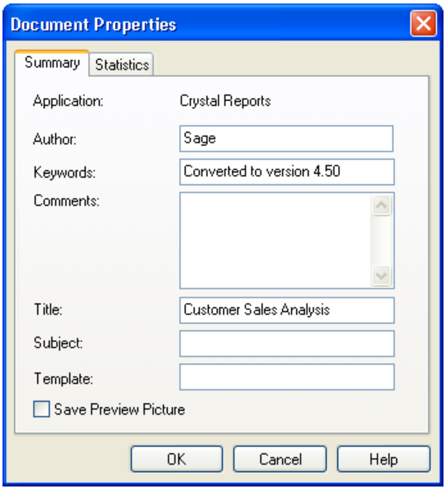
Follow the steps below to convert customized Crystal forms and reports from a prior version for Sage ERP MAS 200 SQL.

1 In the form or report printing window, click the drop-down arrow in the top-right corner, and then click Designer.



2 In the Crystal Reports Designer window, on the File menu, select Summary Info.

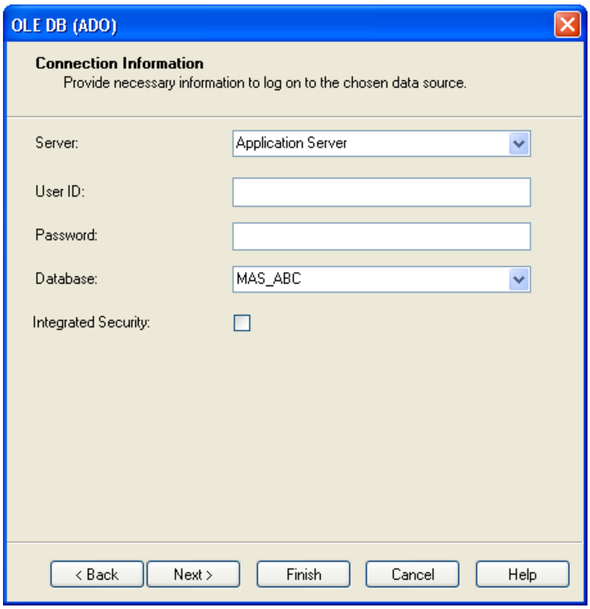
3 In the Document Properties window, in the Keywords field, replace the version that appears with **4.50**, and then click OK.



4 On the Database menu, select Verify Database. The OLE DB (ADO) window appears.

5 Perform one of the following:

- If your Windows logon account has Read access to the database, click Finish.
- If your Windows logon account does not have Read access to the database, clear the Integrated Security check box, enter a user ID with access to the database and its password, and then click Finish.



If it is necessary to remap any fields, follow the instructions in the Crystal Reports Designer Help system. Complete these steps for all forms and reports that were customized in the previous version.

Chapter 10

Installing Federal and State eFiling and Reporting

Federal and State eFiling and Reporting Overview

NOTE
Payroll features in Federal and State eFiling and Reporting are available only in Sage ERP MAS 90 and 200.

Federal and State eFiling and Reporting software allows you to print and electronically file your payroll tax forms and 1099 forms using signature-ready plain paper tax forms. Every report is saved in its own history or draft file for easy retrieval.

Considerations for Installing Federal and State eFiling and Reporting

- To use Federal and State eFiling and Reporting with data created in Sage ERP MAS version 4.20 or prior or from another business management system, perform the upgrade to version 4.50 after the quarter end and before the first payroll in the current quarter to avoid values being placed in the wrong boxes on some forms. If conversion is performed mid-quarter, some eFiling and Reporting forms will require editing.

- If you are upgrading from version 4.20 or prior, and a tax limit type other than Annual is selected in Payroll Tax Table Maintenance, your limit values will not be calculated correctly on eFiling and Reporting forms until the first payroll run after upgrading to version 4.50.

Installing Federal and State eFiling and Reporting to the Workstation

You must install Federal and State eFiling and Reporting separately on each Sage ERP MAS workstation. Do not install the module on the server.

To install Federal and State eFiling and Reporting to the workstation

1. Log on to the workstation as a user with Administrator rights.
2. Place the Sage ERP MAS product DVD in the DVD drive. If Autorun is enabled on the workstation, the Autorun screen appears; otherwise, select Windows Start menu > Run and type **D:\Autorun.exe** where D:\ is the DVD drive.
3. Select your Sage ERP Product, and then click Productivity Applications on the product's main screen.
4. On the Productivity Applications screen, click Install Federal and State eFiling and Reporting.
   - To begin the installation process from a server installation of Sage ERP MAS 90, map a drive letter to the share point above the MAS90 folder. In the MAS90\Wksetup folder, double-click Autorun.exe, and then click Install Federal and State eFiling and Reporting on the Autorun screen.
   - To begin the installation process from a server installation of Sage ERP MAS 200 or 200 SQL, use Windows Explorer to attach to the server share point where Sage ERP MAS is installed. In the MAS90\Wksetup folder, double-click Autorun.exe, and then click Install Federal and State eFiling and Reporting on the Autorun screen.
5. The installation wizard for Federal and State eFiling and Reporting appears. Proceed through the steps in the wizard to complete the installation.
6. Click Accept to accept the terms of the license agreement. You must accept the agreement to continue with the installation. A progress meter appears while the installation is in progress.

Share and NT File System (NTFS) Permissions

For Sage ERP MAS 200 and 200 SQL, on the server where Sage ERP MAS is installed, you must set the share permissions to Change. For users that will generate eFiling forms and reports, set the Write permissions to the following folders (where XXX is the company code):

NOTE
For more information about setting permissions, see Sage ERP MAS Security Permissions on page 145.

...\MAS_XXX\APXXX\eFilingReporting

...\MAS_XXX\PRXXX\eFilingReporting

The share permissions and folder NTFS permission must be set up before users can use Federal and State eFiling and Reporting.

Chapter 11

Setting Up Credit Card Processing

Use the Credit Card Processing module powered by either Sage Payment Solutions or PCCharge Payment Server for validation and authorization of credit cards through modules such as Accounts Receivable, Sales Order, and eBusiness Manager. Both Sage Payment Solutions and PCCharge Payment Server work with a number of popular merchant accounts.

Sage Payment Solutions

The Credit Card Processing module powered by Sage Payment Solutions is installed with Sage ERP MAS and requires the Accounts Receivable and Sales Order modules to be installed. For more information, see Set Up the Credit Card Processing Module for Sage Payment Solutions in the Help system.

PCCharge Payment Server

The Credit Card Processing module powered by PCCharge Payment Server is installed with Sage ERP MAS and requires the PCCharge Payment Server and the Accounts Receivable and Sales Order modules to be installed.

Installing the PCCharge Payment Server

Installation of the PCCharge Payment Server is a multi-phase process.

To install the PCCharge Payment Server

1 Make sure you have all the information required to configure your PCCharge Payment Server before running the installation. Follow the instructions included in the PCCharge Payment Server online documentation.

2 Review the *PCCharge Payment Server* manual available on the PCCharge Payment Server CD. The manual is provided as a PDF file.

NOTE
Most merchant accounts support modem connections, but only a few support SSL through the Internet.

3 Install the PCCharge Payment Server. Select a server on your network that has a modem connection or access to the Internet. You will need to determine your hardware requirements based on which merchant you are using.

4 Contact VeriFone Technical Support to activate your PCCharge Payment Server software (this information is also included in the PCCharge Payment Server online documentation).

5 Sage ERP MAS communicates with the PCCharge Payment Server using TCP/IP, which is not the default configuration. If TCP/IP is not configured, perform the steps below to enable TCP/IP support and establish a port on which the PCCharge Payment Server will be listening. If TCP/IP is configured, proceed to step 6.

   a Start the PCCharge Payment Server and select Setup menu > Preferences. In the Preferences window, click Advanced.

   b In the Advanced Configuration Setup window, select the Use TCP/IP Connection check box in the TCP/IP Communications area.

   The Local Port Number defaults to 31419. You can change this to any port number that is not currently in use on this workstation by another application. Do no use ports under 1024. These ports are reserved for common services (such as HTTP, SSL, and SMTP).

Consult your system administrator to verify there are no port conflicts occurring on the machine to which you are installing the PCCharge Payment Server. Write down the port number if you change it so that it can be recorded in Sage ERP MAS.

6 Configure the Sage ERP MAS component so the applications can communicate with the PCCharge Payment Server.

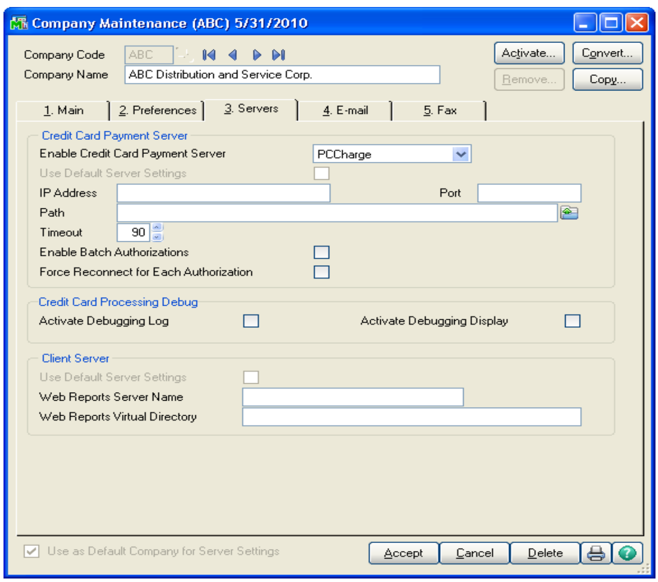
7 The PCCharge Payment Server is not accessible from within Sage ERP MAS until the Credit Card Processing module is registered. To enable the Credit Card Processing module for PCCharge Payment Server, perform the following:

NOTE
If the Credit Card Processing module is not registered, the fields on the Servers tab are not available.

a Select Library Master Main menu > Company Maintenance.

b Click the Servers tab. At the Enable Credit Card Payment Server field, select PCCharge.

c Enter information in the remaining fields.



Accessing the Payment Server Manual

The *PCCharge Payment Server* manual is available on the PCCharge Payment Server CD as a PDF file. If you do not have Adobe Acrobat Reader installed on your workstation, you will need to install it before accessing the documentation.

To view the *PCCharge Payment Server* manual, open Windows Explorer, browse to the CD drive where the PCCharge Payment Server CD is located, and double-click the DOCUMENTATION.PDF file.

