

Sage 100 2016 Installation and System Administrator's Guide

This is a publication of Sage Software, Inc.

Version 2016

Copyright © 2015 Sage Software, Inc. All rights reserved.

Sage, the Sage logos, and the Sage product and service names mentioned herein are registered trademarks or trademarks of Sage Software, Inc., or its affiliated entities. All other trademarks are the property of their respective owners.

Business Objects® and the Business Objects logo, BusinessObjects®, and Crystal Reports® are trademarks or registered trademarks of Business Objects Software Ltd. in the United Sates and in other countries. Business Objects is an SAP company.

Microsoft® and Microsoft SQL Server® are either registered trademarks or trademarks of the Microsoft Corporation in the United States and/or in other countries.

The names of all other products and services are property of their respective owners.

Your use of this document and the Sage product(s) described herein is governed by the terms and conditions of the Sage End User License Agreement ("EULA") or other agreement that is provided with or included in the Sage product. Nothing in this document supplements, modifies or amends those terms and conditions. Except as expressly stated in those terms and conditions, the information in this document is provided by Sage "AS IS" and Sage disclaims all express, implied or statutory warranties of any kind, including but not limited to the warranties of merchantability, fitness for a particular purpose or of non-infringement. No implied license is granted to you under any Sage intellectual property or trade secret right. Sage reserves the right to revise, supplement or remove information in this document at any time without notice to you or others.

Sage End User License: http://na.sage.com/sage-na/eula

Contents

Chapter 1 — Introduction 1

How to Use This Manual 1

Graphic Conventions 1

Text Conventions 2

Installation Overview 3

Contents of Installation Programs 3

General Installation Tips 3

Chapter 2 — Installing Sage 100 Standard 5

Installation Requirements 5

Pre-Installation Tasks 5

Installation Process 6

Post-Installation Tasks 7

Workstation Setup 9

Workstation Setup Requirements 9

Running Workstation Setup 9

Sage Intelligence Reporting 10

Installing Sage Intelligence Reporting 10

Setting Up Sage Intelligence Reporting 11

Considerations for Installing on a Windows Server 12

Chapter 3 — Installing Sage 100 Advanced 13

Installation Requirements 13

Pre-Installation Tasks 13

Installation Process 15

Post-Installation Tasks 16

Workstation Setup 17

Workstation Setup Requirements 17

Running Workstation Setup 18

Multiple Installations 18

Adding a Server to Existing Workstation 19

Selecting a Server 19

Editing, Adding, and Removing Servers 19

Aliasing a Server 19

Setting a Default Server 20

Sage Intelligence Reporting 20

Installing Sage Intelligence Reporting 20

Setting Up Sage Intelligence Reporting 21

Chapter 4 — Installing Sage 100 Premium 22

Installation Requirements 22

Microsoft SQL Server Runtime Edition 2012 22

Installation Requirements 23

SQL Server Installation Types 23

Microsoft SQL Server Runtime Edition 2012 Installation Process 23

Pre-Installation Tasks 24

Sage 100 Premium Installation Process 25

Post-Installation Tasks 26

Workstation Setup 28

Workstation Setup Requirements 28

Running Workstation Setup 28

Multiple Installations 29

Adding a Server to Existing Workstation 29

Selecting a Server 29

Editing, Adding, and Removing Servers 30

Aliasing a Server 30

Setting a Default Server 30

Sage Intelligence Reporting 31

Installing Sage Intelligence Reporting 31

Setting Up Sage Intelligence Reporting 31

Chapter 5 — Installing Sage CRM 33

Pre-Installation Tasks 33

Tasks to perform if installing on a Windows 2008 Server Network 33

Installation Process 34

Post-Installation Tasks 35

Upgrading Sage CRM 36

Upgrading from Sage 100 2014 36

Upgrading from Sage 100 2013 37

Upgrading from Sage 100 4.50 39

Upgrading from Extended Enterprise Suite 1.4 40

Upgrading from Extended Enterprise Suite 1.3 or prior 41

Resetting the Tomcat Port Number for Quick Order Entry 42

Installing Quick Order Entry 43

Chapter 6 — Uninstalling and Reinstalling 44

Overview of Uninstalling Process 44

Uninstalling Sage 100 44

Uninstalling the Workstation Component 45

Uninstalling Sage CRM 46

Reinstalling Sage 100 47

Reinstalling Sage CRM 48

Changing an Existing Sage CRM Installation 48

Reinstalling the Workstation 49

Chapter 7 — Using the Application Server 50

Application Server Overview 50

Configuring the Application Server 50

Turning Off the Application Server 51

Configuring as a Service 51

Advanced Features 53

Session Tracking 53

SSL Encryption 53

Generating an SSL Certificate 54

Chapter 8 — Configuring the Client/Server ODBC Driver 55

Server-Side Configuration 55

Running as an Application or Service 55

Configuring the Server 55

Workstation Configuration 57

Sharing Permissions 58

Chapter 9 — Installing SAP Crystal Reports Designer 59

Installing SAP Crystal Reports Designer to the Workstation 59

Modifying SAP Crystal Reports in Sage 100 Premium 59

Set up an OLE DB (ADO) Connection 60

Converting SAP Crystal Reports from a Prior Version 60

Converting Reports 60

Converting Reports for Sage 100 Premium 62

Chapter 10 — Installing Federal and State eFiling and Reporting 64

Federal and State eFiling and Reporting Overview 64

Considerations for Installing Federal and State eFiling and Reporting 64 Installing Federal and State eFiling and Reporting to the Workstation 64 Share and NT File System (NTFS) Permissions 65

Chapter 11 — Setting Up Credit Card Processing 66

Sage Exchange 66

Considerations for Installing Sage Exchange 66 Enable Credit Card Processing 66

Chapter 12 — Performing System Startup 68

Starting the Software 68

Performing Administrative Tasks 68

Creating and Activating Companies 68

Copying a Company 69

Upgrading and Converting Data 70

Setting Up Security 70

Setting Up Roles and Users for Security 70

Defining Roles 71

Creating Users and Assigning Roles 74

Copying a User 75

Setting Additional User Preferences for Security 76

Setting a Workstation to Automatically Log Off 76

Locking Users Out 77

Setting System Preferences 78

Requiring a Password 78

Setting Accounting Date Preferences 80

Setting a Prompt for the Accounting Date 80

Setting the Accounting Date from the System Date 80

Restricting the Accounting Date to Current and One Future Period 80

Changing Your Administrator Password 81

Setting Up Security for Sage CRM 81

Logging On as the Administrator 81

User Authentication / Password Setup 81

Security Profiles and Territories 81

Field Security 82

Company Team Restrictions 82

Restricting Updates 83

Server Security 83

Database Security 83

Firewalls 84

SSL (Secure Sockets Layer) 84

Application Security 84

Chapter 13 — System Administrator Tasks 85

Determining Who is Accessing the System/Modules 85

Creating Public Tasks 86

Modifying Company Preferences 87

Uninstalling Modules 88

Chapter 14 — Advanced Features and Troubleshooting 89

Remote Access 89

Routing and Remote Access Service (RRAS) 89

Wide Area Networks (WAN) 90

Performance Over RRAS/WAN 90

Virtual Private Network (VPN) 91

Pinging to a Server or Workstation 91

Configuring the Workstation for the ODBC Driver Service 91

Hanging Processes 91

Detecting Existing Processes 91

Ending Processes 92

Increasing Default Limits Set by Windows Server 92

Appendix A — Sage 100 Security Permissions 93

Setting NTFS and Share Permissions 93

Sage 100 Server Minimum Permission Settings 94

Permissions for the Local User Running the Sage 100 Server 94

Permissions for Other Users accessing the Sage 100 Server 96

Sage 100 Workstation Permission Settings 98

Installation Security for Workstations 98

Report Security for Sage 100 Advanced Workstations 98

NTFS Permissions for Sage 100 Advanced and Premium Workstations 98

Appendix B — TCP/IP Protocol 99

Basic Configuration 99

Testing the Configuration for Sage 100 Advanced and Premium 100

Appendix C — Running in a Terminal Services or Citrix Environment 101

Installing the Sage 100 Server 101
Installing on the Workstation 101
Terminal Services Considerations 102

Appendix D — Running Sage Intelligence Reporting outside of Sage 100 103

Appendix E — Sage Configured Installation for SQL Server 105

Appendix F — Default Database Properties 107

Introduction

How to Use This Manual

This manual provides the information necessary for installing Sage 100. This manual also contains information and troubleshooting tips on the configuration of the various operating systems and environments in which the Sage 100 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 100 Advanced; similar screens appear in Sage 100 Standard and Sage 100 Premium. Note that Business Insights Reporter and the eBusiness Manager, Electronic Reporting, Job Cost, Material Requirements Planning, Payroll, TimeCard, and Work Order modules are not available for Sage 100 Premium.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Graphic Conventions

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



The **N**ote 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 100 products. The symbol is followed by the product(s) to which the section does apply.

Chapter 1*Introduction*

Text Conventions

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

Text Convention	Explanation
TOXE 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.</none>
<i>Italic</i> 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 100 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 100 system.*

The installation procedures in this document address Windows® environments. For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

In some parts of this guide, the Sage 100 Integration Engine is referred to simply as the Integration Engine.

Contents of Installation Programs

The Sage 100 installation programs are divided into two separate self-extracting executable files. The Sage 100 2016 file contains the following:

- Installation programs for Sage 100. To access these programs, select a product from the Autorun screen.
- Installation programs for Sage Intelligence Reporting, which is automatically installed with Sage 100 Standard and when running Workstation Setup for all versions of the product.
- Documentation for Sage 100 products, which includes 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 from the product screen.
- Productivity applications, such as SAP Crystal Reports® Designer and Acrobat Reader.

The Sage 100 2016 CRM file contains installation programs and documentation for Sage CRM.

General Installation Tips

Keep the following in mind when installing your Sage 100 system:

- If your serial number includes leading zeros, be sure to include all zeros when typing the number.
- When specifying where to install Sage 100, do not nest a destination folder in folders named MAS90 or SOA.

Note
The Sage 100
installation
programs include
setup programs
for three
Sage 100
products;
however, you will
be able to install
only the product
for which your
product key is
valid.

Chapter 1*Introduction*

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

- Installing SAP Crystal Reports Designer is optional; however, it must be installed on the workstation if you want to create new reports and modify existing ones. For more information, see Installing SAP Crystal Reports Designer on page 59.
- 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.
- The Customer Relationship Management module and the Sage 100 Integration Engine are installed along with Sage 100.
- If you are upgrading, all modules installed on your source system must be installed on the destination installation. After you have upgraded to the current version, you can uninstall modules that are no longer needed.
- If you are upgrading and your company data contains credit card information, the Sage Exchange Desktop will be automatically installed during conversion. This program is used to validate the merchant key and terminal ID to use when processing credit cards. For more information, read the *Customer Upgrade Guide* which is available in the Documentation folder within the Sage 100 installation program.

Chapter 2

Installing Sage 100 Standard

Read this guide completely before installing and setting up Sage 100 Standard. A series of procedures must be completed for new installations. For more information, read the Getting Started Guide, which is available in the Documentation folder within the Sage 100 installation program.

When upgrading a system, there are additional pre- and post-installation instructions for converting to the current version. For more information, read the Customer Upgrade Guide. To access this guide, select a product from the Autorun screen, and then click Documentation on the product screen.

⚠ WARNING

If you are upgrading from a prior version, you must install Sage 100 version 2016 to a new location and perform a parallel installation.

Installation Requirements

All prerequisites must be installed before installing Sage 100 Standard: any prerequisite that is not on your system will be installed by the Sage 100 2016 installation program.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.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 Customer Portal and in the Documentation folder within the Sage 100 installation program.
- Verify that you have your Sage Download Notification e-mail, which includes the serial number, customer number, user key, and product key, which are required to install Sage 100 Standard for the correct number of users and to register the modules. This information is also available on the Sage Customer Portal under Products > Details.
- Depending on your Internet connection speed, downloading the installation files may take several hours; therefore, you may want to download the files in advance. For more information, see step 3 on page 6.
- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Sage Knowledgebase at support.na.sage.com.
 - The Supported Platform Matrix (article ID 47649)
 - The Integrated Solutions Compatibility Matrix (article ID 48274)
- If you plan to use Sage Intelligence Reporting, open Microsoft Excel to ensure that it has been licensed and activated.

