



Sage 500 ERP 2016 Installation and System Configuration Guide

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Getting Started with Installation

1

Sage, a recognized leader in accounting software for mid-sized businesses, welcomes you to Sage 500 ERP business software that provides superior power, flexibility, and integration with your existing line of business applications.

This chapter provides information you need to start the installation and shows how to start the installation programs.

In this chapter

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Information You Need

Introduction

This *Installation and System Configuration* guide describes the procedures for installing and configuring the system. It also includes procedures for the System Manager module, which is part of the installation and configuration process.

Read this guide and additional sources of information before proceeding with the installation.

Tip: If you are viewing this document online in Adobe Acrobat, click any of the blue text to jump to the indicated heading or Web site.

Installing the Credit Card Module

Setting Up Credit Card Processing

To set up the Credit Card module:

- 1 Obtain a merchant ID and merchant key from Sage Payment Services.
- 2 Activate the credit card module in Maintain Companies.
- 3 Back up your database master key. **THIS IS VERY IMPORTANT.** Refer to Protecting Merchant Information in the Help system for the Credit Card module, Getting Started with Credit Cards/Setup Tasks.
- 4 Set up credit card processor accounts, deposit groups, and tender types.

For more information, refer to Getting Started with Credit Card and Flowcharts for Credit Card help in the Help system.

System Requirements

Compatibility and Resource Guide For information about system requirements, supported platforms, and recommended configurations, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

Additional Sources of Information

Introduction This section lists other documentation you should read.

Additional installation guides The following components have separate installation guides:

Product	Installation Guide
Business Insights Dashboard	<i>Internet Applications</i> guide

Software Development Kit (SDK) documentation If you plan to customize the software, read the documentation provided with the Sage 500 ERP SDK to determine the extent of the customization and to plan how the customizations will be added. The SDK release notes provide important information about new releases.

Customer Support

Introduction Customer support is available on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

Telephone Contact Support at the following telephone numbers:

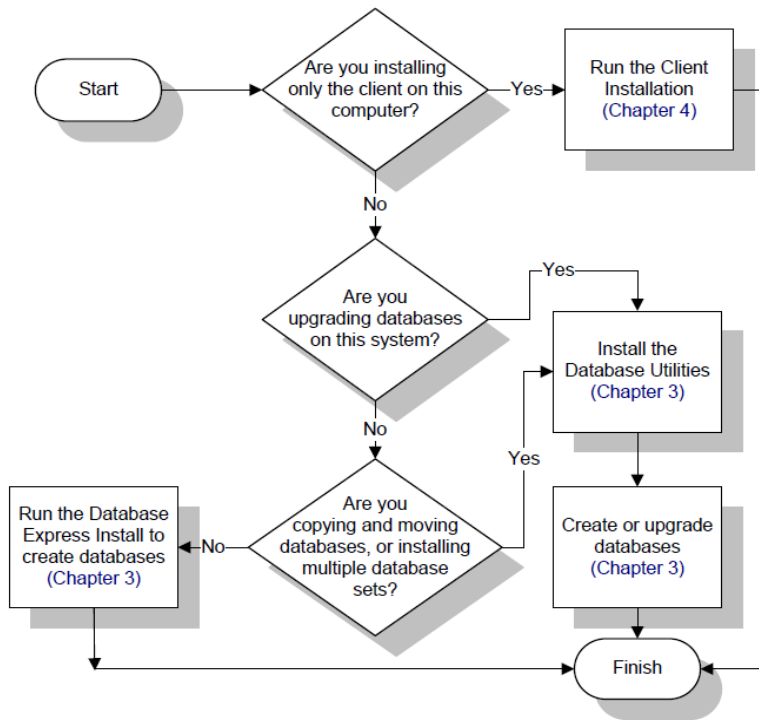
Telephone	Fax
(800) 944-5487	(800) 864-7698

Choosing an Installation Method

Overview

Introduction

There are several methods for installing the software. Use the flowchart to select the installation program you need to run. For installation instructions, see *Starting the Installation* on page 5.



Starting the Installation

Overview

Introduction This section describes how to start the installation and use the window that launches the installation software.

Prerequisites for Installation

Internet Explorer requirement If you are using the Business Insights Dashboard, you need Microsoft Internet Explorer. For more information, refer to the *Business Insights Dashboard* guides. If you do not have a Web browser on your system, you can install the copy of Microsoft Internet Explorer provided by Sage.

Adobe Flash Adobe Flash must be installed on the client workstation to view or edit Visual Process Flows. This component is not installed by the Sage 500 ERP installation. This component can be downloaded from Adobe's website.

Opening the Installation Screen

Procedure To start the installation, download the installation executable file from the location specified in your e-mail from Sage. Double-click the executable file to start the installation program.

Using the Installation window The Installation window appears. Click the button on the left to select the installation program or document to use.