Support and Upgrades

VeriFone provides support for the PCCharge Payment Server product and can assist you with troubleshooting the setup, configuration, and continuing maintenance of the server. Contact VeriFone if you are having problems receiving authorizations. For contact information, refer to the PCCharge Payment Server online documentation.

Chapter 12

Performing System Startup

After installing Sage ERP MAS, you are ready to set up companies, security, and system preferences. One company must be created in Sage ERP MAS before anyone can access the system.

During the installation, a program group is added to the Windows Start > All Programs menu. Click the Sage ERP MAS Desktop icon in this program group to start the software.

Starting the Software

When first starting Sage ERP MAS, you are prompted to enter the Administrator password that you entered during the installation.

After entering your Administrator password, the Administrative Tools screen appears.

Logging on as Administrator does not give you full access to the software. Only certain Library Master tasks are available. To access the software, you must set up a user logon (other than the Administrator logon) and password in User Maintenance. For more information, see Setting Up Security on page 104.

Performing Administrative Tasks

You can perform the following tasks from the Administrative Tools screen:

- Create and activate companies for new installations (see Creating and Activating Companies on this page)
- Define user roles, create users, and assign roles to users (see Setting Up Roles and Users for Security on page 104)
- Set up system preferences (see Setting System Preferences on page 117)
- Change your administrator password (see Changing Your Administrator Password on page 126)
- Change the key phrase seed value for credit card key encryption key generation.
- Change your participation in the Sage Product Enhancement Program.

NOTE
You must create and activate companies and then create user roles before creating users.

Creating and Activating Companies

You must create and activate the companies for which data will be processed. Many systems are set up with multiple companies to keep financial records for individual companies separate, and to separate real company data from test company data. Each company is identified using a three-character company code. Within the modules, you can set up data files for each company.

If you are creating companies that contain similar information, you can create companies from an existing company by copying information from the source company. For more information, see Copying a Company on page 102.

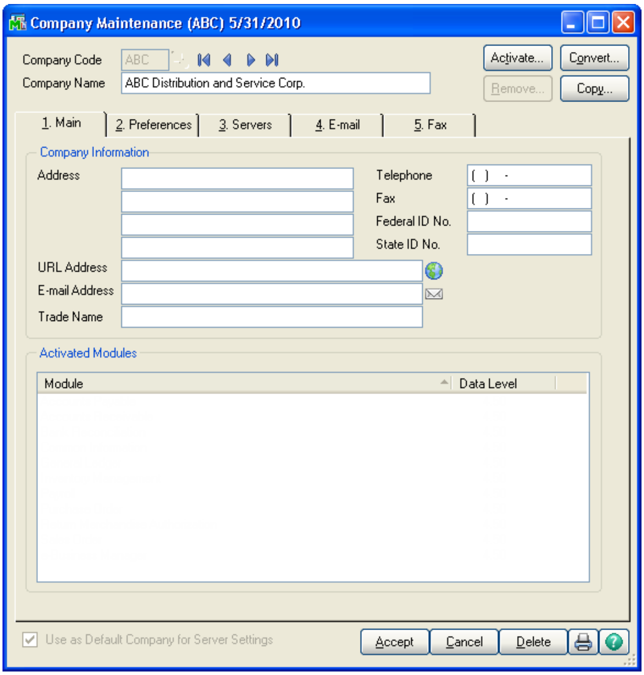
To create and activate a company

1 Use any of the following methods to open the Company Maintenance window:

   - In the Administrative Tools screen, click Company Maintenance.
   - Select Library Master Main menu > Company Maintenance.

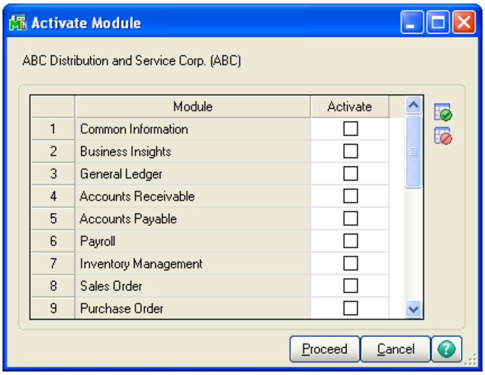
2 In the Company Maintenance window, enter a company code and company name.

3 Enter the fields appropriate to your company, including the Federal ID No. field.



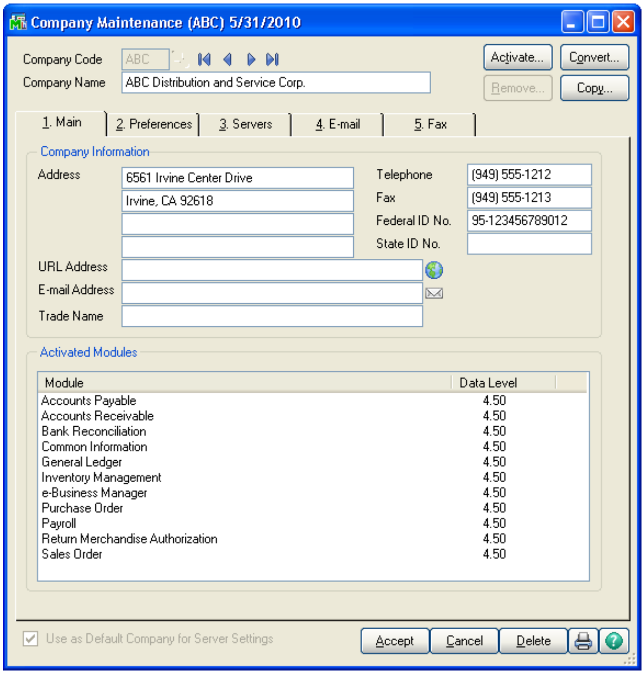
4 Click Activate to activate one or more modules. Click Yes, when you are prompted to save the new company.

5 In the Activate Module window, select the module(s) to activate and click Proceed. This process creates data files for each selected module for the company.



6 The Company Maintenance window appears again after the activation process is complete. Verify that the modules you selected appear in the Activated Modules section of the window.

The demo data company codes are automatically created and activated if they were selected during the installation process.



Copying a Company

You can create a new company from an existing company. You can copy information, including company data and company forms, from the source company.

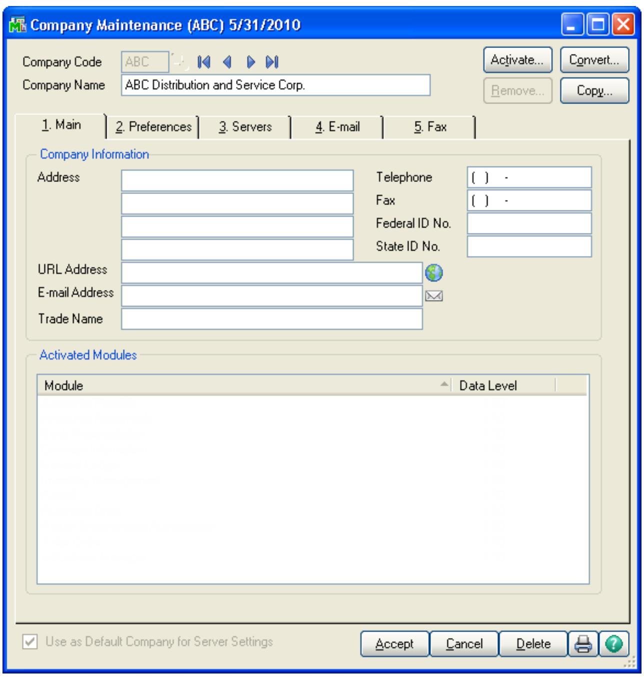
To copy a company

1. Use any of the following methods to open the Company Maintenance window:

   - In the Administrative Tools window, click Company Maintenance.
   - Select Library Master Main menu > Company Maintenance.

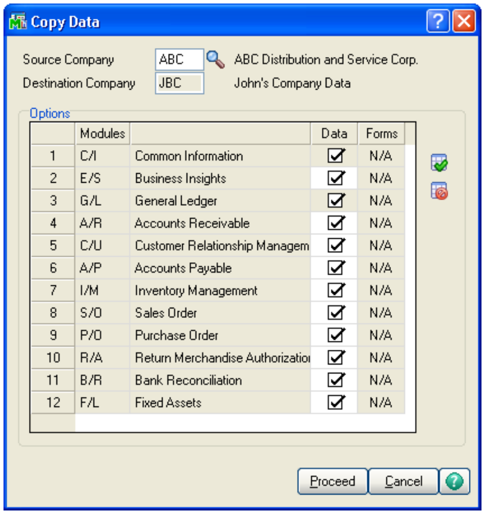
2. In the Company Maintenance window, enter a company code and company name.

NOTE
Although you can define multiple company codes, you must define at least one company code before activating any modules.



3 Click Copy.

4 In the Copy Data window, at the Source Company field, enter the company you are copying from.



5 To copy data and/or forms, select the corresponding check boxes.

6 Click Proceed.

Migrating and Converting Data

If you are migrating data from a previous installation, refer to your *Customer Upgrade Guide* for migration instructions. If you performed an in-place installation, refer to your *Customer Upgrade Guide* for information on converting your data to version 4.50.

Setting Up Security

Sage ERP MAS offers a flexible security system that can be used to provide appropriate access to the system and to meet your company's specific requirements. The security system can be simple, or it can be elaborate, protecting various combinations of companies, modules, menus, tasks, and security permissions by creating multiple roles, and assigning these roles to users. Roles are assigned to users so that users are restricted to only those tasks that pertain to the roles they are assigned to. If the user attempts to access a secured area, access is denied.

Setting Up Roles and Users for Security

To implement effective security, you must define roles for your system, and then create user codes and assign users to specific roles.

The security for Sage ERP MAS is role-based. Roles should be set up to reflect the functional roles of your organization. You should define roles with access to certain modules, tasks, and security events that allow users to perform tasks related to their jobs. Roles are company independent, though you can assign roles to users who are restricted from entering certain companies.

A Default role is included in Sage ERP MAS. Users assigned to the Default role have access to all modules except security events. The Default role cannot be modified in Role Maintenance.

When establishing your system's security, use the concept of roles to identify the specific tasks and options you want users to be able to access. Users can be assigned to multiple roles so design your roles to be as granular as you like. Role permissions are cumulative, which means if a user is assigned to two roles where one role gives the user access to a program while another role does not, the user will be granted access to this program.

You must determine the requirements for your security system. In most cases, it is better to start with a simple arrangement. As more sophistication is needed, this flexible system can be easily refined.

Defining Roles

NOTE
To access Role Maintenance, you must be logged on as Administrator, or have a role assigned to you that allows access to Role Maintenance.