NOTE If you use the Payroll module, you must enter your new product key when installing Sage 100 2016. If you enter a product key obtained when purchasing a previous version of the program. you will not be able to open any Payroll tasks.

Installation Process

- If you will be installing the Sage Web Engine, refer to the eBusiness Manager Installation Guide.
- 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 version 2016 of the Sage Web Engine is installed, move the templates back to the IW folder.
- Third-party applications used with Sage 100 Standard may require a
 drive mapping or UNC path 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. 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 path.
- If you are installing on a Windows server, review Considerations for Installing on a Windows Server on page 12.
- If you are installing Sage CRM and using the Integrated Logon for SQL Server, create a Windows user account with permissions to access both the server where Sage 100 Standard will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage 100 Standard server and the Sage CRM server. You are asked to provide this information during the Sage 100 Standard installation. For more information, see Installing Sage CRM on page 33.

Installation Process

Run the Sage 100 Standard installation wizard to install a new instance of Sage 100 Standard or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage 100 Standard

- 1 Log on to the server where Sage 100 will be installed using an account with administrator rights. You must run the Setup program on 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 Download the Sage 100 2016.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

WARNING
If you install
Sage 100 on a
server with an
unsupported
operating system,
Sage 100
Customer
Support will be
unable to assist
you if you
encounter any

problems.

Note
Save the
download file in a
folder located
directly beneath
the root directory.
For example:
C:\temp.

Post-Installation Tasks

Note
When specifying
where to install
Sage 100, do not
nest a destination
folder in folders
named MAS90 or
SOA.

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

- 4 Click the Sage 100 2016.exe file to extract the installation files. The Sage 100 2016 folder, which contains the installation files, will be extracted.
- 5 In the Sage 100 2016 folder, click Autorun.exe.
- **6** On the Autorun screen, click Sage 100 Standard, and then click Install Sage 100 Standard to begin the installation.
- **7** Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

The time required to install 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. To install the application, on the Sage 100 Standard screen, click Productivity Applications, and then click Install Acrobat Reader.

After the Sage 100 installation is completed, the Upgrade Checklist automatically appears if Acrobat Reader is installed. To manually access this document, click Documentation on the Sage 100 Standard screen.

Post-Installation Tasks

Perform the following tasks after installing Sage 100 Standard.

- 1 If you are upgrading, refer to the *Customer Upgrade Guide*, which is available in the Documentation folder within the Sage 100 installation program.
- 2 Install any Sage 100 2016 product updates available on the Sage Customer Portal at: https://customers.sagenorthamerica.com
- 3 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.
- Install Sage CRM if you plan to use that product (see Installing Sage CRM on page 33).

Post-Installation Tasks

- **5** Run Workstation Setup on all workstations that will access the Sage 100 Standard installation (see Workstation Setup on page 9).
 - Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.
 - Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.
- **6** If you plan to use Sage Intelligence reporting, see Installing Sage Intelligence Reporting on page 10.
- 7 Install optional productivity applications, such as SAP Crystal Reports Designer, on each workstation as needed. Installing SAP 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 100 workstation. For more information, see Installing Federal and State eFiling and Reporting on page 64.
- **9** If you are using third-party 64-bit applications, such as the 64-bit version of Microsoft Office, that need to access Sage 100 data, install the 64-bit ODBC driver from the Productivity Applications menu.
- **10** Create companies and activate modules (see Creating and Activating Companies on page 68).
- 11 Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 70).
- **12** Set up the modules for your companies. If you are converting your existing business management system to Sage 100 Standard, 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 100
Standard software
upgrade.

The Workstation Setup wizard installs the required software, common programs, and Help files to the workstations that will access the Sage 100 Standard 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 a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.

Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.

If you have installed Sage 100 Standard on only one computer, it is not necessary to run Workstation Setup to access Sage 100 Standard on that computer; Workstation Setup is necessary only for additional workstations that will be accessing the installation.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage 100 Standard is installed.

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 a share at least one folder above the MAS90 folder where the Sage 100 Standard server component is installed.
- 3 Use Windows Explorer to attach to the server share point where Sage 100 Standard is installed, and locate the MAS90\Wksetup folder.
- 4 Double-click Autorun.exe to run the program; it takes a few seconds to launch.
- **5** Follow the steps in the Workstation Setup wizard.

Sage Intelligence Reporting

NOTE
If a message
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. To install Acrobat Reader, start the Sage 100 installation program, and select your product from the Autorun screen. Click Productivity Applications, and then click Install Acrobat Reader.

If Sage Intelligence Reporting will be used on this workstation, see Setting Up Sage Intelligence Reporting on page 11.

To create a Workstation Setup DVD, copy the contents of the MAS90\WKSETUP folder to the root folder of a blank DVD. For detailed information on creating a DVD, refer to your DVD burner software.

Sage Intelligence Reporting

Sage Intelligence Reporting is selected by default on the Module Selection screen when installing Sage 100 Standard; therefore, it is automatically installed unless you change the default selection.

For additional workstations that will access the Sage 100 Standard installation, Sage Intelligence Reporting is automatically installed when running Workstation Setup if you select the Recommended setup type.

If you select the Custom setup type, Sage Intelligence Reporting is installed unless you change the default options on the Custom Setup screen.

Installing Sage Intelligence Reporting

If you change the default installation options so that Sage Intelligence Reporting is not included when you first install Sage 100 or run Workstation Setup, you can install it later by running Workstation Setup.

To install Sage Intelligence Reporting

- 1 Make sure that Microsoft Excel is installed and activated, and then close Excel.
- 2 Start the Workstation Setup wizard. For details, see Running Workstation Setup on page 9.
- 3 Proceed through the wizard to the Program Maintenance screen.
- 4 Select the Add Components option.
- 5 Select the Sage Intelligence Reporting option and proceed through the rest of the wizard.

After the installation is complete, follow the steps under Setting Up Sage Intelligence Reporting on page 11.

Setting Up Sage Intelligence Reporting

Before using Sage Intelligence Reporting, follow the steps below to set up a repository and register the product.

The repository will be used to store Sage Intelligence Reporting data, reporting trees, report templates and other settings. Centralizing this information in one folder has the following advantages:

- Using a single folder makes it easier to back up and restore the information.
- Multiple users can access the information.

To set up Sage Intelligence Reporting

1 Create a shared folder to serve as the repository. The folder can be created locally or on a network; however, you must use a UNC format when entering the repository path: \\server\share name\repository folder name

If you are upgrading from a previous version of Sage 100, you must create a new repository. If you have custom reports that you want to use in version 2016, export them from your preexisting repository and import them into the new one.

For more information, see the Upgrading Sage Intelligence Reporting section in the Sage 100 *Customer Upgrade Guide*.

- 2 Grant Sage Intelligence Reporting users read and write permissions to the folder.
- 3 Open the Report Manager from within Sage 100. Select Sage Intelligence Reporting > Reports > Report Manager.
- **4** When the window appears asking for the path to the repository, enter the UNC path to the shared folder that you created, and click OK.
- 5 When a window appears asking you to run the license manager, click Yes.
- 6 In the License Manager window, enter your Sage customer account number and serial number, and then click Apply.
- 7 Click Perform Registration.

Click the Help button on any Sage Intelligence Reporting window for detailed information about the product's features.

For instructions on running Sage Intelligence Reporting outside of Sage 100, see page 103.

Considerations for Installing on a Windows Server

The following are special considerations to be aware of before installing or upgrading Sage 100 Standard on a Windows network.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

- Perform the installation on Sage 100 Standard directly on 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 least one folder above the MAS90 folder. Do not create the share directly at the MAS90 folder. Every workstation will access Sage 100 through this share point.
- Each workstation must recognize the network drive on which Sage 100 Standard is loaded using a mapped drive letter. Using Universal Naming Convention (UNC) paths is not supported.

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.

Chapter 3

Installing Sage 100 Advanced

Read this guide completely before installing and setting up Sage 100 Advanced. A series of procedures must be completed for new installations. For more information, read the *Getting Started Guide*, which is available in the Documentation folder within the Sage 100 installation program.

When upgrading a system, there are additional pre- and post-installation instructions for converting to the current version. For more information, read the *Customer Upgrade Guide*. To access this guide, select a product from the Autorun screen, and then click Documentation on the product screen.

WARNING

If you are upgrading from a prior version, you must install Sage 100 version 2016 to a new location and perform a parallel installation.

Installation Requirements

Sage 100 Advanced uses the TCP/IP protocol for all communications between the workstation and server. To run Sage 100 Advanced, TCP/IP must be properly configured on both the Windows Server and all workstations that will run Sage 100 Advanced on the server. For more information, see TCP/IP Protocol on page 99.

If you are installing Sage 100 Advanced on a Windows Server with Terminal Services enabled, see Terminal Services Considerations on page 102.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

All prerequisites must be installed before installing Sage 100 Advanced; any prerequisite that is not on your system will be installed by the Sage 100 2016 installation program.

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 Customer Portal and in the Documentation folder within the Sage 100 installation program.
- Verify that you have your Sage Download Notification e-mail, which
 includes the serial number, customer number, user key, and product
 key, which are required to install Sage 100 Advanced for the correct
 number of users and to register the modules. This information is also
 available on the Sage Customer Portal under Products > Details.
- Depending on your Internet connection speed, downloading the installation files may take several hours; therefore, you may want to download the files in advance. For more information, see step 3 on page 15.

If you use the Payroll module, you must enter your new product key when installing Sage 100 2016. If you enter a product key obtained when purchasing a previous version of

the program, you

will not be able to

open any Payroll

tasks.

Note

Pre-Installation Tasks

- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Sage Knowledgebase at support.na.sage.com.
 - The Supported Platform Matrix (article ID 47649)
 - The Integrated Solutions Compatibility Matrix (article ID 48274)
- If you will be installing the Sage 100 Web Engine, verify that IIS is installed and running.
- If a prior version of the Sage 100 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 version 2016 of the Sage Web Engine is installed, move the templates back to the IW folder.
- 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 99.
- Verify that the Application Server port ID is open, and create an inbound rule, if necessary.
- Third-party applications used with Sage 100 Advanced may require a
 drive mapping or UNC path 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 100 Advanced 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 path.
- If you are installing Sage CRM and using the Integrated Logon for SQL Server, create a Windows user account with permissions to access both the server where Sage 100 Advanced will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage 100 Advanced server and the Sage CRM server. You are asked to provide this information during the Sage 100 Advanced installation. For more information, see Installing Sage CRM on page 33.

Installation Process

MARNING

If you install
Sage 100 on a
server with an
unsupported
operating system,
Sage 100
Customer
Support will be
unable to assist
you if you
encounter any
problems.

NOTE

Save the download file in a folder located directly beneath the root directory. For example: C:\temp.

NOTE

When specifying where to install Sage 100, do not nest a destination folder in folders named MAS90 or SOA.

NOTE

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

Installation Process

Run the Sage 100 Advanced installation wizard program to install a new instance of Sage 100 Advanced or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage 100 Advanced

- 1 Log on to the server where Sage 100 will be installed using an account with administrator rights. You must run the Setup program on 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 Download the Sage 100 2016.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

- 4 Click the Sage 100 2016.exe file to extract the installation files. The Sage 100 2016 folder, which contains the installation files, will be extracted.
- 5 In the Sage 100 2016 folder, click Autorun.exe.
- **6** On the Autorun screen, click Sage 100 Advanced, and then click Install Sage 100 Advanced to begin the installation.
- **7** Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

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. To install the application, click Productivity Applications, and then click Install Acrobat Reader.

After the Sage 100 installation is completed, the Upgrade Checklist automatically appears if Acrobat Reader is installed. To manually access this document, click Documentation on the Sage 100 Advanced screen.

Post-Installation Tasks

Perform the following tasks after installing Sage 100 Advanced.