Viewing guides A number of documents are provided in PDF.

Documentation about software installations

This *Installation and System Configuration* guide describes how to use the Express Installation of databases and all components and the standard client and database utilities installation. For instructions on installing other Sage 500 ERP software, refer to the following guides:

- Web-Based Applications: Refer to the *Business Insights Dashboard* guide.
- Schema Browser: Refer to the *Development Utilities* guide of the SDK.

Third-Party Utilities and Program Updates

Introduction

The installation window also allows you to install required service packs and product updates.

The following third-party utilities and program updates are available on the Sage website. Refer to the software manufacturer if you encounter any problems applying these updates.

Microsoft Data Access Components 2.8

Microsoft Data Access Components (MDAC) 2.8 is automatically installed during the Sage 500 ERP client installation. The MDAC installation contains the core components (ADO, OLE DB, and ODBC) and additional OLE DB providers and ODBC drivers for various data stores. Use these components to integrate information from a variety of both relational (SQL) and nonrelational sources.

Scripting

The scripting components support the Customizer module. The Sage 500 ERP client installation automatically installs the portions of the scripting components required for Customizer.

Microsoft Service Packs

Use the links on the Installation screen to go to the appropriate pages of the Microsoft Web site where you can download or order the service packs.

Overview of Installation

2

This chapter provides an overview of the installation process. This section will give you an understanding of how the software works so that you can plan your installation.

In this chapter

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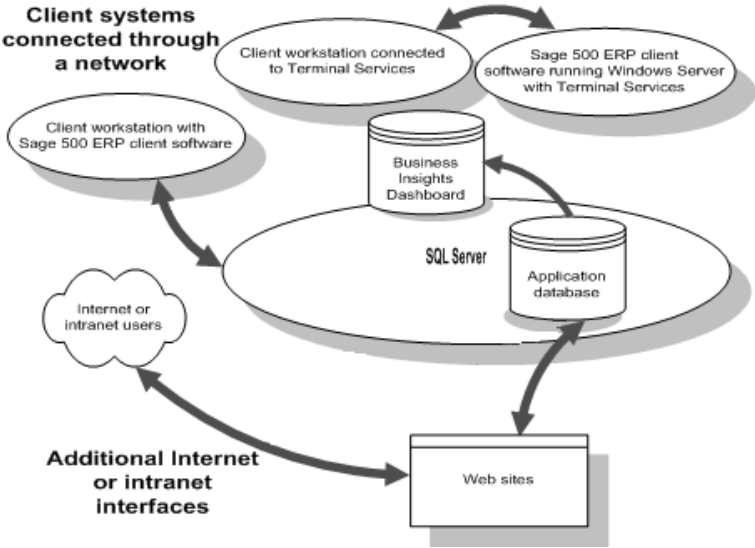
Structure

Overview

Introduction To help you in planning and preparing to install the software, this section explains the architecture used by the system and provides an overview of the processes for installing or upgrading a new system.

Sage 500 ERP Architecture

Description The software is a two-tier client/server application. The following figure shows an overview of the system, which is explained in the following sections.



Databases

Types of databases	<p>The core of the system is the Application database containing the information. This database contains the following types of information.</p> <ul style="list-style-type: none"> ▶ System information shared by all modules (for example, user identification, security groups, and company information) and seed data used to activate modules. ▶ Enterprise resource planning (ERP) information shared by companies. More than one company can use the same database.
Transaction logs	<p>As with all SQL Server databases, the databases have transaction logs.</p>
Database maintenance	<p>Treat all of the databases as one unit when performing maintenance. For example, all databases should be backed up at the same time.</p>
SQL Server databases	<p>Along with the Sage 500 ERP databases, you should also be aware of SQL Server databases that affect the access performance and security of Sage 500 ERP data:</p> <ul style="list-style-type: none"> • tempdb: The tempdb database is used for temporary data storage while data is being written to and from databases. For best performance, set the database sizes as recommended in the <i>Sage 500 ERP Compatibility and Resource Guide</i> located in the Support page on the Sage Customer Portal at: https://customers.sagenorthamerica.com • master: The master database contains all system-level information and identifies the presence of all databases on the SQL Server, including the Sage 500 ERP databases. <p>Warning: If the master database becomes corrupted, you can lose your data. Back up the master database and do not modify it manually.</p>

Client Systems

Description	The client systems serve as the front end to the Sage 500 ERP data. The client systems are connected to the server through a TCP/IP-compatible network, which can include local-area networks and remote connections.
Parts of client systems	To use the data, the systems need the client software. The client software consists of the following: <ul style="list-style-type: none">• Applications (including COM objects and system DLLs) for accessing data• Crystal Reports runtime for generating reports• Help system
Methods of installing client software	You can install the client software in the following ways: <ul style="list-style-type: none">• Install the client software directly on the system.• Access the client software through a system with Terminal Services.