Roles are set up to reflect the functional roles within an organization. These roles are global to the software and are company independent. Permissions assigned to roles allow assigned users access to the areas of the software they need to perform their job functions.

For the General Ledger, Library Master, Accounts Payable, Accounts Receivable, Bank Reconciliation, Business Insights, Customizer, eBusiness Manager, Return Merchandise Authorization, and Sales Order modules, security can be further refined by assigning Create, Modify, Remove, or View permissions to maintenance tasks, or by setting Update or Print Only permissions to update tasks. For setup tasks, permissions can be set to Modify or View. Additionally, some module options, such as allowing batches to be merged can be allowed or restricted.

Defining roles is considered the first step in enabling security for your system. Before you define roles in your system, determine the functional roles needed for your organization.

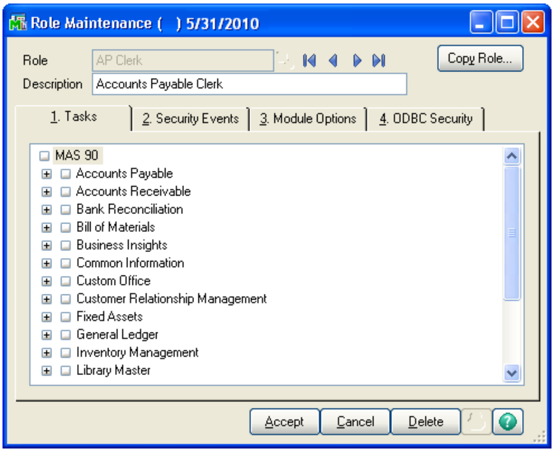
To define roles

NOTE
Library Master tasks are not company-specific.

1 Use any of the following methods to open the Role Maintenance window:
   - In the Administrative Tools screen, click Role Maintenance.
   - Select Library Master Main menu > Role Maintenance.

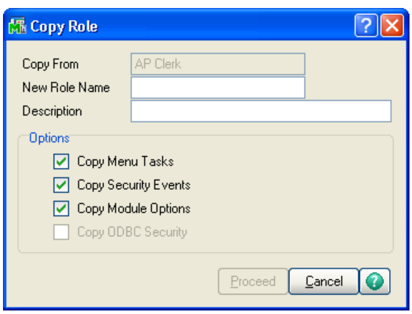
2 In the Role Maintenance window, at the Role field, type the name of the role (for example, AP Clerk).

3 At the Description field, type a description for the role (for example, Accounts Payable Clerk).



4 If you are creating a role from an existing role, click Copy Role; otherwise, skip to step 7.

5 In the Copy Role window, enter the name and description of the new role to create.

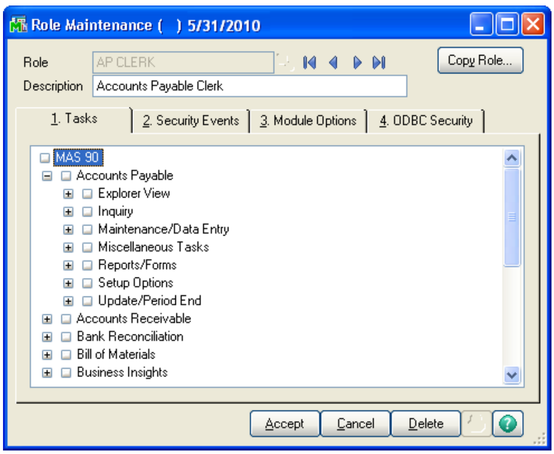


6 Select the check boxes for copying menu tasks, security events, and module options permissions, then click Proceed.

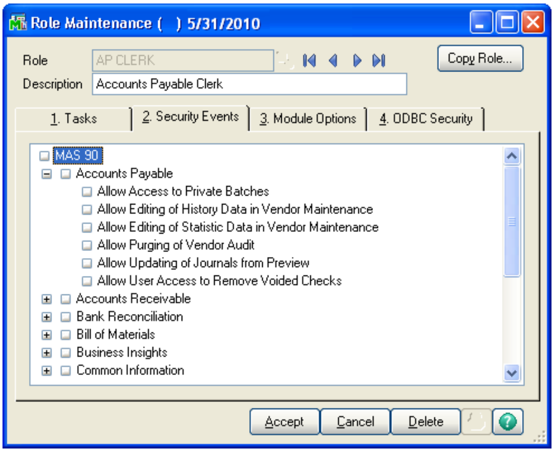
7 On the Tasks tab, you can restrict access to modules, tasks, or security permissions within tasks.

- To expand each level, click the + graphic. To select all items in a level, select the check box next to the option.
- To refine the level of security to individual modules and tasks, select the check box next to the individual modules that you want to allow access to.
- You can further allow or restrict the level of access to tasks within a module by selecting or clearing the check boxes for tasks within modules.

NOTE
To allow access to all modules and all security permissions, for the role, select the MAS 90 check box.



8 On the Security Events tab, select the check boxes next to the module and security events that you want to assign to the role. For more information, see Role Maintenance in the Help system.



9 On the Module Options tab, select the check boxes next to the options to which you are allowing access.

10 Click Accept and repeat this procedure for each role you want to define.

After defining all roles for the system, you can create users, and then assign these roles to users. For more information, see Creating Users and Assigning Roles on page 109.

Creating Users and Assigning Roles

Defining a user includes setting up a logon and password, assigning access to specific companies, and assigning a role or multiple roles to the user.

A user account can be defined with an expiration date to lock the user out of the system after a certain amount of time. You can also define start and end dates for any role assigned to the user. This feature allows a user access to certain areas of the system and security events for the limited period of time.

Before you create user logons and passwords, decide whether your system will require a unified logon or a Sage ERP MAS logon for all users. For more information, see Requiring a Password on page 117.

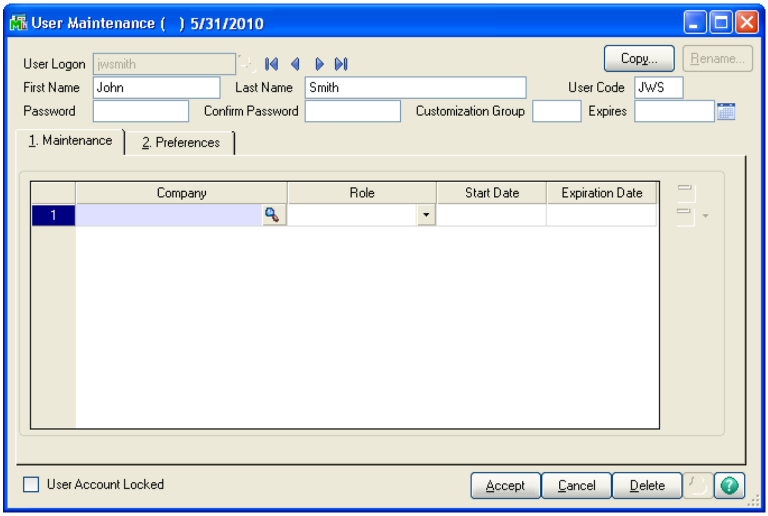
NOTE
You can access User Maintenance only if you are logged on as Administrator, or if you have a role assigned to you that allows access to User Maintenance.

To create a user and assign a role

1 Use any of the following methods to open the User Maintenance window:

- In the Administrative Tools screen, click User Maintenance.
- Select Library Master Main menu > User Maintenance.

2 In the User Maintenance window, enter the User Logon field. If you selected the Use Unified Logon check box in the System Configuration window, this field must match the Windows logon name for the user. For more information, see Requiring a Password on page 117.



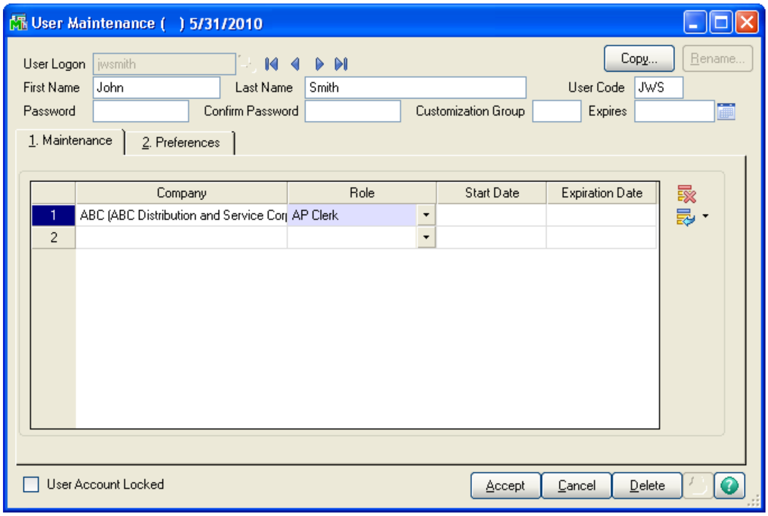
3 Enter the First Name, Last Name, and User Code fields. The user code is only referenced in the software and is not used for logon purposes.

4 If the selected user will be performing group customizations in the Customizer module, enter the Customization Group field.

5 Enter the Expires field to lock the user account after a certain date. A user will not be able to access the system after the date entered.

6 If you selected the Require all Users to Enter a Password check box in the System Configuration window, enter the Password and Confirm Password fields. If you do not enter a password, when logging on to the software, the user will be prompted to enter a password. For more information, see Requiring a Password on page 117.

7 Select the company and role to assign to the user. You can assign multiple companies and roles to the user.



8 Enter a Start Date and Expiration Date for each role to start and end for the selected company, if required.

NOTE
If you have multiple roles assigned to a user, the role with the most access takes precedence.

9 Click the Preferences tab and select user-specific preferences for the user and click Accept. For more information, see Setting Additional User Preferences for Security on page 114.

Copying a User

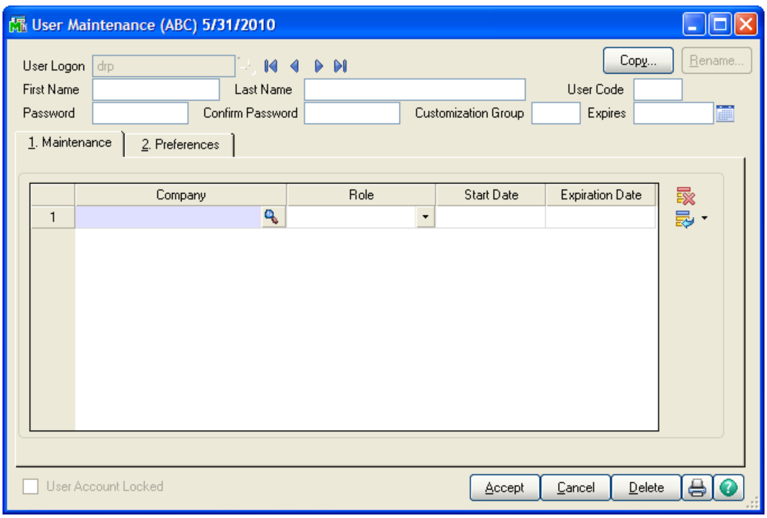
You can create a new user from an existing user. You can copy information including roles and preferences.