- 1 If you are upgrading, refer to the *Customer Upgrade Guide*, which is available in the Documentation folder within the Sage 100 installation program.
- 2 Install any Sage 100 2016 product updates available on the Sage Customer Portal at: https://customers.sagenorthamerica.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 100 Security Permissions on page 93.
- **4** Set up and start the Application Server (see Using the Application Server on page 50).
- 5 Install Sage CRM if you plan to use that product (see Installing Sage CRM on page 33).
- **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 all workstations that will access the Sage 100 Advanced installation (see Workstation Setup on page 17).
 - Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.
 - Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.
- **8** If you plan to use Sage Intelligence reporting, see Installing Sage Intelligence Reporting on page 20.
- 9 Install optional productivity applications, such as SAP Crystal Reports Designer, on each workstation as needed. Installing SAP Crystal Reports Designer is necessary only if you plan to create or modify reports.
- 10 If you are installing Federal and State eFiling and Reporting, you must install it on each Sage 100 Advanced workstation. For more information, see Installing Federal and State eFiling and Reporting on page 64.
- 11 If you are using third-party 64-bit applications, such as the 64-bit version of Microsoft Office, that need to access Sage 100 data, install the 64-bit ODBC driver from the Productivity Applications menu.

Workstation Setup

- **12** Create companies and activate modules (see Creating and Activating Companies on page 68).
- **13** Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 70).
- 14 Set up the modules for your companies. If you are converting your existing business management system to Sage 100 Advanced, 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 100
Advanced
software upgrade.

The Workstation Setup wizard installs the required software, common programs, and Help files 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.

Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.

Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.

If you are running Sage 100 Advanced 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 101.

Note
If you have
multiple
installations of the
same version of
Sage 100
Advanced, see
Multiple
Installations on
page 18.

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

Note
Only one current version on a server is supported.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage 100 Advanced is installed.

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 path to the share point where Sage 100 Advanced is installed.
- 3 Use Windows Explorer to attach to the server share point where Sage 100 Advanced is installed, and locate the MAS90\Wksetup folder.
- **4** Double-click Autorun.exe to run the program; it takes a few seconds to launch.
- 5 Follow the steps in the Workstation Setup wizard.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. To install Acrobat Reader, start the Sage 100 installation program, and select your product from the Autorun screen. Click Productivity Applications, and then click Install Acrobat Reader.

If you are running through Terminal Services/Citrix, you are prompted to indicate whether Sage 100 Advanced will be accessed through Terminal Server. Click Yes to copy the activation key file. This allows multiple Terminal Services/Citrix sessions to access Sage 100 Advanced 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 100 Advanced Server Path page, this message does not appear.

If you click Yes to copy the activation key file but receive a message indicating the copy was not successful, you must manually copy the file to the MAS90/Home/Lib/Keys folder.

To create a Workstation Setup DVD, copy the contents of the MAS90\WKSETUP folder to the root folder of a blank DVD. For detailed information on creating a DVD, refer to your DVD burner software.

Multiple Installations

A Sage 100 Advanced workstation can attach to multiple servers. For example, if your site has three servers and Sage 100 Advanced 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.

Adding a Server to Existing Workstation

To add a server to an existing workstation, launch the Install Sage 100 Advanced Workstation program from the Sage 100 Advanced server installation folder and double-click Autorun.exe to run the program. Click Add on the Program Maintenance page and enter the server name, path, and port ID associated with the server you want to add. After Workstation is run, click Finish.

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 appears which 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 100 Advanced, click Cancel to terminate the program.

You cannot have multiple installations for the same version of the Sage 100 Advanced 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 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. 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 100 Advanced 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 100 Advanced is started from this workstation, the server and socket number selected as the defaults are highlighted.

Sage Intelligence Reporting

Sage Intelligence Reporting is automatically installed when running Workstation Setup if you select the Recommended setup type.

If you select the Custom setup type and clear the Sage Intelligence Reporting option, you can install the program at a later time by rerunning Workstation Setup.

Installing Sage Intelligence Reporting

To install Sage Intelligence Reporting

- 1 Make sure that Microsoft Excel is installed and activated, and then close Excel.
- 2 Start the Workstation Setup wizard. For details, see Running Workstation Setup on page 18.
- **3** Proceed through the wizard to the Setup Type screen.
- 4 Perform one of the following steps.
 - Select the Recommended setup type.
 - Select the Custom setup type and then select Sage Intelligence Reporting on the next screen.
- 5 Proceed through the rest of the wizard.

After the installation is complete, follow the steps under Setting Up Sage Intelligence Reporting on page 21.

Setting Up Sage Intelligence Reporting

Before using Sage Intelligence Reporting, follow the steps below to set up a repository and register the product.

The repository will be used to store Sage Intelligence Reporting data, reporting trees, report templates and other settings. Centralizing this information in one folder has the following advantages:

- Using a single folder makes it easier to back up and restore the information.
- Multiple users can access the information.

To set up Sage Intelligence Reporting

1 Create a shared folder to serve as the repository. The folder can be created locally or on a network; however, you must use a UNC format when entering the repository path: \\server\share name\repository folder name

If you are upgrading from a previous version of Sage 100, you must create a new repository. If you have custom reports that you want to use in version 2016, export them from your preexisting repository and import them into the new one.

For more information, see the Upgrading Sage Intelligence Reporting section in the Sage 100 *Customer Upgrade Guide*.

- **2** Grant Sage Intelligence Reporting users read and write permissions to the folder.
- **3** Open the Report Manager from within Sage 100. Select Sage Intelligence Reporting > Reports > Report Manager.
- **4** When the window appears asking for the path to the repository, enter the UNC path to the shared folder that you created, and click OK.
- 5 When a window appears asking you to run the license manager, click Yes.
- 6 In the License Manager window, enter your Sage customer account number and serial number, and then click Apply.
- 7 Click Perform Registration.

Click the Help button on any Sage Intelligence Reporting window for detailed information about the product's features.

For instructions on running Sage Intelligence Reporting outside of Sage 100, see page 103.

Chapter 4

Installing Sage 100 Premium

Read this guide completely before installing and setting up Sage 100 Premium. A series of procedures must be completed for new installations. For more information, read the *Getting Started Guide*, which is available in the Documentation folder within the Sage 100 installation program.

When upgrading a system, there are additional pre- and post-installation instructions for converting to the current version. For more information, read the *Customer Upgrade Guide*. To access this guide, select a product from the Autorun screen, and then click Documentation on the product screen.

WARNING

If you are upgrading from a prior version, you must install Sage 100 version 2016 to a new location and perform a parallel installation.

NOTE

For information on the configured options for installing SQL Server, see Sage Configured Installation for SQL Server on page 105.

Installation Requirements

Microsoft SQL Server must be installed before installing Sage 100 Premium. Sage supports the installation of Sage 100 Premium and Microsoft 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 2012 on page 22.

Sage 100 Premium uses the TCP/IP protocol for all communications between the workstation and server. To run Sage 100 Premium, TCP/IP must be properly configured on both the Windows Server and all workstations that will run Sage 100 Premium on the server. For more information, see TCP/IP Protocol on page 99.

If you are installing Sage 100 Premium on a Windows Server with Terminal Services enabled, see Terminal Services Considerations on page 102.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

All prerequisites must be installed before installing Sage 100 Premium; any prerequisite that is not on your system will be installed by the Sage 100 2016 installation program.

Microsoft SQL Server Runtime Edition 2012

If you purchased SQL Server directly from Sage, you will install Microsoft SQL Server Runtime Edition 2012. The only difference between this version and SQL Server 2012 Standard Edition is that Microsoft SQL Server Runtime Edition 2012 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 SP1 is required and is included with the SQL Server installation program. 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 with the SQL Server installation program. 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 100 Premium. For information on how parameters are defined, see Sage Configured Installation for SQL Server on page 105.

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 2012 Installation Process

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

To install SQL Server

- 1 Log onto the server where SQL Server will be installed.
- 2 Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
- 3 Download the Microsoft SQL Server 2012.exe file from the location specified in your Download Notification e-mail from Sage.
 - a When prompted to run or save the file, click Save.
 - **b** Save the file to a folder in the root directory of your computer, for example: C:\temp.

WARNING
If you install SQL
Server or Sage
100 Premium on
a server with an
unsupported
operating system,
Sage 100
Customer
Support will be
unable to assist
you if you
encounter any
problems.

Pre-Installation Tasks

- c When the Download Complete window appears, click Run. This starts the download process. Depending on your Internet connection speed, the download may take several hours to complete.
- 4 Click the executable file to extract the installation files. The Microsoft SQL Server 2012 folder, which contains the installation files, will be extracted.
- 5 In the Microsoft SQL Server 2012 folder, click Autorun.exe.
- 6 On the Autorun screen, click Install Microsoft SQL Server Runtime Edition 2012.
 - A message 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.
- 7 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.
 - If one or more of the required components are missing from your server, a message appears. Click Yes to install the missing components, or click No to exit the installation process.
- 8 If you are prompted to restart your system after components are installed, restart the computer, and then resume the installation.

Pre-Installation Tasks

Perform these tasks before installing Sage 100 Premium.

- If you are upgrading from a prior version, read the *Customer Upgrade Guide*, which is available on the Sage Customer Portal and in the Documentation folder within the Sage 100 installation program.
- Verify that you have your Sage Download Notification e-mail, which
 includes the serial number, customer number, user key, and product
 key, which are required to install Sage 100 Premium for the correct
 number of users and to register the modules. This information is also
 available on the Sage Customer Portal under Products > Details.
- Depending on your Internet connection speed, downloading the installation files may take several hours; therefore, you may want to download the files in advance. For more information, see step 3 on page 23.
- Test and validate all of the hardware and network configurations using the following resources, which can be found in the Sage Knowledgebase at support.na.sage.com.

Note
The SQL Server
2012 Setup
window appears
during the
installation, which
may take up to an
hour

- The Supported Platform Matrix (article ID 47649)
- The Integrated Solutions Compatibility Matrix (article ID 48274)
- 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 99.
- Verify that the Application Server port ID is open, and create an inbound rule, if necessary.
- Third-party applications used with Sage 100 Premium may require a drive mapping or UNC path 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 100 Premium 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 path.
- If you are installing Sage CRM and using the Integrated Logon for SQL Server, create a Windows user account with permissions to access both the server where Sage 100 Premium will be installed and the SQL Server database. This account is used by the Integration Engine to send data between the Sage 100 Premium server and the Sage CRM server. You are asked to provide this information during the Sage 100 Premium installation. For more information, see Installing Sage CRM on page 33.

Sage 100 Premium Installation Process

Run the Sage 100 Premium installation wizard program to install a new instance of Sage 100 Premium or to upgrade your system from a prior version. The installation wizard guides you through the installation.

To install Sage 100 Premium

1 Log on to the server where Sage 100 will be installed. The log-on account must have administrator rights. Also, if you plan to select the Windows authentication option when running the installation wizard, the account must be a member of the sysadmin role on the server. This is necessary to ensure that the MAS SYSTEM SQL database is created correctly.

You must run the Setup program on 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 Download the Sage 100 2016.exe file from the location specified in your Download Notification e-mail from Sage.

✓ WARNING If you install Sage 100 on a server with an unsupported operating system, Sage 100 Customer Support will be unable to assist you if you encounter any problems.

NOTE Save the download file in a folder located directly beneath

the root directory.

For example: C:\temp.

Post-Installation Tasks

When specifying where to install Sage 100, do not nest a destination folder in folders named MAS90 or SOA.

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

/ WARNING Changes to the default properties for Sage 100 Premium company and MAS_SYSTEM databases may cause the product to work incorrectly. For more information. see Default Database Properties on page 107.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

- 4 Click the Sage 100 2016.exe file to extract the installation files. The Sage 100 2016 folder, which contains the installation files, will be extracted.
- **5** In the Sage 100 2016 folder, click Autorun.exe.
- **6** On the Autorun screen, click Sage100 Premium, and then click Install Sage 100 Premium to begin the installation.
- **7** Follow the steps in the installation wizard to install a new instance or upgrade an existing installation.

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. To install the application, click Productivity Applications, and then click Install Acrobat Reader.