To copy a user

1 Use any of the following methods to open the User Maintenance window:

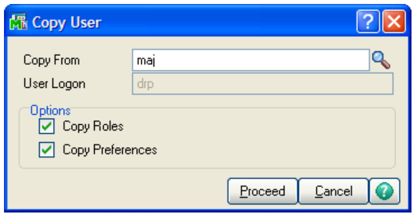
- In the Administrative Tools screen, click User Maintenance.
- Select Library Master Main menu > User Maintenance.

2 In the User Maintenance window, enter a new user logon.



3 Click Copy.

4 In the Copy User window, at the Copy From field, enter the user you are copying from.



5 Select whether you are copying all user information including roles and preferences, and then click Proceed.

Setting Additional User Preferences for Security

NOTE
You can access User Maintenance only if you are logged on as Administrator, or if you have a role assigned to you that allows access to User Maintenance.

User preferences are preferences that apply to each user. You can set up additional security measures for individual users such as setting a workstation to automatically log off, and manually locking certain users out of the system.

For security purposes, a workstation can automatically log off if it is left unattended for a specified period of time. This feature ensures that workstations are not accidently left with the software running, allowing unauthorized users access to sensitive information.

The Automatic Logoff feature is not activated if the Sage ERP MAS Desktop is the active window on your workstation. In addition, the Sage ERP MAS Desktop does not automatically shut down any activity in process, such as an update or report, that is currently processing, or if the Sage ERP MAS Desktop is idle within an option's window, such as a data entry or inquiry window.

Setting a Workstation to Automatically Log Off

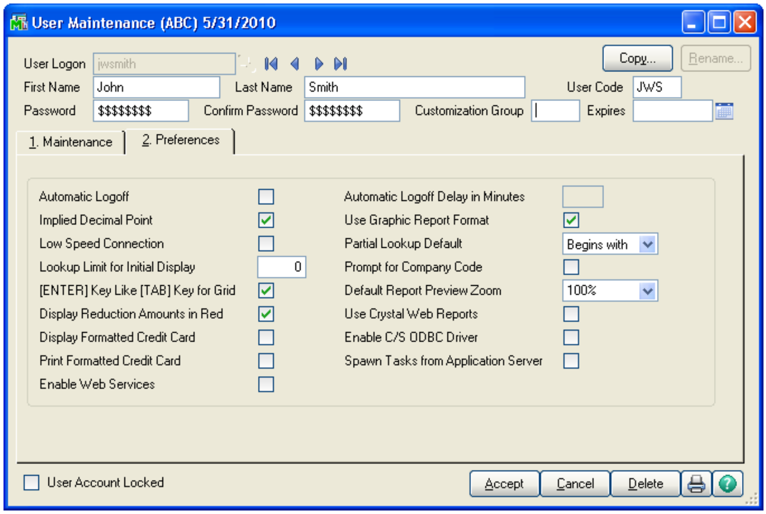
To automatically log off a workstation

1 Use any of the following methods to open the User Maintenance window:

- In the Administrative Tools screen, click User Maintenance.
- Select Library Master Main menu > User Maintenance.

2 Select a user at the User Logon field.

3 Click the Preferences tab and select the Automatic Logoff check box.



4 At the Automatic Logoff Delay in Minutes field, type the number of minutes that the system is to remain active before automatically logging off this workstation. The maximum amount of time that can be specified is 999 minutes.

5 Click Accept. After you save a user record, the dollar signs ($) in the Confirm Password field disappear.

Locking Users Out

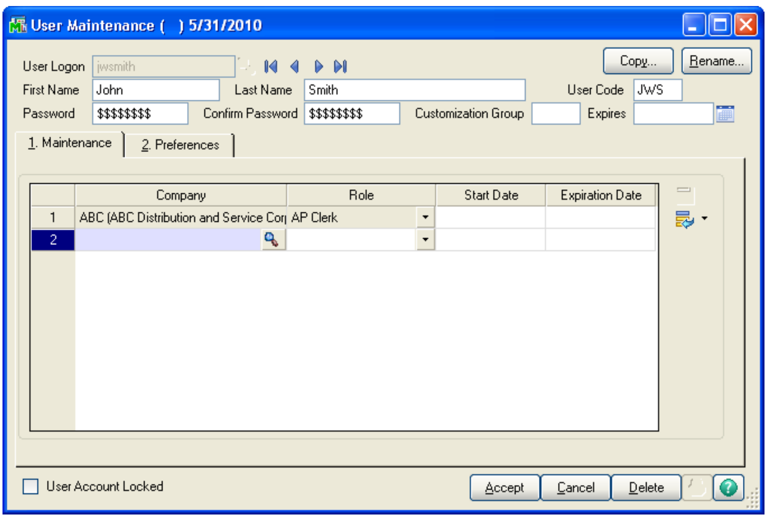
Another security feature is the option to lock users out of the system. This procedure illustrates how to manually lock users out of the system. Users can also be locked out of the system if a number of incorrect logon attempts occur, or if the expiration date for all users' roles has expired. This can be done using the System Configuration task.

To lock users out of the system

1 Use any of the following methods to open the User Maintenance window:

- In the Administrative Tools screen, click User Maintenance.
- Select Library Master Main menu > User Maintenance.

2 Select a user at the User Logon field.



3 Select the User Account Locked check box and click Accept.

Setting System Preferences

The software is equipped with a number of features that can effectively keep unauthorized users from accessing programs and files. In addition to basic security features, additional measures can be taken to further secure your data. These additional measures include, requiring a password, enabling intruder detection, and specifying lockout duration.

Requiring a Password

To further protect your system, you can require all users to have a password. First decide if you will set up your users with a unified logon, or a Sage ERP MAS logon. A unified logon allows Sage ERP MAS to authenticate and use the Windows logon. If you implement a unified logon, users do not need to reenter a logon and password when accessing the software. You can, however, require that users enter their password before accessing the software. A Sage ERP MAS logon is independent of the Windows logon, and will be required to enter the software.

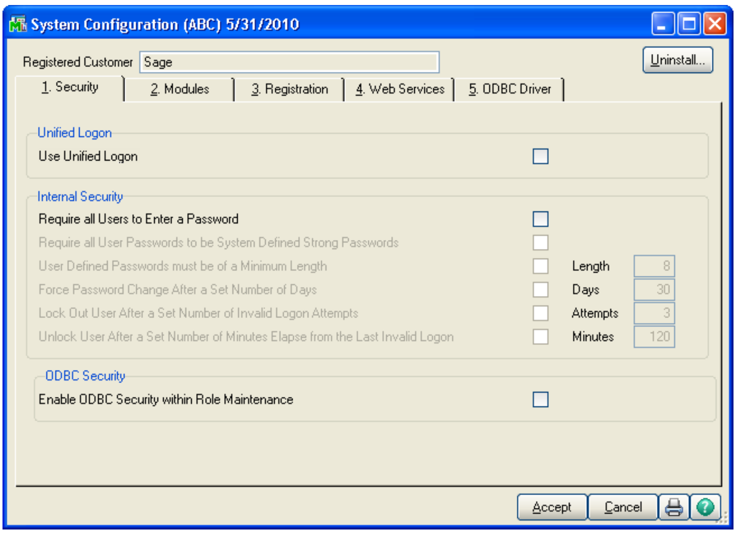
When you set up a Sage ERP MAS logon, you can enable intruder detection. Intruder detection locks a user out of the system when a certain number of logon attempts fail. This prevents unauthorized users from trying numerous passwords while attempting to access your system.

To require a unified logon

1 Use any of the following methods to open the System Configuration window:

- In the Administrative Tools screen, click System Configuration.
- Select Library Master Main menu > System Configuration.

2 In the System Configuration window, select the Use Unified Logon check box to enable a unified logon for each user.



3 Click Accept.

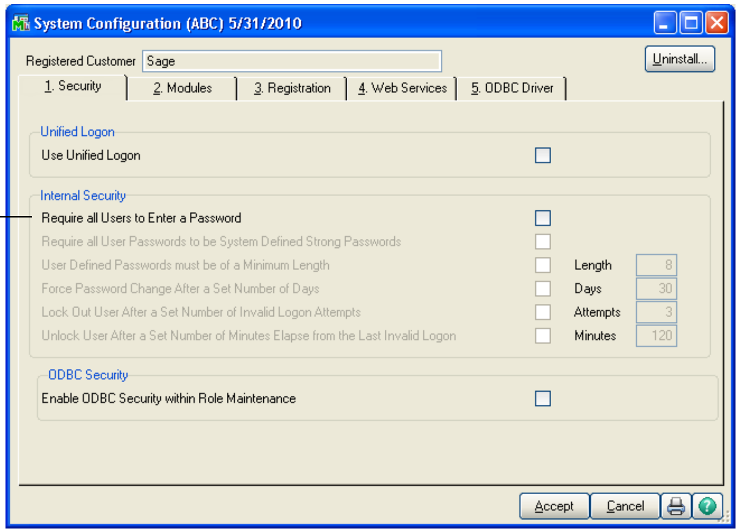
To require a Sage ERP MAS password

1 Use any of the following methods to open the System Configuration window:

- In the Administrative Tools screen, click System Configuration.
- Select Library Master Main menu > System Configuration.

2 In the System Configuration window, select the Require all Users to Enter a Password check box.

If this check box is selected after user codes are set up without passwords, when a user accesses the software, a dialog box will prompt the user to define a password.



3 To require passwords that are at least eight characters in length, include both letters and numbers, and do not include repeating characters, select the Require all User Passwords to be System Defined Strong Passwords check box.