After the Sage 100 installation is completed, the Upgrade Checklist automatically appears if Acrobat Reader is installed. To manually access this document, click Documentation on the Sage 100 Premium screen.

Post-Installation Tasks

Perform the following tasks after installing Sage 100 Premium.

- 1 If you are upgrading, refer to the *Customer Upgrade Guide*, which is available in the Documentation folder within the Sage 100 installation program.
- 2 Install any Sage 100 2016 product updates available on the Sage Customer Portal at: https://customers.sagenorthamerica.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 100 Security Permissions on page 93.
- **4** Set up and start the Application Server (see Using the Application Server on page 50).
- 5 Install Sage CRM if you plan to use that product (see Installing Sage CRM on page 33).

Post-Installation Tasks

- **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 all workstations that will access the Sage 100 Premium installation (see Workstation Setup on page 28).
 - Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.
 - Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.
- **8** If you plan to use Sage Intelligence reporting, see Installing Sage Intelligence Reporting on page 31.
- 9 Install optional productivity applications, such as SAP Crystal Reports Designer, on each workstation as needed. Installing SAP Crystal Reports Designer is necessary only if you plan to create or modify reports.
- 10 If you are installing Federal and State eFiling and Reporting, you must install it on each Sage 100 Premium workstation. For more information, see Installing Federal and State eFiling and Reporting on page 64.
- **11** Create companies and activate modules (see Creating and Activating Companies on page 68).
- **12** Create roles and user codes, and set up system preferences (see Setting Up Roles and Users for Security on page 70).
- 13 Set up the modules for your companies. If you are converting your existing business management system to Sage 100 Premium, 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 100
Premium software
upgrade.

The Workstation Setup wizard installs the required software, common programs, and Help files 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.

Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.

Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.

If you are running Sage 100 Premium 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 101.

Running Workstation Setup

To facilitate ease of installation, the Workstation Setup program should be run from the server where Sage 100 Premium is installed.

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 path to the share point where Sage 100 Premium is installed.
- 3 Use Windows Explorer to attach to the server share point where Sage 100 Premium is installed, and locate the MAS90\Wksetup folder.
- 4 Double-click Autorun.exe to run the program; it takes a few seconds to launch.
- **5** Follow the steps in the Workstation Setup wizard.

Note
If you have
multiple
installations of the
same version of
Sage 100
Premium, Multiple
Installations on
this page.

Workstation Setup

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

Note
Only one current version on a server is supported.

If you receive a message stating that no installation of Adobe Acrobat Reader was detected, click OK to continue with the installation. To install Acrobat Reader, start the Sage 100 installation program, and select your product from the Autorun screen. Click Productivity Applications, and then click Install Acrobat Reader.

If you are running through Terminal Services/Citrix, you are prompted to indicate whether Sage 100 Premium will be accessed through Terminal Server. Click Yes to copy the activation key file. This allows multiple Terminal Services/Citrix sessions to access Sage 100 Premium 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 100 Premium page, this message does not appear.

If you click Yes to copy the activation key file but receive a message indicating the copy was not successful, you must manually copy the file to the MAS90/Home/Lib/Keys folder.

To create a Workstation Setup DVD, copy the contents of the MAS90\WKSETUP folder to the root folder of a blank DVD. For detailed information on creating a DVD, refer to your DVD burner software.

Multiple Installations

A Sage 100 Premium workstation can attach to multiple servers. For example, if your site has three servers and Sage 100 Premium 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.

Adding a Server to Existing Workstation

To add a server to an existing workstation, launch the Install Sage 100 Premium Workstation program from the Sage 100 Premium server installation folder and double-click Autorun.exe to run the program. Click Add on the Program Maintenance page and enter the server name, path, and port ID associated with the server you want to add. After Workstation is run, click Finish.

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 appears which 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 100 Premium, click Cancel to terminate the program. You cannot have multiple installations for the same version of the Sage 100 Premium 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 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. 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 100 Premium 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 100 Premium is started from this workstation, the server and socket number selected as the defaults are highlighted.

Sage Intelligence Reporting

Sage Intelligence Reporting is automatically installed when running Workstation Setup if you select the Recommended setup type.

If you select the Custom setup type and clear the Sage Intelligence Reporting option, you can install the program at a later time by rerunning Workstation Setup.

Installing Sage Intelligence Reporting

To install Sage Intelligence Reporting

- 1 Make sure that Microsoft Excel is installed and activated, and then close Excel.
- 2 Start the Workstation Setup wizard. For details, see Running Workstation Setup on page 28.
- **3** Proceed through the wizard to the Setup Type screen.
- 4 Perform one of the following steps.
 - Select the Recommended setup type.
 - Select the Custom setup type and then select Sage Intelligence Reporting on the next screen.
- **5** Proceed through the rest of the wizard.

After the installation is complete, follow the steps under Setting Up Sage Intelligence Reporting on page 31.

Setting Up Sage Intelligence Reporting

Before using Sage Intelligence reporting, follow the steps below to set up a repository and register the product.

The repository will be used to store Sage Intelligence Reporting data, reporting trees, report templates and other settings. Centralizing this information in one folder has the following advantages:

- Using a single folder makes it easier to back up and restore the information.
- Multiple users can access the information.

To set up Sage Intelligence Reporting

1 Create a shared folder to serve as the repository. The folder can be created locally or on a network; however, you must use a UNC format when entering the repository path: \\server\share name\repository folder name

If you are upgrading from a previous version of Sage 100, you must create a new repository. If you have custom reports that you want to use in version 2016, export them from your preexisting repository and import them into the new one.

For more information, see the Upgrading Sage Intelligence Reporting section in the Sage 100 *Customer Upgrade Guide*.

- 2 Grant Sage Intelligence Reporting users read and write permissions to the folder.
- 3 Open the Report Manager from within Sage 100. Select Sage Intelligence Reporting > Reports > Report Manager.
- **4** When the window appears asking for the path to the repository, enter the UNC path to the shared folder that you created, and click OK.
- 5 When a window appears asking you to run the license manager, click Yes.
- 6 In the License Manager window, enter your Sage customer account number and serial number, and then click Apply.
- 7 Click Perform Registration.

Click the Help button on any Sage Intelligence Reporting window for detailed information about the product's features.

For instructions on running Sage Intelligence Reporting outside of Sage 100, see page 103.

Chapter 5

Installing Sage CRM

The Sage CRM server(s) host the Sage CRM 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 100 installed. Depending on the number of users accessing the Sage CRM server, it may be necessary to split the Sage CRM SQL Server database and the IIS Web server across two or more servers.

For Sage CRM hardware and software requirements, refer to the *Sage CRM 7.3 Installation and Upgrade Guide*. The document is available in the Documentation folder within the Sage CRM installation program. To access this guide, click the Documentation link on the Autorun screen that appears when you start the Sage CRM installation program.

Pre-Installation Tasks

Perform these tasks before beginning the installation process.

- Ideally, Sage 100 should be installed before installing Sage CRM. For information on installing Sage 100, refer to the Sage 100 2016 Installation and System Administrator's Guide.
- If you are upgrading from a prior version of Sage CRM, third-party customizations may be overwritten. Contact your Sage business partner for assistance. For more information, see Upgrading Sage CRM on page 36.
- Determine the name of the database server you will install to and the port number that SQL Server is using for TCP/IP connectivity.
- When installing an additional instance of Microsoft SQL Server, you
 must enter a specific port number and make note of that port number
 so that you can enter it in CRM Company Options.
- The Integration Engine will need to be started before setting up the Customer Relationship Management module in Sage 100. For more information, see Post-Installation Tasks on page 35.
- Depending on your Internet connection speed, downloading the installation files may take several hours; therefore, you may want to download the files in advance.

Tasks to perform if installing on a Windows 2008 Server Network

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

 If Windows Firewall is used, set the Incoming connections option to Allowed.

NOTE
Microsoft SQL
Server Express is
not supported in
a production
environment.

Installation Process

- If Sage CRM will be integrated with Sage 100 Advanced or Sage 100
 Premium, 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.

Installation Process

Perform this installation at the IIS Web server. This section refers only to a new installation. For information on upgrading, see Upgrading Sage CRM on page 36.

To install Sage CRM

- 1 Log on to the IIS Web server where you are installing the Sage CRM software.
- **2** Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
- 3 Download the Sage 100 2013 CRM 73b.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

The Sage Download Manager window will appear and indicate the amount of time remaining to download the file.

- 4 Click the Sage CRM 7.3 for Sage 100 2016.exe file to extract the installation files. The Sage CRM 7.3 for Sage 100 2016 folder, which contains the installation files, will be extracted.
- **5** In the Sage CRM 7.3 for Sage 100 2016 folder, click Autorun.exe.
- **6** On the Autorun screen, click New Sage CRM Installation or Upgrade from Sage CRM 7.2. The installation program may take a few seconds to launch.
- 7 If Microsoft .NET Framework 3.5 is not installed on the server, you are prompted to install it. Click OK to launch and complete the Microsoft .NET Framework installation wizard.

Note
Save the
download file in a
folder located
directly beneath
the root directory.
For example:
C:\temp.

Post-Installation Tasks

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

8 Follow the steps in the installation wizard to install Sage CRM.

Note the name of the Sage CRM SQL Server database and logon information. When setting up the Customer Relationship Management module in Sage 100, 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

Perform the following tasks after installing Sage CRM and Sage 100.

- 1 The Integration Engine must be started before setting up Sage CRM. Perform the following steps to start the Integration Engine:
 - a Select Windows Start menu > Control Panel > Administrative Tools
 > Services.
 - **b** Right-click Sage 100 Integration Engine and click Properties.
 - **c** In the Startup Type drop-down field, select Automatic, and then click Apply. Close the Properties window.
 - d Right-click Sage 100 Integration Engine and click Start.
- 2 Set up and create users, territories, and security profiles in Sage CRM. One Sage CRM user must be created for each Sage 100 user who will be creating quotes and orders or maintaining customer information.
 - For more information, refer to the Sage CRM *System Administrator Guide*. To access this guide, click the Documentation link on the Autorun screen that appears when you start the Sage CRM installation program.
- 3 Set up the Customer Relationship Management module in your Sage 100 installation. Sage 100 and Sage CRM will not be integrated until after you set up the module in CRM Server Options and CRM Company Options.

For more information, see Set Up Customer Relationship Management for a new Company in the Sage 100 Help system.

If you are upgrading from a previous version of Sage CRM, refer to the Sage CRM 7.3 Installation and Upgrade Guide for full details on completing the upgrade. The guide is available in the Documentation folder within the Sage CRM installation program.

The steps provided in this chapter are an overview of the upgrade process. This chapter is not a substitute for the *Sage CRM 7.3 Installation* and *Upgrade Guide*. The following chapters in that guide should serve as your reference:

- Chapter 8: Running a Test Upgrade
- Chapter 9: Upgrading Sage CRM

There is one important exception to the information provided in chapter 8. The Licensing section suggests using a trial license key to create a test installation. However, the mirror installation that you will create is the one that will be upgraded and integrated with your Sage 100 2016 installation; therefore, you must use a valid Sage CRM 7.3 license key. You can use the same 7.3 license key for two installations as long as they are not on the same server.

If your existing installation has third-party customizations, they may be overwritten. Contact your Sage business partner for assistance. After completing the upgrade process and migrating your data, you can simultaneously run your 2016 installation and your previous installation for a test period.

Upgrading from Sage 100 2014

To upgrade from Sage CRM version 7.2b or later

- 1 Create a backup of your Sage CRM database.
- 2 Create a fully functioning duplicate copy of your existing Sage CRM installation. This mirror copy must be set up exactly the same as your production installation. This is the Sage CRM installation that will be integrated with Sage 100 2016.
- **3** Restore the backup of your Sage CRM database to the mirror installation created in the prior step.
- 4 Upgrade the mirror installation to Sage CRM 7.3.
 - **a** Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
 - **b** Download the Sage 100 2013 CRM 73b.exe file from the location specified in your Download Notification e-mail from Sage.

Note
If your Sage 100
2016 installation
is on the same
server as the
Sage 100 system
you are
upgrading, you
must use a
different
Integration
Engine port ID for
your version
2016 installation.