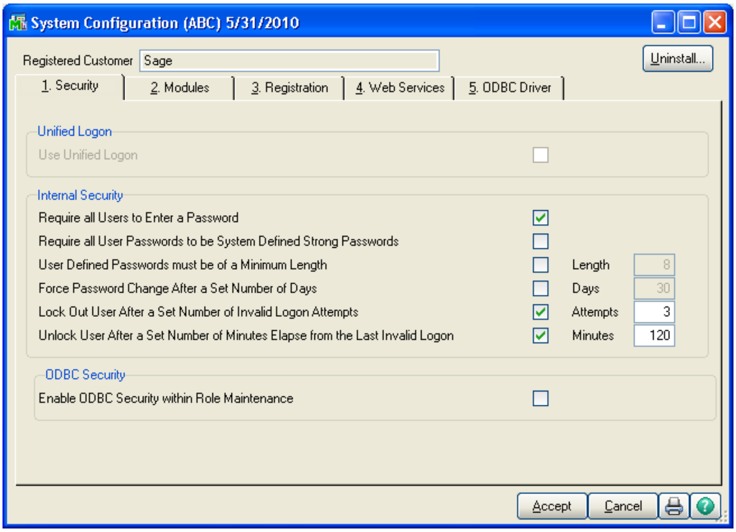
4 To include a minimum length on passwords, select the User Defined Passwords must be of a Minimum Length check box, and type a minimum number of characters needed for passwords.

5 To require all users to change their password after a number of days, select the Force Password Change After a Set Number of Days check box, and type a number of days.

6 To enable intruder detection, select the Lock Out User After a Set Number of Invalid Logon Attempts check box, and then type the number of attempts you will allow before a user is locked out of the system (cannot attempt to log on anymore).

NOTE
If you do not specify a lockout duration, a user locked out by intruder detection can attempt to log back onto the system only if the User Account Locked check box is cleared in the User Maintenance window.

7 To specify an optional lockout duration, select the Unlock User After a Set Number of Minutes Elapse from the Last Invalid Logon check box, and type the amount of time you want the lockout to be in effect. After the amount of time has passed, the user can attempt to access the system.



8 Click Accept.

Setting Accounting Date Preferences

The software maintains personal preferences for each workstation. One of these preferences is to prompt for the accounting date the first time a user accesses a module for that day, or you can automatically default the accounting date based on the system date.

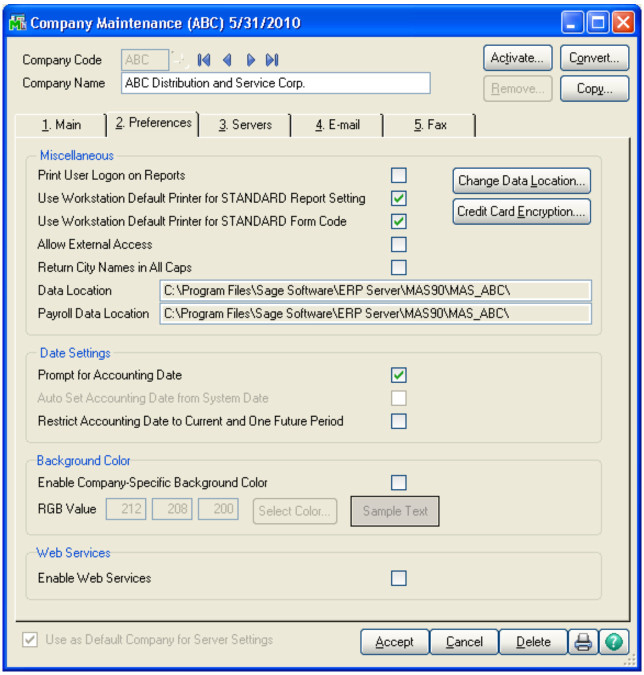
Setting a Prompt for the Accounting Date

If a prompt for the accounting date is not set in Company Maintenance, the module defaults to the accounting date it was last set at on that workstation, unless the Auto Set Accounting Date from System Date check box is selected.

To set a prompt for the accounting date

1 Select Library Master Main menu > Company Maintenance.

2 On the Preferences tab, select the Prompt for Accounting Date check box. The default date is the system date.



3 Click Accept.

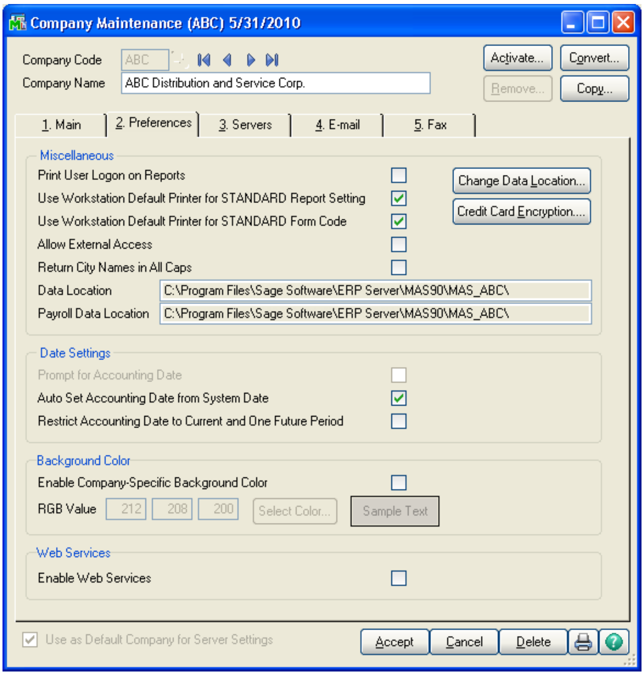
Setting the Accounting Date from the System Date

The accounting date for all modules can be set from the workstation's system date for convenience and to ensure that users do not accidentally use an old accounting date.

To set the accounting date from the system date

1 Select Library Master Main menu > Company Maintenance.

2 On the Preferences tab, select the Auto Set Accounting Date from System Date check box.



3 Click Accept.

Restricting the Accounting Date to Current and One Future Period

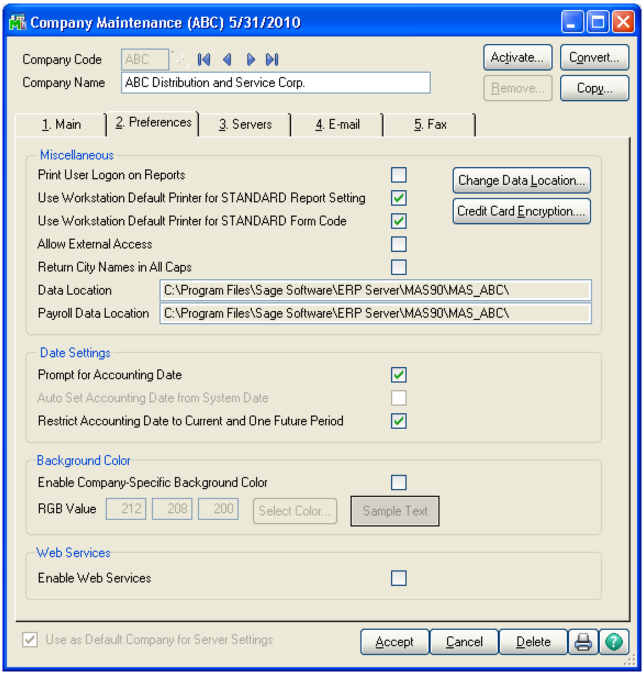
When performing certain data entry and register printing functions, the accounting date is used as the default. When the posting date used for updates does not fall within the current and one future period for the module, the summarized totals for the current or future period will not match the transaction detail reports.

To prevent this problem, users with supervisor rights can restrict the accounting date to the current and one future period for the Accounts Payable, Accounts Receivable, Inventory Management, Job Cost, Purchase Order, and Sales Order modules.

To restrict the accounting date

1 Select Library Master Main menu > Company Maintenance.

2 On the Preferences tab, select the Restrict Accounting Date to Current and One Future Period check box.



3 Click Accept.

Changing Your Administrator Password

Changing your administrator password on a frequent basis is a good idea to protect your system from unauthorized users.

To change your administrator password

1 In the Administrative Tools screen, click Administrator Password.

2 In the Administrator Security Password window, enter a new password and then confirm the password. Click OK.

Setting Up Security on SageCRM

This section describes basic security concepts for SageCRM, including how to log on after installing, passwords, and the types of security that can be set up. For more information about SageCRM security, refer to your SageCRM *System Administrator Guide*.

Logging On as the Administrator

After installing SageCRM, you can log on as the system administrator with a user name of admin and no password. You should also change the password to prevent unauthorized administrative access.

User Authentication / Password Setup

A user requires a user name logon ID to access the system. You can also set the minimum length and strength of passwords. A user's password is encrypted both within the system and in the database for maximum security. The System Administrator can change, but not view, a user's existing password.

A password can also be set to expire within a specified number of days. When the password is changed, the expiration date is adjusted accordingly.

Security Profiles and Territories

The system administrator can manage security access rights across the organization by setting up security profiles and territories. A profile is a way of grouping users together when defining access rights (for example, View, Update, Insert, and Delete).

In addition to basic access rights profiles, you can further divide users rights by territory. For example, you may want users in the West Coast territory to view all Opportunities within the East Coast territory, but not to be able to update them.

Field Security

The system administrator can set up field security for the whole SageCRM system, for individuals, teams, and for security profiles.

For example, it is possible to make a field invisible to some users, allow others to view the contents of the field but not to change it, and allow others to both view and change it. In addition, it is possible to require a field entry before the user can submit the form. For more information on field security, refer to your SageCRM *System Administrator Guide*.

Company Team Restrictions

Rights to view the following tabs can be restricted to individual users depending on company team membership. If a user has not been assigned to work on an account on the Company Team tab, that user cannot view or update information in the following tabs:

- Quick Look
- Dashboard
- Marketing (if available)
- Notes
- Communications
- Opportunities
- Cases
- Company Team
- Documents

The tabs are displayed with "no entry" symbols. If the user selects one of the restricted tabs, a message dialog box is displayed informing the user that this information is available only to members of the appropriate team.

If the user searches for a related entity, such as an Opportunity, and they are not on the Company Team of the associated company, when they click the hyperlink of the entity in the list, a security message dialog box is displayed.

Restricting Updates

The Delete and Edit buttons are available on the Company summary page only if the user is on the Company team.

In addition, rights to update the following tabs can be restricted for individual users depending on Company Team membership. This means that if you have not been assigned to work on an account using the Company Team tab, you can view, but not update any of the following information related to that account:

- Quick Look
- Notes
- Communications
- Leads
- Opportunities
- Cases
- Documents

Server Security

There are many ways to secure the system from unauthorized access:

- Use NT Challenge/Response to allow access to clients with a valid domain login.

- Use SSL Encryption to secure your data sessions with client users.

- Use a firewall to restrict unauthorized access from outside of your network and allow only authorized users through.

You can use all three or a combination of the above methods to secure connections to the system.

Database Security

Users do not have direct access to the SQL database for the SageCRM server. The eWare DLL accesses the database by using a predefined logon. When a user requests data, the eWare DLL connects to the database using Microsoft Data Access Components (MDAC) and retrieves the required data.

For more security the eWare DLL can be configured to access SQL using a login with limited access, or access with the appropriate rights to add, change and delete data from every table in the database.

For information on changing the SQL logon password, refer to your SageCRM *System Administrator Guide*.

Firewalls

To allow users to access the system remotely, the best way to protect your network from the Internet is to install a firewall. This will ensure that only authorized traffic accesses your SageCRM database and protects your server from unauthorized users. You can configure rules to allow only certain traffic through. By doing this you can ensure that your server is protected from Internet attacks. You can also install a firewall in all of your remote sites and set up Virtual Private Networks (VPNs) to increase the security of data being sent. Mobile users can be set up as mobile firewall users so they can access the VPN to transmit and receive data securely.

SSL (Secure Sockets Layer)

Without using a firewall, IIS can use different methods to secure transmitted and received data. One of these methods is by using an SSL server certificate. This ensures that data that has been transmitted and received between the server and the user is encrypted. There are two versions of SSL encryption: 40-bit and 128-bit. It is currently possible to crack the 40-bit encryption, but not 128-bit. SSL cannot protect your server from unauthorized access, only encrypt sessions between the server and a user.

An SSL certificate can be imported into IIS to create a secure connection between SageCRM and its users. When a client logs onto SageCRM, the SSL certificate is downloaded and the data sent to and from the client is encrypted. Using this method, anybody can log on and download the SSL certificate. To be more secure, IIS can be configured to only allow clients with a SSL certificate installed on their machine and deny anybody without the appropriate certificate. IIS can also use Windows NT Challenge/Response, which requests a user to log on using a valid user name and password for that domain before allowing them access to data.

Application Security

All users must be assigned a valid user name and password by the system administrator. Each user can be assigned different levels of access security depending on their job role (for example, IT, Accounts). To increase security, all users should be advised to use an alphanumeric password of no fewer than six characters. When IIS uses SSL encryption, SageCRM is aware of this and when the client attaches any documents to a form in SageCRM, it sends it through the encrypted session.

Chapter 13

System Administrator Tasks

This chapter provides procedures for maintaining certain tasks that are performed by a system administrator.

Determining Who is Accessing the System/Modules

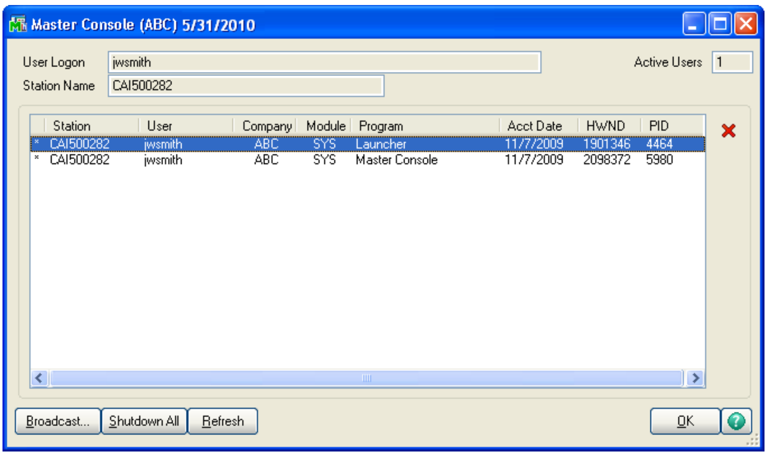
Use Master Console to display all currently logged on users. The Master Console includes data on each workstation, the module and task being accessed, and the accounting date for each user.

To determine who is accessing the system/modules

1 Use either of the following methods to open the Master Console window:

- Select Library Master Main menu > Master Console.
- Select File menu > Master Console.
- On the Standard toolbar, click the Master Console button.

2 In the Master Console window, determine the module and task being accessed by viewing the Module column and the Program column.



Creating Public Tasks

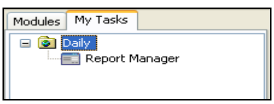
To access tasks quickly, you can organize them into groups in public task folders that all users can access. In addition to tasks, you can also add desktop shortcuts and external programs, such as Microsoft Word or Excel, into a public task folder so that users can select and launch one of these programs without leaving the software.

NOTE
To create public tasks, the role assigned to your user code must have the Allow public tasks for editing security event turned on.

Even though public task folders are accessible to all users, individual menu tasks within a task folder are still subject to the standard menu security system (if one has been set up). All company, module, menu, and task restrictions assigned to users override all task folder assignments.

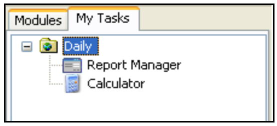
To create a public task folder and public tasks

1. On the Sage ERP MAS Desktop, click the My Tasks tab. Right-click the My Task area and select New > Public Folder.
2. Type a name for the public task folder and press ENTER.
3. Right-click the folder and select New > Task.
4. In the Browse dialog box, select the module, the menu, and then the menu task to add to the folder and click Open. The task is added to the public tasks folder.



5. To add more public tasks to this folder, repeat steps 3 and 4, as necessary.
6. To add an external program to the public tasks folder, right-click the public task folder and select New > Program.

7 In the Browse dialog box, click the Folder button and select the external program, then click Open. The external program is added to the public task folder.



8 To add more external programs to this folder, repeat steps 6 and 7, as necessary.

NOTE
All users must exit the software and log back on before they can see the new public task folder.

9 You must exit the software and log back on for the new public folder to be accessible. You can access the public task folder from the My Tasks menu on the Modules Menu toolbar, or the My Tasks tab.

You can also delete existing public task folders, and modify existing tasks or program titles. You can create an unlimited number of public task folders, and each folder can contain any number of tasks and programs.

Modifying Company Preferences

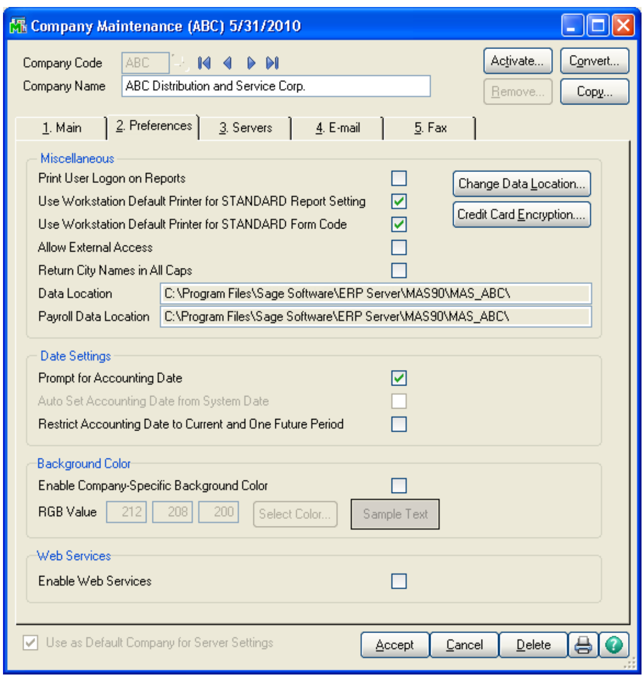
For each company, you can set a preference to print a user logon on all reports, allow the company to be accessed externally, and change the location of the Payroll folder.

To modify company preferences

1 Use any of the following methods to open the Company Maintenance window:

- In the Administrative Tools screen, click Company Maintenance.
- Select Library Master Main menu > Company Maintenance.

2 In the Company Maintenance window, click the Preferences tab.



3 To display the user logon of the user generating a report or listing on all reports, select the Print User Logon on Reports check box.

4 To default to the workstation's default printer when printing reports (such as the General Ledger Detail Report) with the STANDARD report setting, select the Use Workstation Default Printer for STANDARD Report Setting check box. Clear this check box to save a specific printer as the default for the STANDARD report setting in the report windows.

5 To default to the workstation's default printer when printing forms (such as sales orders) with the STANDARD form code, select the Use Workstation Default Printer for STANDARD Form Code check box. Clear this check box to save a specific printer as the default for the STANDARD form code in the form windows.

6 If SageCRM is installed, to allow communication between Sage ERP MAS and the SageCRM server, select the Allow External Access check box. This check box must be selected for the company to be accessed externally through the company's objects, such as VBScript, JavaScript, and other programs that are not based on Sage ERP MAS.

7 To change the location of the Payroll folder for security reasons, click Change Data Location, and type the path of the new location. The data location is company-specific and not module-specific. The path must be appended with MAS_XXX, where XXX represents the company code.

8 Click Accept.

Uninstalling Modules

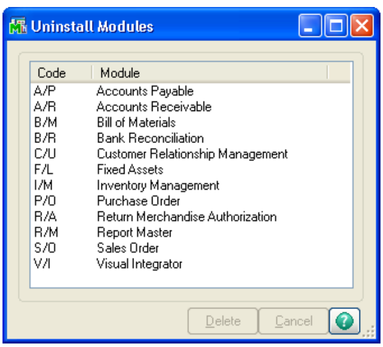
You can remove menu records and programs from the software for a specific module. Prior to removing modules, this utility will check to ensure there are no data files for that module. If data files exist, they can be deleted using the Remove feature in Company Maintenance.

The Custom Office module cannot be removed using Uninstall Modules. Removing this module will impact access to customized forms and user-defined fields (UDFs).

Removing the Visual Integrator (VI) module will remove the module from the Modules menu; however, the VI folder and two associated files, VI0PER and VI0XRF, will remain in the file structure. The VI0XRF file contains the definitions for the default VI perform logic and is a cross-referenced file that provides shared UDF access between Visual Integrator and Custom Office.

To uninstall a module

1. Use either of the following methods to open the System Configuration window:
   - In the Administrative Tools screen, click System Configuration.
   - Select Library Master Setup menu > System Configuration.
2. In the System Configuration window, click Uninstall.
3. In the Uninstall Modules window, select the module to uninstall and click Delete.



Chapter 14

Advanced Features and Troubleshooting

This chapter applies to:
Sage ERP MAS 200
Sage ERP MAS 200 SQL

This chapter explains some of the advanced features of Sage ERP MAS 200 and 200 SQL, including Remote Access using Windows Remote Access Server (RAS), push-down installation through Microsoft's Systems Management Server (SMS), and some basic troubleshooting techniques. Detailed technical information required by some IT professionals is also provided; some of the content in this chapter may not be applicable to every Sage ERP MAS user.