To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

The Sage Download Manager window will appear and indicate the amount of time remaining to download the file.

- 5 Click the Sage CRM 7.3 for Sage 100 2016.exe file to extract the installation files. The Sage CRM 7.3 for Sage 100 2016 folder, which contains the installation files, will be extracted.
- 6 In the Sage CRM 7.3 for Sage 100 2016 folder, click Autorun.exe.
 - **a** On the Autorun screen, click New Sage CRM Installation or Upgrade from Sage CRM 7.2.
 - **b** Proceed through the steps in the wizard to update your mirror installation, and to install the components necessary for integration with Sage 100.
 - **c** This final step must be completed after you have migrated your Sage 100 data.

After migrating your data, log into Sage 100 and check the settings in CRM Server Options. Update the settings as needed. For more information, see the CRM Server Options help.

For information on migrating your data, see the Upgrade Checklist in the Sage 100 Customer Upgrade Guide.

7 If you are using Quick Order Entry, see Resetting the Tomcat Port Number for Quick Order Entry on page 42.

Upgrading from Sage 100 2013

If you have already upgraded your Sage CRM installation to version 7.2b or later, you can upgrade directly to Sage CRM 7.3. Upgrading from version 7.2b to 7.3 is not required.

If you are using Sage CRM 7.1 SP1, you must upgrade to maintain compatibility with Sage 100 2016. Also, you must upgrade to version 7.2b before you can upgrade to version 7.3.

For information on obtaining prior versions of Sage CRM to complete the upgrade path, contact Sage 100 Customer Support.

To upgrade from Sage CRM version 7.2b or later

- 1 Create a backup of your Sage CRM database.
- 2 Create a fully functioning duplicate copy of your existing Sage CRM installation. This mirror copy must be set up exactly the same as your production installation. This is the Sage CRM installation that will be integrated with Sage 100 2016.

Note
Save the
download file in a
folder located
directly beneath
the root directory.
For example:
C:\temp.

- 3 Restore the backup of your Sage CRM database to the mirror installation created in the prior step.
- **4** Upgrade the mirror installation to Sage CRM 7.3.
 - a Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
 - **b** Download the Sage 100 2013 CRM 73b.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

The Sage Download Manager window will appear and indicate the amount of time remaining to download the file.

- 5 Click the Sage CRM 7.3 for Sage 100 2016.exe file to extract the installation files. The Sage CRM 7.3 for Sage 100 2016 folder, which contains the installation files, will be extracted.
- 6 In the Sage CRM 7.3 for Sage 100 2016 folder, click Autorun.exe.
 - **a** On the Autorun screen, click New Sage CRM Installation or Upgrade from Sage CRM 7.2.
 - **b** Proceed through the steps in the wizard to update your mirror installation, and to install the components necessary for integration with Sage 100.
 - **c** This final step must be completed after you have migrated your Sage 100 data.

After migrating your data, log into Sage 100 and check the settings in CRM Server Options. Update the settings as needed. For more information, see the CRM Server Options help.

For information on migrating your data, see the Upgrade Checklist in the Sage 100 Customer Upgrade Guide.

7 If you are using Quick Order Entry, see Resetting the Tomcat Port Number for Quick Order Entry on page 42.

WARNING
You must
upgrade
Sage 100 before
you can log into
Sage CRM.

NOTE Save the download file in a folder located directly beneath the root directory. For example: C:\temp.

Upgrading from Sage 100 4.50

If you are upgrading from Sage 100 version 4.50, you must follow this upgrade path before upgrading to Sage CRM 7.3.

- 1 Upgrade to Sage CRM 7.1 SP1.
- 2 Upgrade to Sage CRM 7.2b.

For information on obtaining prior versions of Sage CRM to complete the upgrade path, contact Sage 100 Customer Support.

To upgrade from Sage CRM version 7.2b or later

- 1 Create a backup of your Sage CRM database.
- 2 Create a fully functioning duplicate copy of your existing Sage CRM installation. This mirror copy must be set up exactly the same as your production installation. This is the Sage CRM installation that will be integrated with Sage 100 2016.
- 3 Restore the backup of your Sage CRM database to the mirror installation created in the prior step.
- **4** Upgrade the mirror installation to Sage CRM 7.3.
 - **a** Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
 - **b** Download the Sage 100 2013 CRM 73b.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

The Sage Download Manager window will appear and indicate the amount of time remaining to download the file.

- 5 Click the Sage CRM 7.3 for Sage 100 2016.exe file to extract the installation files. The Sage CRM 7.3 for Sage 100 2016 folder, which contains the installation files, will be extracted.
- 6 In the Sage CRM 7.3 for Sage 100 2016 folder, click Autorun.exe.
 - **a** On the Autorun screen, click New Sage CRM Installation or Upgrade from Sage CRM 7.2.
 - **b** Proceed through the steps in the wizard to update your mirror installation, and to install the components necessary for integration with Sage 100.

c This final step must be completed after you have migrated your Sage 100 data.

After migrating your data, log into Sage 100 and check the settings in CRM Server Options. Update the settings as needed. For more information, see the CRM Server Options help.

For information on migrating your data, see the Upgrade Checklist in the *Sage 100 Customer Upgrade Guide*.

7 If you are using Quick Order Entry, see Resetting the Tomcat Port Number for Quick Order Entry on page 42.

Upgrading from Extended Enterprise Suite 1.4

If you are upgrading from Sage Extended Enterprise Suite version 1.4, you must follow this upgrade path before upgrading to Sage CRM 7.3.

- 1 Upgrade to Sage CRM 7.0 D2.
- 2 Upgrade to Sage CRM 7.1 SP1.
- 3 Upgrade to Sage CRM 7.2.b

For information on obtaining prior versions of Sage CRM to complete the upgrade path, contact Sage 100 Customer Support.

To upgrade from Sage CRM version 7.2b or later

- 1 Create a backup of your Sage CRM database.
- 2 Create a fully functioning duplicate copy of your existing Sage CRM installation. This mirror copy must be set up exactly the same as your production installation. This is the Sage CRM installation that will be integrated with Sage 100 2016.
- 3 Restore the backup of your Sage CRM database to the mirror installation created in the prior step.
- **4** Upgrade the mirror installation to Sage CRM 7.3.
 - a Close down other programs. Do not close antivirus, antispyware, and script-blocking software unless it is actually interfering with the installation.
 - **b** Download the Sage 100 2013 CRM 73b.exe file from the location specified in your Download Notification e-mail from Sage.

To avoid errors when extracting the installation program from the download file, save the file in a folder located directly beneath the root directory. For example: C:\temp

WARNING
You must
upgrade
Sage 100 before
you can log into
Sage CRM.

Note
Save the
download file in a
folder located
directly beneath
the root directory.
For example:
C:\temp.

The Sage Download Manager window will appear and indicate the amount of time remaining to download the file.

- 5 Click the Sage CRM 7.3 for Sage 100 2016.exe file to extract the installation files. The Sage CRM 7.3 for Sage 100 2016 folder, which contains the installation files. will be extracted.
- 6 In the Sage CRM 7.3 for Sage 100 2016 folder, click Autorun.exe.
 - **a** On the Autorun screen, click New Sage CRM Installation or Upgrade from Sage CRM 7.2.
 - **b** Proceed through the steps in the wizard to update your mirror installation, and to install the components necessary for integration with Sage 100.

A message may appear recommending that any triggers in the Sage CRM database be disabled before the upgrade. The following triggers have been enabled by Sage to facilitate integration between Sage CRM and Sage 100; 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
- **c** This final step must be completed after you have migrated your Sage 100 data.

After migrating your data, log into Sage 100 and check the settings in CRM Server Options. Update the settings as needed. For more information, see the CRM Server Options help.

For information on migrating your data, see the Upgrade Checklist in the Sage 100 Customer Upgrade Guide.

7 If you are using Quick Order Entry, see Resetting the Tomcat Port Number for Quick Order Entry on page 42.

Upgrading from Extended Enterprise Suite 1.3 or prior

Sage does not support upgrading from versions of Extended Enterprise Suite prior to version 1.4. If you are on version 1.3 or prior, you must upgrade to version 1.4 and then follow the steps under If you are using Quick Order Entry, see Resetting the Tomcat Port Number for Quick Order Entry on page 42. on page 40.

Resetting the Tomcat Port Number for Quick Order Entry

Upgrading from Sage CRM version 7.2 to 7.3 may change the Tomcat port number that is used for Quick Order Entry. If you use Quick Order Entry, you must reset the port number.

To reset the Tomcat port number

- 1 On the server where Sage CRM is installed, open the Windows Control Panel.
- 2 Select Administrative Tools > Internet Information Services (IIS) Manager.
- 3 In the Connections pane, under Sites > Default Web Site, select the Sage CRM installation that you need to update.
- 4 In the pane on the right, click Features View.
- 5 In the IIS area, click URL Rewrite.
- 6 In the URL Rewrite window, select sage100erp_rwc.
- 7 On the Actions menu, click Edit.
- 8 In the Edit window, scroll to the Action area.
- **9** In the Rewrite URL field, change the port number to the value used for the Sage CRM instance that you've upgraded.

If you aren't sure of the port number, you can find it by executing the following command in SQL Server Manager on the server where the Sage CRM instance that's you've upgraded is installed:

select parm_name, parm_value from custom_sysparams where parm_name='CRMTomcatPort'

10 Restart IIS and the Tomcat service.

Installing Quick Order Entry

To use Quick Order Entry for entering orders and quotes within Sage CRM, you must install the Quick Order Entry Component. Quick Order Entry is available for use only with Sage 100 Advanced and Premium.

To install Quick Order Entry

- 1 In the folder containing the installation files used to install Sage CRM, click Autorun.exe.
- 2 On the Autorun screen, click Install Quick Order Entry Component, and follow the steps in the wizard to complete the installation.
- 3 If you have Sage CRM and Sage 100 installed on two different servers, or if they are on the same server and you are not using the default port number (10000), edit the web.xml file:
 - a On the server, browse to the following location within the Sage CRM installation folder:
 - ..\tomcat\webapps\richwebclient swt\WEB-INF
 - b Right-click the web.xml file and select Edit to edit the file in Notepad. You must run Notepad as the administrator. If you are not logged in as the administrator, open Notepad by right-clicking it on the Windows programs menu and selecting Run as administrator.
 - **c** Review the settings in the table below and update them as needed.

Setting	Note
pvx host name	The name of the server where Sage 100 is installed. The default value is localhost, which is applicable only if Sage 100 is installed on the same server as Sage CRM.
pvx host socket	The port number used by the Sage 100 server to listen for client connections. The default host socket value is 10000.

d Stop and then restart the Tomcat service on the server where Sage CRM is installed.

Chapter 6

Uninstalling and Reinstalling

Uninstalling Sage 100 requires uninstalling each component separately. The server and workstation uninstall routines will remove all program files and registry entries made by the Sage 100 installation routines. To remove Sage 100 data files, manually delete the MAS90 folder. All Sage 100 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 100.

- 1 If you are using Sage Fixed Assets, uninstall Sage Fixed Assets from the server and each workstation.
- 2 Uninstall Sage 100 from the Application Server and each workstation (see Uninstalling Sage 100 on this page).
- **3** Uninstall the Sage CRM software, if it is installed (see Uninstalling Sage CRM on page 46).
- 4 If you are using Web Services, uninstall it.
- 5 If you are using the Web Engine, uninstall it.
- 6 If you have no other Sage products installed, uninstall Sage Advisor. Do not uninstall Sage Advisor if you have other Sage products installed that use Sage Advisor to receive updates.

Uninstalling Sage 100

The uninstall program performs a complete deletion of all Sage 100 related files other than the data files; they must be manually removed by deleting the MAS90 folder.

If your system is integrated with Sage CRM, and you plan to continue using Sage CRM after uninstalling Sage 100, delete the linked Sage 100 companies before uninstalling. This will remove references to those companies from the Sage CRM database. For more information, see Delete a Company in the Help System.

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.

NOTE
If the Integration
Engine is running,
stop the engine
before uninstalling
Sage 100.