Remote Access

Sage ERP MAS 200 and 200 SQL are ideally suited for remote access and wide-area networks (WANs) by virtue of the product architecture. Communication across the remote connection is limited to data displayed on the window and user interface commands from the server. The local workstation handles the actual user interface and leaves the processing to the server.

Remote Access Server (RAS)

NOTE
You should limit the initial number of records displayed in a lookup by setting the Lookup Limit for Initial Display field in Library Master User Maintenance.

Performance through RAS is slower than the performance of a computer attached directly to the network because the transfer rate is limited by the Internet connection speed. The minimum workstation requirements are the same for a remote workstation as they are for a local workstation. For operating system requirements, see the Supported Platform Matrix in the Support area of the Sage Online Web site (www.sagesoftwareonline.com).

The server must be configured with RAS provided by Microsoft on the appropriate Windows Server DVD. For more information on installing and configuring RAS on your server system, consult a Microsoft Windows Server engineer or consultant. The minimum bandwidth is 33.6 Kbps per user.

After RAS is configured, remote users should be able to dial into the network and log on. Before attempting to start Sage ERP MAS, perform the following tasks:

- Verify that you can access Windows Explorer and see all appropriate network resources.
- Verify that there are no firewalls between the remote dial-in and the server.
- Verify that the IP addresses are unique.
- Verify that you can ping to the server to which Sage ERP MAS is installed.

If these tasks are successful, Sage ERP MAS will start. Run the workstation installation wizard from the server. The installation may take several minutes, depending on the speed of the network and the modem connecting the workstation to the server.

Sage ERP MAS does not require a logical drive connection; however, if you intend to use Crystal Reports or other third-party software that accesses Sage ERP MAS data files, these programs will require a drive mapping. When accessing a system remotely, if possible, install the applications on the local hard drive rather than accessing them from the server. This minimizes the amount of data transferred across the phone line and significantly improves performance.

Wide Area Networks (WAN)

NOTE
Verify that routers and other network services do not re-map IP addresses for the server or workstation when packets are transferred through the WAN.

Sage ERP MAS runs on any TCP/IP-based WAN and has been tested using ISDN, Frame Relays, and T1 connections. The configuration and setup of Sage ERP MAS on a WAN are the same as those for remote access, and the same tests should be performed to make sure the remote workstation can access all network resources (including the ability to ping to the Sage ERP MAS server). Individual requirements vary from site to site, based on the amount of data being transferred and the number of users on the system. Sage cannot support the various hardware configurations possible in TCP/IP WANs. To set up and configure TCP/IP WANs using Windows servers (including routers, gateways, and DNS servers), consult with a Windows server WAN specialist or a Sage business partner qualified to support WAN configurations.

Performance Over RAS/WAN

When running Sage ERP MAS over a WAN or Remote Access Server (RAS), you will experience slower system performance, specifically with screen displays. Slower system performance is caused by actions that travel from the remote workstation through the phone lines or dedicated cabling to the server, which processes the request and sends the response back to the remote workstation. Clicking action controls (such as buttons) may require you to click the control more than once before the action begins. To make sure the command executes, hold the mouse button down until you see the button change to its depressed mode. When you release the mouse button, control returns to its normal mode. Additionally, do not click controls before the screen loads completely.

NOTE
Selecting the Low Speed Connection check box is recommended in environments with low bandwidth.

The Low Speed Connection check box on the User Maintenance Preferences tab will turn off the screen display while the panel is loading. Otherwise, if you click controls before they are loaded completely, you may receive some error conditions if certain controls are not loaded or are not properly initialized. Similar conditions may also be experienced when running through Windows with Terminal Services, especially if you are dialing in to the Windows server.

Virtual Private Network (VPN)

If you are implementing VPN, you should consider that software-based solutions, such as VPN bundled with Windows Server on low speed connections, may slow performance, because of the security overhead.

Pinging to a Server or Workstation

If you are having problems pinging to a server or workstation, for each LAN workstation, use the built-in TELNET utility to ping the specific socket and port the Application Server is listening on. For remote workstations, you can use ping and TELNET if the server's router or firewall does not block Internet Control Message Protocol (ICMP) commands. If the router or firewall does block ICMP commands, use a port scanning utility instead.

Configuring the Workstation for the ODBC Driver Service

When configuring a Sage ERM MAS 200 workstation to use the client/server ODBC driver, if a failure occurs when testing the connection from the workstation to the client/server ODBC service, use the built-in TELNET utility or a port scanning utility to verify the workstation can connect to the server on port 20222.

Hanging Processes

On occasion, a process may become orphaned from the workstation if the connection between the workstation and server fails. This is more prevalent in low bandwidth remote WAN connections where reliability and stability cannot be guaranteed.

Detecting Existing Processes

When the Sage ERP MAS Desktop is started, Sage ERP MAS checks to see whether any processes exist for that computer. If there are orphaned processes or if a Sage ERP MAS Desktop is already in use by this workstation, a message dialog box appears informing you that another Desktop has already been started for the computer.

Users in a LAN environment should not encounter these errors unless an error previously occurred, causing the workstation to lose its connection with the server, or if another Sage ERP MAS Desktop is in use for this workstation. There is also the possibility that another computer on the network has the same name as the machine attempting to connect to the server.

Ending Processes

⚠ **WARNING**
Use the Windows Task Manager to end processes only when the tasks for this machine are known to be "dead." Killing "live" tasks in this manner may cause data corruption or loss.

If the message dialog box stating that a Sage ERP MAS Desktop is already in use appears when there is no Desktop in use, use Windows Task Manager to end any orphaned processes.

Use this option only when you are certain that the tasks left on the server are, in fact, orphaned and not processing any information. Tasks that are interrupted in the middle of an update can continue to update, even though the connection has been severed. If an update process has started and the connection is lost, let the task complete and end rather than "kill" the task using the option mentioned on page 144. Unless a remote connection is extremely stable (such as a dedicated ISDN line), do not run update or register programs from a remote workstation. This reduces the chances of data corruption and allows the files to be updated and closed correctly.

To end an orphaned process

1 Press CTRL+ALT+DELETE to access the Windows Task Manager.

2 In the Windows Task Manager window, click the Processes tab.

3 Select each instance of Pvxwin32.exe, and click End Process.

Increasing Default Limits Set by Windows Server

Windows servers may limit the number of Sage ERP MAS processes that can run simultaneously, especially when the Application Server has been configured to run as a service. This can create an issue when a significant number of users are using Sage ERP MAS at the same time. Blank, white screens may appear when any user tries to start a new task. If a user closes down an existing screen and then tries to open the original task, it then opens successfully. For more information on this issue, use the Knowledge Base on the Sage Online Web site at www.sagesoftwareonline.com to search for the following text: White screen appears if over 75 tasks are open.

Appendix A

Sage ERP MAS Security Permissions

The information in this appendix provides the minimum Share and NT File System (NTFS) permission settings for servers and workstations to work properly with Sage ERP MAS. This appendix also provides procedures for setting permissions.

Setting NTFS and Share Permissions

There are two methods mentioned in this appendix for applying permission settings in an operating system: the Share (share point) method and the NTFS method. The following procedures describe how to set permissions using each method.

To set permissions using the Share method

1. In Windows Explorer, right-click the share point folder and select Properties. The Properties window appears.
2. Click the Sharing tab, and then select Share this folder.
3. Click Permissions. The Permissions window appears.
4. In the Group or user names section, select the group or user.
5. In the Permissions section, select the applicable permission (Full Control, Change, or Read).

To set permissions using the NTFS method

1. In Windows Explorer, right-click the folder and select Properties. The Properties window appears.
2. Click the Security tab.
3. In the Group or user names section, select the group or user.
4. In the Permissions section, select the applicable permission (Full Control, Change, or Read).

Sage ERP MAS Server Minimum Permission Settings

The following information provides minimum permission settings for the local user account running on the Sage ERP MAS server and for any network user account accessing the server from another computer.

Permissions for the Local User Running the Sage ERP MAS Server

The following table provides the minimum permission settings for the local user account running the Sage ERP MAS application either as a service or an application. The user account must be a member of the Administrators group (or equivalent). Do not use the system account to run the Sage ERP MAS server application.

Set the share point and NTFS permissions in the table below for the local user account running on the server to perform the functions and tasks indicated.

Task	Minimum Share Permission	Minimum NTFS Permission	Folder
Application Utilities	Change	Full Control	..\MAS90
Business Insights Explorer	Change	Full Control	..\MAS90
Business Insights Reporter	Change	Full Control	..\MAS90
Change Data Location	Change	Full Control (for the destination location)	..\MAS90
Custom Office	Change	Full Control	..\MAS90

Task	Minimum Share Permission	Minimum NTFS Permission	Folder
Office Template Manager	Change	Full Control	..\MAS90
Modifying Forms and Reports from within Modules	Change	Full Control	..\MAS90
Library Master Utilities	Change (for the Sage MAS 90 share point)	Full Control	..\MAS90
Printing Tasks	Change	Full Control	..\MAS90
Report Manager	Change	Full Control	..\MAS90
Updates for Pre-Version 4.0 Modules	Change	Full Control	..\MAS90
Updates for Version 4.0 Modules	Change	Full Control	..\MAS90

When updating user-defined fields (UDFs), if alternate directories exist, the account running on the Sage ERP MAS server must have Change permissions set to all share point folders where company data exists to be able to update records.

Permissions for Other Users accessing the Sage ERP MAS Server

The following information provides the minimum permission settings for user accounts performing Sage ERP MAS tasks on the Sage ERP MAS server from another computer.