Uninstalling the Workstation Component

Note
When uninstalling
Sage 100
Premium from the
server, the SQL
database is not
removed. Use the
Microsoft
database tools to
remove the SQL
database.

Note
To remove
Sage 100 data
files after
uninstalling,
manually delete
the data folder
from the MAS90
folder.

3 Select the Sage 100 server component from the list. Click Uninstall to start the uninstall process. If you have more than one installation of Sage 100 on your server, each installation will be identified by its version or 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 100. Click Next.

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 100. 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.

Uninstalling the Workstation Component

The uninstall process for the Sage 100 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 100 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.

Uninstalling Sage CRM

4 Some registry entries may be needed by other installations of the Sage 100 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 100 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 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 Sage CRM

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

To uninstall Sage CRM

- 1 In the Windows Control Panel, double-click the Programs and Features icon.
- 2 Select Sage CRM 200, and then click Uninstall.
- 3 Follow the steps in the wizard to uninstall Sage CRM.
- **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 Sage CRM. Unresolved errors may prevent future installations of Sage CRM from functioning correctly.

Reinstalling Sage 100

If you previously installed the 2016 version of the software, you can install over the existing 2016 installation or install a new copy of the software. Installing over an existing 2016 version of the software streamlines the installation process.

Before reinstalling Sage 100, 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 version 2016 of the Sage Web Engine is installed, move the templates back to the IW folder.

To reinstall Sage 100

- 1 In the Sage 100 installation program Autorun screen, select a product.
- 2 On the product screen, select the option to install that product.
- 3 Select whether to add, reinstall, or uninstall all modules.
 - Select Add to 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.
 - Select Reinstall to reinstall all 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 Uninstall to completely uninstall Sage 100. To uninstall modules individually, use the System Configuration task on the Library Master Setup menu. For further information, see Uninstalling Modules on page 88.
- 4 Select Reinstall and click Next. If the Integration Engine is running, a message appears stating that you must stop the Integration Engine before continuing. Stop the Integration Engine using the following steps:
 - a Select Windows Start menu > Control Panel > 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.

Reinstalling Sage CRM

- **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 > Control Panel > Administrative Tools > Services.
 - **b** In the Services window, select the Sage 100 Integration Engine. Click the Start Service button.

Reinstalling Sage CRM

If you previously installed the Sage CRM software, after the License Agreement page, the Sage CRM 200 Setup page appears that provides you setup options to install, upgrade, change, or reinstall the Sage CRM software.

To reinstall Sage CRM

- 1 Select the Complete Reinstall installation option to reinstall over a Sage CRM installation, and then proceed to the next step.
- 2 If you have more than one Sage CRM 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 Sage CRM on page 33.

Changing an Existing Sage CRM Installation

The Sage CRM installation wizard allows you to change specific components in Sage CRM 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 Sage CRM

- **1** Select the Change existing install of CRM option.
- 2 If you have more than one Sage CRM 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 Sage CRM on page 33.

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.

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

Reinstalling the Workstation

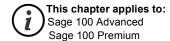
If you previously installed the 2016 version of the software, you can install over the existing 2016 installation or install a new copy of the software. Installing over an existing 2016 version of the software streamlines the installation process.

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



Application Server Overview

Sage 100 Advanced and Premium 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 100 Advanced or Premium, 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 100 server.

To configure the Application Server

- 1 On the server where Sage 100 is installed, from the Windows Start menu, run the Application Server Configuration program. This program should be a shortcut in the Sage program group.
- 2 In the Application Server Configuration window, click the Server tab.

The server selected in the Server 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 100 after performing workstation setup.

The Application Server continues to run and will service incoming requests from Sage 100 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 100 (all rights to all program and data folders in Sage 100).

Application Server Overview

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 100 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 50.
- **2** Exit the Application Server Configuration program after the Application Server has been configured.

Application Server Overview

- 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 100. This should include the Modify permission to the application folder, any folders where Sage 100 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 100 installation, if it is different than the default Sage 100 installation path. The Application Server Service installation wizard installs the service components necessary to run the Application Server as a service.
- 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 100 Advanced Service or Sage 100 Premium 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 100 Application Server. Provide the user logon and password information where specified.
- 7 Click Apply to save any changes.



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

∕¶ WARNING Do not run the Sage 100 Application Server service under the Local System account. The Local System account does not have access to certain network resources that Sage 100 requires.

8 On the General tab, click Start to begin the service. The Service Status message changes to Started, and users can now access Sage 100.

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 100. 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 100 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 100 Application Server to use SSL and then generate an SSL certificate. For more information, See Generating an SSL Certificate on page 54.

To configure the Sage 100 Application Server to use SSL

- 1 Make sure all users are out of Sage 100. 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 100.
- **2** Run the Application Server Configuration program.

Advanced Features

- 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 100 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 100, change the Sage 100 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.

Generating an SSL Certificate

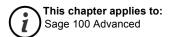
To use the SSL capabilities of the Application Server, create a .pem file that contains both the certificate and your private key in X509 format.

For information on generating an SSL certificate, use the Knowledgebase on the Sage Customer Portal at https://customers.sagenorthamerica.com to search for the following text: How to generate an SSL certificate.

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

Chapter 8

Configuring the Client/Server ODBC Driver



The Sage 100 Advanced server installs client/server ODBC driver components, which allow remote workstations to process worktables using server-side ODBC processing. Report rendering is completed using a locally cached copy of the form or report and a local SAP Crystal Reports print engine.

Server-Side Configuration

Set up the client/server ODBC driver to run as an application 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 pvxiosvr.exe file in the following location:
 - ..\MAS90\Home\pvxiosvr.exe
- To run the client/server ODBC driver as a service, select File > Run on the server and enter the server's local path to pvxiosvr.exe followed by the -i parameter. For example:
 - X:\Sage\Sage 100 Advanced\MAS90\Home\pvxiosvr.exe -i
- To uninstall previous versions of the client/server ODBC driver as a service, select File > Run on the server and enter the server's local path to pvxiosvr.exe followed by the -u parameter. For example:

X:\Sage\Sage 100 Advanced\MAS90\Home\pvxiosvr.exe -u

Configuring the Server

If you set up the client/server ODBC driver to run as a service, follow the procedure for your server's operating system to configure the server.

To configure a server running Windows Server 2012

- **1** From the Sage 100 Advanced server, right-click Server Manager on the system's Desktop.
- 2 In the Server Manager window, on the Tools menu, click Services. The services appear in the right pane of the window.
- 3 Double-click the Sage 100 Client Server ODCB Driver Service item.

- 4 In the Sage 100 Client Server ODCB Driver Service Properties window, at the Startup type field, select Automatic, and then click the Log On tab.
- **5** Click the General tab, and then click Apply.
- **6** Click Start and verify that the service starts successfully.
- 7 Click OK.

To configure a server running Windows Server 2008

- 1 From the Sage 100 Advanced server, right-click My Computer on the system's Desktop, and then select Manage.
- 2 In the left pane of the Server Manager window, select Configuration. 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 Sage 100 Client Server ODCB Driver Service item.
- 5 In the Sage 100 Client Server ODCB Driver Service Properties window, at the Startup type field, select Automatic, and then click the Log On tab.
- 6 Click the General tab, and then click Apply.
- 7 Click Start and verify that the service starts successfully.
- 8 Click OK.

To configure a server running Windows Server 2003

- 1 From the Sage 100 Advanced server, right-click My Computer on the system's Desktop, and then select Manage.
- 2 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 Sage 100 Client Server ODCB Driver Service item.
- 5 In the Sage 100 Client Server ODCB Driver Service Properties window, at the Startup type field, select Automatic, and then click the Log On tab.
- **6** Click the General tab, and then click Apply.
- 7 Click Start and verify that the service starts successfully.

8 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

- On the Sage 100 Advanced Desktop, select Library Master Setup menu > System Configuration. The System Configuration window appears.
- 2 Click the ODBC Driver 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 Perform one of the following:
 - If all users (both LAN and remote) will be using the client/server ODBC driver, select the Enable for All Users check box.
 - To enable the ODBC driver for an individual user, select Library Master Main menu > User Maintenance. On the Preferences tab, select the Enable C/S ODBC Driver check box.
- 6 Close and restart the workstation client.

Sharing Permissions

NOTE
If you encounter problems connecting to the client/server
ODBC service, see Configuring the Workstation for the ODBC Driver Service on page 91.

- 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 and double-click the Administrative Tools item.
 - **b** Double-click Data Sources (ODBC). The ODBC Data Source Administrator window appears.
 - **c** On the User DSN tab, double-click the SOTAMAS90 item. 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. 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 100 Security
Permissions on
page 93.

On the Sage 100 Advanced 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 100 Advanced 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 100 Advanced server share point.

Chapter 9

Installing SAP Crystal Reports Designer

SAP Crystal Reports Designer is a powerful, graphics-oriented reporting program that allows users to customize their graphical forms. SAP Crystal Reports Designer is fully integrated with Sage 100. Sage 100 provides a number of customizable SAP Crystal Reports forms as part of the standard installation.

The Workstation Setup program for Sage 100 installs the standard SAP Crystal Reports Run-Time Engine on each workstation, which allows all users to view and print reports created through SAP Crystal Reports; however, to modify the standard forms included with Sage 100, or to create your own reports, you must install the SAP Crystal Reports Designer.

SAP Crystal Reports Designer is licensed for use with the Sage 100 ODBC driver as well as the standard Microsoft SQL Server ODBC driver.

If you are using Sage 100 Premium, you will need read access to the applicable database. For information, See Modifying SAP Crystal Reports in Sage 100 Premium on page 59.

Installing SAP Crystal Reports Designer to the Workstation

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

To install SAP Crystal Reports Designer to the workstation

- 1 Click a product from the Sage 100 installation Autorun screen, and then on the product screen, click Productivity Applications.
- **2** On the Productivity Applications screen, click Install SAP Crystal Reports Designer.
- 3 The SAP Crystal Reports 2011 for Sage Setup page appears. Follow the steps in the installation wizard to install SAP Crystal Reports Designer. A progress meter appears while the installation is in progress.

Modifying SAP Crystal Reports in Sage 100 Premium

To modify reports in Sage 100 Premium using SAP 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 SAP 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 database 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) to open 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 SAP Crystal Reports Designer.

Converting SAP Crystal Reports from a Prior Version

When upgrading from a prior version of Sage 100, any custom SAP Crystal reports and forms must be converted to run in version 2016.

Converting Reports

The Sage 100 Crystal Report Conversion Wizard converts prior versions of Sage 100 Crystal Reports forms and reports to the latest data dictionary revisions and SAP Crystal Reports format.

To convert reports

- 1 In the MAS90\Home folder, locate and double-click mascrcw.exe. The Sage 100 Crystal Report Conversion Wizard appears. Click Next.
- 2 In the Select Reports page, verify the connection type.
- 3 In the User Name field, type the user logon and type the password in the Password field.

NOTE
For information on converting reports for that product, see Converting Reports for Sage 100 Premium on page 62.

Note
This wizard runs
the first time you
access a SAP
Crystal Report
created using a
level of Sage 100
prior to version
2016.

Converting SAP Crystal Reports from a Prior Version

- 4 In the Company 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.
- 5 In the Directory field, verify that the path is correct. Click Next.
- 6 In 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 100 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 Sage 100 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 Save to save the listing of the selected reports and the conversion status of each report. The listing can be printed to the default Windows printer.

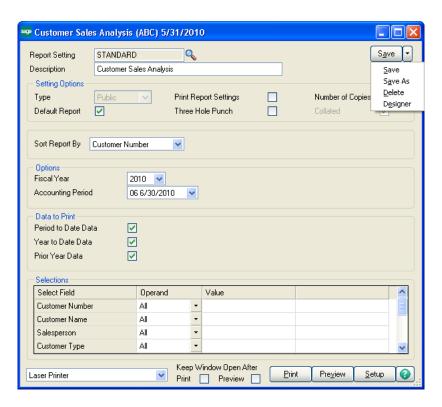
If a field name used within the report or form no longer exists in the data source, it will be noted on the listing and removed from the report or form. If the removed field is contained in a formula, a SAP Crystal Reports error in printing message will appear when printing.

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 100 Premium

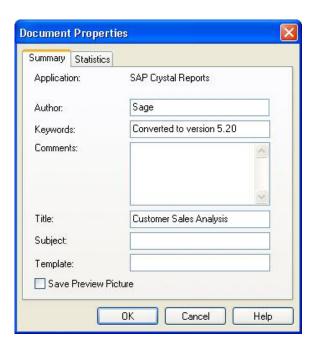
Follow the steps below to convert customized Crystal forms and reports from a prior version for Sage 100 Premium.

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 SAP Crystal Reports Designer window, on the File menu, select Summary Info.
- In the Document Properties window, in the Keywords field, verify the version that appears is the current version, and then click OK.

Converting SAP Crystal Reports from a Prior Version



- **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 SAP Crystal Reports Designer Help system. Complete these steps for all forms and reports that were customized in the previous version.

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 not
available in Sage
100 Premium.

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 100 version 4.20 or prior or from another business management system, perform the upgrade to version 2016 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 2016.

Installing Federal and State eFiling and Reporting to the Workstation

You must install Federal and State eFiling and Reporting separately on each Sage 100 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** Click a product from the Sage 100 installation Autorun screen, and then on the product screen, click Productivity Applications.
- **3** On the Productivity Applications screen, click Install Federal and State eFiling and Reporting.
 - To begin the installation process from a server installation of Sage 100 Standard, map a drive letter to a share point on the server 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.

Federal and State eFiling and Reporting Overview

- To begin the installation process from a server installation of Sage 100 Advanced or Premium, use Windows Explorer to attach to the server share point where Sage 100 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.
- **4** The installation wizard for Federal and State eFiling and Reporting appears. Proceed through the steps in the wizard to complete the installation.
- 5 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 100 Advanced and Premium, on the server where Sage 100 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):

...\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.

NOTE
For more
information about
setting
permissions, see
Sage 100 Security
Permissions on
page 93.

Chapter 11

Setting Up Credit Card Processing

Use the Credit Card Processing module powered by Sage Payment Solutions for validation and authorization of credit cards through modules such as Accounts Receivable, Sales Order, and eBusiness Manager, as well as eBusiness Web Services.

Sage Exchange

Credit Card Processing is installed with Sage 100 and requires the Accounts Receivable module to be installed as well as a valid merchant account with Sage Payment Solutions. For more information, see Set Up the Credit Card Processing Module in the Help system.

Sage Exchange requires the installation of two components, the Module SDK and the Sage Exchange Desktop application. The Module SDK is installed when installing Sage 100 to install the Sage Exchange certificates. The Sage Exchange Desktop is installed on workstations when tasks requiring communication with Sage Exchange are accessed.

Considerations for Installing Sage Exchange

- Workstations used to process credit card transactions or set up credit card processing require a working Internet connection.
- Add www.sageexchange.com to the list of trusted websites for any workstations that will be using the Sage Exchange Desktop to set up credit card related data.

Enable Credit Card Processing

To enable Credit Card Processing perform the following:

- **1** Enable credit card processing for the company.
 - a Select Library Master Main menu > Company Maintenance.
 - **b** Click the Credit Cards tab and select the Enable Credit Card Processing check box.
 - **c** If credit card records exist, enter the virtual terminal ID and merchant key.
 - d Click Accept.
- 2 Define credit card payment types.
 - a Select Accounts Receivable Setup menu > Payment Type Maintenance.
 - **b** Add a new payment type, selecting Credit Card in the Payment Method field.

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

Sage Exchange

Note
One-time use
credit cards can be
used during data
entry if needed.

- **c** Enter the virtual terminal ID and merchant key obtained from Sage Payment Solutions.
- d Click Accept.
- 3 Store the credit cards in the Sage Exchange Vault for future use.
 - a Select Accounts Receivable Main menu > Customer Maintenance.
 - **b** Select a customer and click the Additional tab.
 - **c** Click Credit Card and add the credit card record as required.
 - d Click Accept.

Performing System Startup

After installing Sage 100, you are ready to set up companies, security, and system preferences. One company must be created in Sage 100 before anyone can access the system.

During the installation, a program group is added to the Windows Start > All Programs menu. Click the Sage 100 Desktop icon in this program group to start the software.

Starting the Software

When first starting Sage 100, 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 70.

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 70)
- Set up system preferences (See Setting System Preferences on page 78)
- Change your administrator password (See Changing Your Administrator Password on page 81)
- Change your participation in the Sage Product Enhancement Program.

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.

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

Performing Administrative Tasks

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 69.

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 for your company.
- **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.
- 3 Click Copy.

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

Upgrading and Converting Data

NOTE
For Sage 100
Premium, only
data can be
copied.

- 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.
- Click Proceed.

Upgrading and Converting Data

Note
If credit card
payment types
exist for the source
company, the
Sage Exchange
Desktop will be
automatically
installed on the
workstation.

If you are upgrading data from a previous installation, refer to your *Customer Upgrade Guide* for upgrading instructions.

Setting Up Security

Sage 100 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 100 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 100. 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.

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.

NOTE
Library Master
tasks are not
company-specific.

Defining Roles

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.

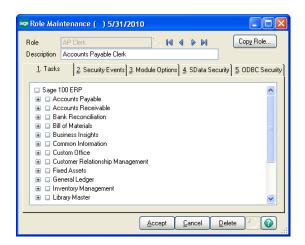
For modules other than Job Cost, Material Requirements Planning, Payroll, TimeCard, and Work Order, security can be further refined by assigning Create, Modify, Remove, or View permissions to maintenance tasks, or by setting Update or Print Only permissions to update tasks. For setup tasks, permissions 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.

After you have created a role, you can create a copy of it for use as a starting point when creating additional roles.

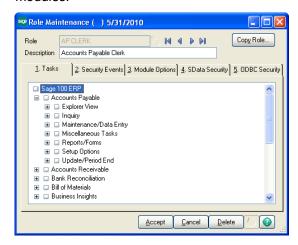
To define roles

- 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).

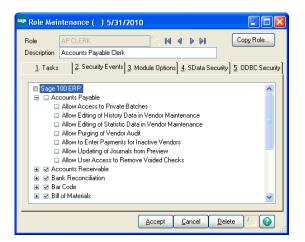


Note
To allow access to all modules and all security permissions, for the role, select the Sage 100 check box.

- **4** 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.



5 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.



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

NOTE
The ODBC feature is not available in Sage 100
Premium.

- 7 On the SData Security tab, select the check boxes next to the module and business tables that you want to assign to the role.
- 8 On the ODBC Security tab, select the check boxes next to the module, data tables, and fields that you want to assign to the role.
- 9 Click Accept and repeat this procedure for each role you want to define.

To Copy a Role from an Existing Role

- 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.
- Select the role that you will copy from.
- 3 Click Copy Role.
- 4 In the Copy Role window, enter the name and description of the new role to create.



- **5** Select the check boxes for copying menu tasks, security events, and module options permissions, then click Proceed.
- **6** Make necessary changes on the Tasks, Security Events, Module Options, SData Security, and ODBC Security tabs.
- 7 Click Accept.

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 74.

Creating Users and Assigning Roles

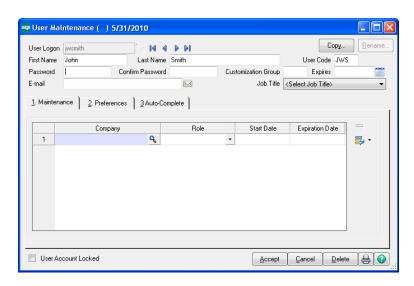
Defining a user includes setting up a logon and password, assigning access to specific companies, and assigning a role or multiple roles to the user.

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 100 logon for all users. For more information, See Requiring a Password on page 78.

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.
- 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 78.



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.



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.

- **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 78.
- **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.
- 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 76.

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.

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

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.

⚠ WARNING

When a user is working in Sage CRM through the Sage 100 Desktop, the system does not recognize the Sage CRM activity for the purpose of determining whether to automatically log off the user. Therefore, if this check box is selected, and users are working exclusively in Sage CRM accessed through the Desktop, they may be logged out of Sage 100 without warning. The Desktop will close, and any unsaved changes in Sage CRM would be lost.

Setting Additional User Preferences for Security

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.

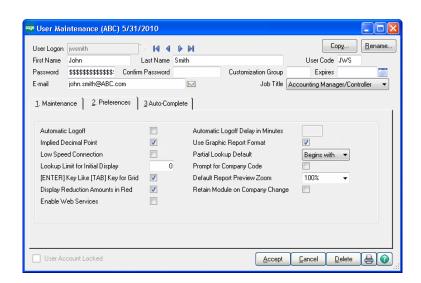
For security purposes, a workstation can automatically log off if it is left unattended for a specified period of time. This feature ensures that workstations are not accidently left with the software running, allowing unauthorized users access to sensitive information.

The Automatic Logoff feature is not activated if the Sage 100 Desktop is the active window on your workstation. In addition, the Sage 100 Desktop does not automatically shut down any activity in process, such as an update or report, that is currently processing, or if the Sage 100 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.



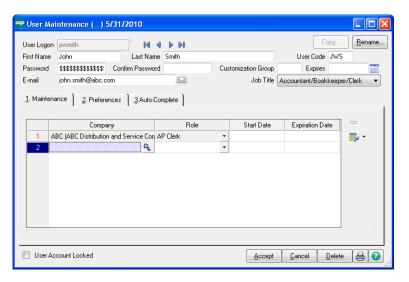
- **4** At the Automatic Logoff Delay in Minutes field, type the number of minutes that the system is to remain active before automatically logging off this workstation. The maximum amount of time that can be specified is 999 minutes.
- **5** Click Accept. After you save a user record, the dollar signs (\$) 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 100 logon. A unified logon allows Sage 100 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 100 logon is independent of the Windows logon, and will be required to enter the software.

When you set up a Sage 100 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.

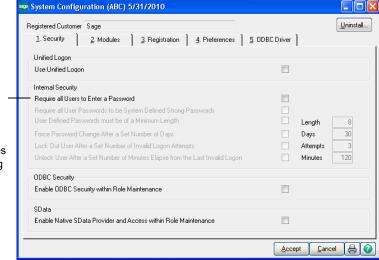
To require a unified logon

- 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 100 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).
- 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.
- 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.

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

Setting Up Security for Sage CRM

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

Logging On as the Administrator

After installing Sage CRM, 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 entire Sage CRM 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 Sage CRM *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 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 Sage CRM 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 Sage CRM *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 Sage CRM 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 Sage CRM and its users. When a client logs onto Sage CRM, 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, Sage CRM is aware of this and when the client attaches any documents to a form in Sage CRM, it sends it through the encrypted session.

Chapter 13

System Administrator Tasks

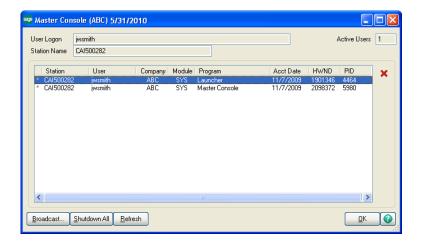
This chapter provides procedures for maintaining certain tasks that are performed by a system administrator.

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.



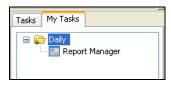
Creating Public Tasks

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.

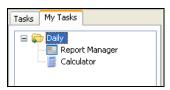
Even though public task folders are accessible to all users, individual menu tasks within a task folder are still subject to the standard menu security system (if one has been set up). All company, module, menu, and task restrictions assigned to users override all task folder assignments.

To create a public task folder and public tasks

- 1 On the Sage 100 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
To create public tasks, the role assigned to your user code must have the Allow public tasks for editing security event turned on.

Modifying Company Preferences

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 company data and 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 To change the location of the company data and 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.
- 7 Click Accept.

Uninstalling Modules

You can remove all 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).