Task	Minimum Share Setting	Minimum NTFS Setting	File or Folder
ACH Electronic Payments Folder	Change	Write	..\MASxxx\APxxx where xxx represents the company code (Default folder can be changed in Accounts Payable Options)
Application Utilities	No Permissions Required	No Permissions Required	
Business Insights Explorer	Change	Write	..\MAS90\BIExplorer\views
Business Insights Reporter	Change	Write	**Files:** ..\MAS90\Providex.DDF ..\MAS90\PVXVIEW ..\MAS90\PVXVIEW.GPD ..\MAS90\PVXVIEW.ITM ..\MAS90\PVXVIEW.SRC ..\MAS90\PVXVIEW.VUE **Folders:** ..\MAS90\HOME\LIB ..\MAS90\MAS_SYSTEM ..\MAS90\Reports\BIReporter

Task	Minimum Share Setting	Minimum NTFS Setting	File or Folder
Change Data Location	No Permissions Required	No Permissions Required	
Custom Office	No Permissions Required	No Permissions Required	
Office Template Manager	Change	No Permissions Required	..\MAS90\OfficeTemplates
Modifying Forms and Reports from within Modules	Change	Write	..\MAS90\MAS_XXX\Reports ..\MAS90\Reports\###-### ..\MAS90\###-XXX ..\MAS90\MAS_System\Reports (where XXX is the company code)
Federal and State eFiling and Reporting	Change	Write	..\MAS90\MAS_XXX \APXXX\eFilingReporting ..\MAS90\MAS_XXX \PRXXX\eFilingReporting (where XXX is the company code)
Library Master Utilities	No Permissions Required	No Permissions Required	
Paperless Office PDF Folder	Change	Write	Defined in Paperless Office maintenance tasks

NOTE
For printing tasks, a Read, Change, or Full permission is required to print to local and network printers. If no share permission is defined, printing is restricted to deferred reports. Access to the Deferred Printing task is based on security settings in Role Maintenance.

Task	Minimum Share Setting	Minimum NTFS Setting	File or Folder
Payroll Direct Deposit (ACH) File Folder	Change	Write	..\MASxxx\PRxxx where xxx represents the company code (Default folder can be changed in Payroll Options)
Printing Tasks	None/ Read/ Change/ Full	No Permissions Required	
Report Manager (for modifying forms)	Change	Write	..\MAS90\MAS_XXX\Reports ..\MAS90\Reports\###-### ..\MAS90\###-XXX ..\MAS90\MAS_System\Reports
Updates for Pre-Version 4.0 Modules	No Permissions Required	No Permissions Required	
Updates for Version 4.0 Modules	No Permissions Required	No Permissions Required	

Sage ERP MAS Workstation Permission Settings

The following information provides minimum permission settings that must be set for Sage ERP MAS workstations.

Installation Security for Workstations

Administrator rights must be set at the local workstation to install the workstation software and to run the Migrate Level 3 Data wizard and the Parallel Migration Wizard.

Report Security for Sage ERP MAS 200 Workstations

For Sage ERP MAS 200, reports are cached in the following client workstation hidden folder:

C:\Documents and Settings\All Users\Application Data\Sage Software\Cache\MAS 200

The permission setting for this folder is set by the operating system, and should not be changed.

NTFS Permissions for Sage ERP MAS 200 and 200 SQL Workstations

The following NTFS permission settings must be set at the Sage ERP MAS 200 and 200 SQL workstations.

Minimum NTFS Setting	Folder
Modify	..\Mas90\Launcher
Write	..\Mas90\Home
Write	..\Mas90\Soa

Appendix B

TCP/IP Protocol

WARNING
Do not make changes to the TCP/IP configuration without consulting your system administrator.

Sage ERP MAS uses the TCP/IP protocol for all communications between the workstation and server. TCP/IP must be properly configured on both the Windows server and all workstations.

Although this section discusses configuration settings and options available in configuring a TCP/IP network, it is not a guide for installing TCP/IP on your server or workstation. Contact your Windows systems consultant for specific information regarding the installation and configuration of TCP/IP on your network.

Basic Configuration

There are no specific requirements for your Sage ERP MAS system with regard to the configuration of TCP/IP. To determine if a workstation is communicating with a server or vice versa, ping the server or workstation.

WARNING
If an Internet connection is used in your Sage ERP MAS infrastructure, make sure adequate precautions are taken to secure the data traveling through those connections.

To ping a server or workstation

1 Select Windows Start menu > All Programs > Accessories > Command Prompt.

2 In the Command Prompt window, type **PING** ***MACHINE_NAME***, where MACHINE_NAME is the name of the server or workstation with which you are attempting to communicate.

3 If you are successful in communicating with another machine, a response similar to the output below will appear.

```
C:\WINDOWS>PING ERPSERVER
Pinging ERPSERVER [128.0.153.253] with 32 bytes of data:
Reply from 128.0.153.253: bytes=32 time=1ms TTL=32
Reply from 128.0.153.253: bytes=32 time=1ms TTL=32
Reply from 128.0.153.253: bytes=32 time=1ms TTL=32
Reply from 128.0.153.253: bytes=32 time=1ms TTL=32
C:\WINDOWS>
```

If you do not get a response and receive messages such as "unknown host MACHINE_NAME" or "timed_out," then the computer with which you are attempting to communicate is not receiving or acknowledging information from the workstation. This indicates that either TCP/IP is not configured correctly on the server or workstation, or the server is unreachable.

If the workstation cannot find a server by its name, it is likely that a name resolution mechanism is not in place. If this is the case, go to the server to find its IP address or contact your system administrator. You will receive a Bad IP address message dialog box if your name resolution is not working.

If you receive an error message when running the Ping program, it is possible that the workstation itself is not configured properly for TCP/IP. Contact your system administrator or a Windows system consultant for assistance in configuring TCP/IP.

Testing the Configuration for Sage ERP MAS 200 and 200 SQL

After installing Sage ERP MAS 200 or 200 SQL, test the TCP/IP configuration.

To test the configuration

NOTE
If you encounter problems pinging to the server or workstation, see Pinging to a Server or Workstation on page 142.

1. At the server, use the built-in NETSTAT utility or equivalent software to verify that the Application Server is running on its configured port. The default port is 10000.
2. From each workstation, ping the Application Server on its configured port. The TCP/IP built-in ping.exe utility does not provide a way for pinging a specific port. The network administrator should use port scanning software or equivalent to ping the specific port the Application Server is listening on.

Appendix C

Running in a Terminal Services or Citrix Environment

This chapter applies to:
Sage ERP MAS 200
Sage ERP MAS 200 SQL

The Sage ERP MAS server supports running through a Windows Server with Terminal Services enabled.

The Sage ERP MAS server application should be installed on a server within the LAN that is not running Terminal Services/Citrix. Remote users connect up to a Windows server running Terminal Services. From there, they run the workstation component and connect to the Sage ERP MAS server. This limits the amount of processing and resources required by the Terminal Server computer. Separating out the workstation and server components allows users coming through Terminal Services to take advantage of the client-server architecture of Sage ERP MAS.

Installing the Sage ERP MAS Server

Install Sage ERP MAS as you would any other installation. This server should not have Terminal Services running on it. Because the Sage ERP MAS server is doing all the processing for each of the clients attaching to the server, having the additional burden of running Terminal Services will slow down the server significantly. The Sage ERP MAS Server can be a Windows server that meets the minimum system requirements for Sage ERP MAS.

Users can connect to the Sage ERP MAS server from anywhere on the network; they do not have to come in through the Terminal Server. This flexibility allows some users who are running through a corporate intranet to connect directly to Sage ERP MAS while remote users can run Sage ERP MAS through the Terminal Server.

Installing on the Workstation

From a Terminal Services/Citrix session, run the workstation installation wizard logged on as an administrator. Do not run the workstation installation wizard directly at the Terminal Services/Citrix Server.

Insert the Sage ERP MAS product DVD into the Terminal Services Server DVD drive. If the Autorun screen does not appear, select Windows Start menu > Run and type **D:\Autorun.exe**, where D:\ is the DVD drive.

You can also run Workstation Setup from the Sage ERP MAS server's share point by browsing to the MAS90\Wksetup folder and double-clicking the WkSetup.exe file.

Because multiple users will use the Sage ERP MAS client, a multi-user activation key is required. To obtain this key, you must first activate the server before running Workstation Setup. This causes a multi-user activation key to be copied to the Sage ERP MAS client folder on the Terminal Services Server.

To install the workstation, see Workstation Setup on page 21 for Sage ERP MAS 200 or page 35 for Sage ERP MAS 200 SQL.

Terminal Services Considerations

Sage ERP MAS will retrieve the workstation name of the client that is coming into the Terminal Server environment and will use that workstation's name for tracking sessions. This allows for a single installation of the workstation that all users can access; however, verify that all user's machines that are coming in through the Terminal Server have unique workstation names.

Because multiple users will use the Sage ERP MAS client, a multi-user activation key is required. To obtain this key, you must first activate the server. After the server is activated, running the workstation installation wizard through a Terminal Server desktop session (not directly at the server) will copy the ACTIVATE.PVX file in the Sage ERP MAS server's MAS90\Home\Lib\Keys folder to the MAS90\Home\Lib\Keys folder of the Sage ERP MAS client on the Terminal Server.

Sage ERP MAS can be used under the Terminal Services; however, users must be granted permissions to the MAS90 folder where the client-side application software is installed, if it is installed on an NT File System (NTFS). For information on NTFS permissions requirements, see NTFS Permissions for Sage ERP MAS 200 and 200 SQL Workstations on page 151.

For more information on Terminal Server/Citrix considerations, refer to the Supported Platform Matrix on the Sage Online Web site at: www.sagesoftwareonline.com

Appendix D

Sage Configured Installation for SQL Server

This chapter applies to:
Sage ERP MAS 200 SQL

The Microsoft SQL Server Runtime Edition 2008 installation DVD purchased through Sage has a Sage Configured Option for installing SQL Server. If you select this option, parameter settings are defined as shown in the following table.

Parameter	Setting	Description
ACTION	INSTALL	Specifies a setup work flow, such as Install, Uninstall, or Upgrade. This is a required parameter.
FEATURES	SQL, IS, TOOLS	Specifies which features to install, uninstall, or upgrade. The list of top-level features includes SQL, AS, RS, IS, and Tools. The SQL feature installs the database engine, replication, and full-text. The IS feature installs Integration Services, which includes the SQL Server Import and Export Wizard, Log Providers and Logging, XML Source, SSIS Run-Time, Basic Data Profiling Tools, and SSIS Package Designer and Service. The Tools feature installs Management Tools, Books Online, Business Intelligence Development Studio, and other shared components.

Parameter	Setting	Description
INSTANCENAME	MSSQLSERVER	Specifies a default or named instance. MSSQLSERVER is the default instance for non-Express editions, and SQL Express is the default for Express editions. This parameter is required when installing the SQL Server Database Engine (SQL), Analysis Services (AS), or Reporting Services (RS).
SECURITYMODE	SQL	SQL is used for mixed-mode authentication.
SQLSVCACCOUNT	SYSTEM	Specifies the account for the SQL Server service: domain\user or system account
ISSVCAccount	SYSTEM	Can be either domain user name or a system account.
SQLSYSADMINACCOUNTS	ADMINISTRATOR	Specifies which Windows account(s) to provision as SQL Server system administrators.
AGTSVCACCOUNT	SYSTEM	Can be either domain user name or a system account.

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