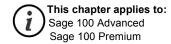
Removing the Visual Integrator (VI) module will remove the module from the Modules menu; however, the VI folder and two associated files, VI0PER and VI0XRF, will remain in the file structure. The VI0XRF file contains the definitions for the default VI perform logic and is a cross-referenced file that 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 explains some of the advanced features of Sage 100 Advanced and Premium, including Remote Access using Windows Routing and Remote Access Service (RRAS), 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 100 user.

Remote Access

Sage 100 Advanced and Premium 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.

Routing and Remote Access Service (RRAS)

Performance through RRAS 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 a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

The server must be configured with RRAS provided by Microsoft on the appropriate Windows Server DVD. For more information on installing and configuring RRAS on your server system, consult a Microsoft Windows Server engineer or consultant.

After RRAS is configured, remote users should be able to dial into the network and log on. Before attempting to start Sage 100, perform the following tasks:

- Verify that you can access Windows Explorer and see all appropriate network resources.
- Verify that firewalls between the remote workstation and the Sage 100 server are configured to allow traffic between the server and workstation using the specified TCP/IP port.
- · Verify that the IP addresses are unique.
- Verify that you can ping to the server on which Sage 100 is installed.

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

Remote Access

If these tasks are successful, Sage 100 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 100 does not require a logical drive connection; however, if you intend to use SAP Crystal Reports or other third-party software that accesses Sage 100 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)

Sage 100 runs on any TCP/IP-based WAN and has been tested using ISDN, Frame Relays, and T1 connections. The configuration and setup of Sage 100 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 100 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 RRAS/WAN

When running Sage 100 over a WAN or RRAS, 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.

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.

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.

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

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 100 Advanced 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 100 Desktop is started, Sage 100 checks to see whether any processes exist for that computer. If there are orphaned processes or if a Sage 100 Desktop is already in use by this workstation, a message 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 100 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.

Increasing Default Limits Set by Windows Server

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.

Ending Processes

If the message dialog box stating that a Sage 100 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 92. 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 100 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 100 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 Knowledgebase on the Sage Customer Portal at https://customers.sagenorthamerica.com to search for the following text: Cannot create a new session with a large number of users.

Appendix A

Sage 100 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 100. 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 100 Server Minimum Permission Settings

The following information provides minimum permission settings for the local user account running on the Sage 100 server and for any network user account accessing the server from another computer.

Permissions for the Local User Running the Sage 100 Server

The following table provides the minimum permission settings for the local user account running the Sage 100 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 100 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
Office Template Manager	Change	Full Control	\MAS90
Modifying Forms and Reports from within Modules	Change	Full Control	\MAS90

Sage 100 Server Minimum Permission Settings

Task	Minimum Share Permission	Minimum NTFS Permission	Folder
Library Master Utilities	Change (for the Sage 100 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 100 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 100 Server

The following information provides the minimum permission settings for user accounts performing Sage 100 tasks on the Sage 100 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
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

Sage 100 Server Minimum Permission Settings

Task	Minimum Share Setting	Minimum NTFS Setting	File or Folder
Modifying Forms and Reports from within Modules	Change	Write	\MAS90\MAS_XXX\Reports\MAS90\Reports\###-###\MAS90\###-XXX\MAS90\MAS_System\Reports
Modules			(where XXX is the company code)
Federal and State eFiling and	Change	Write	\MAS90\MAS_XXX \APXXX\eFilingReporting
Reporting			\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
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	

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.

Sage 100 Workstation Permission Settings

The following information provides minimum permission settings that must be set for Sage 100 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 100 Advanced Workstations

For Sage 100 Advanced, reports are cached in the following client workstation hidden folder:

C:\ProgramData\Sage Software\Cache\MAS 200\Reports

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

NTFS Permissions for Sage 100 Advanced and Premium Workstations

The following NTFS permission settings must be set at the Sage 100 Advanced and Premium 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 100 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 100 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.

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 SERVER
Pinging SERVER [128.0.153.253] with 32 bytes of data:
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.

WARNING
If an Internet
connection is
used in your
Sage 100
infrastructure,
make sure
adequate
precautions are
taken to secure
the data traveling

through those connections.

Testing the Configuration for Sage 100 Advanced and Premium

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 100 Advanced and Premium

After installing Sage 100 Advanced or Premium, test the TCP/IP configuration.

To test the configuration

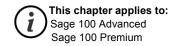
- 1 At the server, use the built-in NETSTAT utility or equivalent software to verify that the Application Server is running on its configured port. The default port is 10000.
- 2 From each workstation, ping the Application Server on its configured port. The TCP/IP built-in ping.exe utility does not provide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

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

page 91.

Appendix C

Running in a Terminal Services or Citrix Environment



The Sage 100 server supports running through a Windows Server with Terminal Services enabled.

The Sage 100 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 100 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 100.

Installing the Sage 100 Server

Install Sage 100 as you would any other installation. This server should not have Terminal Services running on it. Because the Sage 100 server is doing all the processing for each of the clients attaching to the server, having the additional burden of running Terminal Services will significantly slow down the server. The Sage 100 Server can be a Windows server that meets the minimum system requirements for Sage 100.

Users can connect to the Sage 100 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 100 while remote users can run Sage 100 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.

Run the Sage 100 installation program from the Terminal Services Server. You can also run Workstation Setup from the Sage 100 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 100 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 100 client folder on the Terminal Services Server.

To install the workstation, see Workstation Setup on page 17 for Sage 100 Advanced or page 28 for Sage 100 Premium.

Terminal Services Considerations

Sage 100 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 100 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 100 server's MAS90\Home\Lib\Keys folder to the MAS90\Home\Lib\Keys folder of the Sage 100 client on the Terminal Server. If a message appears indicating that the copy was not successful, you must manually copy the file.

To use Sage 100 under Terminal Services, 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 100 Advanced and Premium Workstations on page 98.

For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Appendix D

Running Sage Intelligence Reporting outside of Sage 100

Sage Intelligence Reporting is accessible from the Sage 100 Modules Menu toolbar and Tasks tab; however, you can also run the program outside of Sage 100. To do this, create shortcuts for the different Sage Intelligence Reporting menu items.

To create Sage Intelligence Reporting desktop shortcuts

- 1 Right-click the Windows Desktop.
- 2 Point to New and select Shortcut to open the Create Shortcut window.
- For the item location, enter the path to the BISignOn.exe file followed by the parameter for the specific Sage Intelligence Reporting menu item.

The table below lists the parameters that you must append to the item location to create each shortcut.

Menu Item	Shortcut Name
Report Manager	RMNG
Report Viewer	VWR
Connector	ADMIN
License Manager	LICMAN
Security Manager	SEC

The BISignOn.exe file is located in the Intelligence folder within the Sage 100 installation folder.

If you installed Sage Intelligence Reporting using the Sage 100 Standard Workstation Setup program, the location will always be:

C:\Program Files(x86)\Sage\Intelligence\BISignOn.exe

Otherwise, the location will vary depending on where you installed Sage 100, and the BISignOn.exe file will always be located in the ..\MAS90\Home\Intelligence folder.

You can click the Browse button to locate the file, and then type the parameter.

Type the location of the item:

"C:\Sage\Sage 100 Standard ERP 2014\MAS90\Home\Intelligence\BISignOn.exe" RMNG

Browse...

- 4 Click Next.
- **5** Type the name of the menu item, and then click Finish.

After creating the shortcuts, change the icons so that they match the ones used in the product.

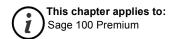
To change the icon for a shortcut

- 1 Right-click the shortcut and select Properties.
- 2 Click the Shortcut tab.
- 3 Click Change Icon.
- 4 Click Browse, and browse to the ..\Intelligence\BIRES\Icons folder.
- **5** Select the appropriate icon for the menu item using the table below.

Menu Item	Icon Name
Report Manager	ReportManager.ico
Report Viewer	ReportViewer.ico
Connector	Administrator
License Manager	LicenseManager.ico
Security Manager	SecurityManager.ico

Appendix E

Sage Configured Installation for SQL Server



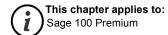
The Microsoft SQL Server Runtime Edition 2012 installation program purchased through Sage has a Sage Configured Option for installing SQL Server. If you select this option, parameter settings are defined as shown in the following table.

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.
SQLSYSADMINACC OUNTS	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.

Appendix F

Default Database Properties



Certain properties are set by default for the company and MAS_SYSTEM SQL Server databases. Changing the default settings may cause the product to operate incorrectly. The following is a list of properties and their default settings that should not be changed.

Property	Default Setting
General	
Collation	SQL_Latin1_General_CP1_CI_AS
Options	
ANSI NULL Default	False
ANSI NULLS Enabled	False
ANSI Padding Enabled	False
ANSI Warnings Enabled	False
Concatenate Null Yields Null	False
Parameterization	Forced
Database Read-Only	False

Index

A	F
accounting date restricting to current and one future period 80 setting from system date 80	Federal and State eFiling and Reporting, installing 64
setting prompt for 80	G
activating a company 68 adding public tasks 86	graphic conventions 1
administrative tasks, performing 68	3
Application Server	Н
configuring 50, 51, 55	
overview 50	hanging process
turning off 51, 58	ending processes 92 overview 91
	how to use this manual 1
C	non to doo and mandar i
client workstation	1
installing for Sage 100 Standard 9	
reinstalling 49	installation requirements
company	Sage 100 Standard 5 installation, overview 3
activating 68	installing
coping 69 creating 68	client workstation for Sage 100 Standard 9
modifying preferences 87	Federal and State eFiling and Reporting 64
converting	Sage 100 Standard 6
data 70	Sage CRM 34
SAP Crystal Reports from a prior version 60	Sage Intelligence Reporting for Sage 100
copy a company 69	Standard 10 SAP Crystal Reports Designer 59
creating	intruder detection, enabling 79
companies 68 public tasks 86	mader detection, endoming re
user code 74	1
Credit Card Processing, setting up 66	L
customizing My Tasks 86	lockout duration, specifying 79
D	M
data	migrating, data 70
converting 70	modifying company preferences 87
migrating 70	modules, uninstalling 88
date	My Tasks, creating public tasks 86
prompt for 80	_
restricting accounting date 80	0
setting accounting date from system 80	overview
defining System Security 70	Sage Exchange 66
	SAP Crystal Reports Designer 59
E	
eFiling and Reporting, installing 64	P
enabling intruder detection 79	password, requiring 78

Index	
ping	security
command 99	See System Security
server 99	security permissions 93
workstation 99	session tracking 53
post-installation tasks	setting
Sage 100 Standard 7	accounting date from system date 80
Sage CRM 35	prompt for accounting date 80
pre-installation tasks	SQL Server
Sage CRM 33	overview 22
productivity applications 3	Sage Configured installation 23
prompt for accounting date 80	Sage Configured Installation Type 105
public tasks, creating 86	SSL
	encryption 53
R	generating a certificate 54
	system security
reinstalling	administrative tasks 68
client workstation 49	creating user code 74
Sage CRM 48	intruder detection, enabling 79
Remote Access	lockout duration, specifying 79
overview 89	overview 70
Remote Access Server (RAS)	setting permissions 93
workstation requirements 89	
requiring a password 78	Т
restricting accounting date 80	•
Routing and Remote Access Service (RRAS)	Task Menu Maintenance 86
performance 89	tasks, creating public 86
RRAS, performance 89	TCP/IP
	configuration 99
S	ping 99 protocol 99
Sage 100 Standard	protocor 99
installation requirements 5	
installing 6	U
installing workstation 9	uninstalling
post-installation tasks 7	modules 88
Sage CRM	overview 44
installing 34	Sage CRM Server 46
post-installation tasks 35	workstation 45
pre-installation tasks 33	upgrading, Sage CRM 36
reinstalling 48	user code
upgrading 36	creating 74
Sage CRM Server	enabling intruder detection 79
uninstalling 46	Ç
Sage Exchange, overview 66	147
Sage Intelligence Reporting	W
installing for Sage 100 Standard 10	Wide Area Networks (WAN)
SAP Crystal Reports Designer	configuration 90
installing 59	overview 90
overview 59	workstation
SAP Crystal Reports, converting from a prior ver-	installing for Sage 100 Standard 9
sion 60	reinstalling 49
	Wide Area Networks 90