Additional Internet and Intranet Interfaces

Description	The Internet Applications allow users to access data through the Internet or an intranet by using a Web browser. For more information, refer to the <i>Business Insights Dashboard</i> guides.
--------------------	--

Security

Description	Several security measures are used to protect your crucial and confidential business data at the server and client.
Security groups	Security groups allow you to grant access to modules and tasks. For example, you can create a security group to grant invoice entry clerks read/write access to invoice entry windows and no access to any of the other features. You then grant access to individual users by assigning them to security groups.
Logon requirements	<p>Users must log on to use the software. You can use either SQL Server authentication where users need to enter their SQL Server user name and password each time they start the software, or you can use Windows authentication that logs users on using their Windows user name and password.</p> <p>To enable a user to log on to the software using Windows authentication, set up the user in a Windows domain. When you add the user, the system records the domain and logon name. A Windows authenticated logon is also created in the SQL Server.</p> <p>After users have logged on for the first time with Windows authentication, they can optionally start the software without seeing the logon window.</p>
Application role	You can set the software to use an application role to grant access to databases only when the user is logged into the software. For more information, see Chapter 5, <i>Registration and Security</i> .

**DI package user
and administrator
roles**

You can set roles for users who will be creating, maintaining, or running import jobs within the Data Import Manager module. These roles are established in the Maintain Users window by selecting the DI Package User or DI Package Administrator check boxes for users.

Note: The user must also belong to a Sage 500 ERP security group that has access to all Data Import Manager tasks.

For more information about installing and configuring the Data Import Manager module, see Appendix B, *Data Import Manager Installation & Configuration*.

Installation

Overview

Introduction This section provides overviews of the installation and upgrade processes. Full procedures are described in the other chapters of this guide.

Installation Process

General steps This section provides an overview of the steps to perform when you install the software for the first time or install it on a new server. Installation includes the following general steps, which are described in detail in this guide:

Note: For more information about system requirements, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at:
<https://customers.sagenorthamerica.com>

For more information about installing and configuring the Data Import Manager module, see Appendix B, *Data Import Manager Installation & Configuration*.

- 1 Complete tasks for planning and assessing system requirements. Make any upgrades that are necessary.
- 2 Create databases by performing one of the following:
 - ▶ Run the Database Express Installation to create databases without installing software. For more information, see *Using the Database Express Installation* on page 23.

- ▶ Install the Database Utilities and run the Database Creation Utility. For more information, see Chapter 3, *Database Creation and Upgrade*.

To determine which installation method to use, see *Choosing an Installation Method* on page 4.

- 3 Use the Client Installation wizard to install the client software.
- 4 Run the Client Configuration Utility to set the database and server to access from the client software.
- 5 Run System Manager to register the software and grant access rights to your users.

Upgrade Process

General steps

If you are upgrading an existing system, follow a different set of steps from a fresh installation. These are described in detail in this guide. The following lists the general steps for performing an upgrade:

- 1 Prepare for the upgrade by performing the following:
 - ▶ Review the system requirements as shown in the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>
 - ▶ Review the new software features described in the Release Notes. The new features may affect how you change the configuration and implementation of the software.
 - ▶ Back up your databases.
 - ▶ Upgrade SQL Server, if necessary.

Note: If you plan to use the Data Import Manager module to import data from source tables into the destination (permanent) tables, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

For more information about installing and configuring the Data Import Manager module, see Appendix B, *Data Import Manager Installation & Configuration*.

- 2** Run the Database Utilities Installation to install components on your local drive for updating databases. When the Server Install is finished, you are prompted to run the Database Creation Utility. Click No.
- 3** Run the Database Upgrade Utility to upgrade the database to the new version. If your database schema has been customized, use the Database Upgrade Utility to run a comparison between your database and a standard database or another database. The utility can also generate custom database update scripts that can be used to retain your schema modifications.
- 4** Upgrade the client software by clicking Client Install. You can install the client software on each system or from a network sharepoint.
- 5** Run the Client Configuration Utility to set the database and server to access from the client software. To access this utility, select Windows Start menu > Sage > Sage 500 ERP 2016 > Utilities > Client Configuration Utility.
- 6** Run System Manager to register the software and grant access rights to your users.

Registration Process

Introduction

When you install a Sage 500 ERP database, the database can be used for evaluation purposes for 45 days. To use the database, it must be registered. You can register the database at any time. The registration process registers all the modules you purchased.

This section provides an overview of the registration process. For instructions on performing registration, see Chapter 5, *Registration and Security*.

About the registration system

When you purchase the software, Sage records information about the license you purchased in a central registration database. You submit a registration request to Sage to retrieve an encoded string that gives you access to the software according to your license.

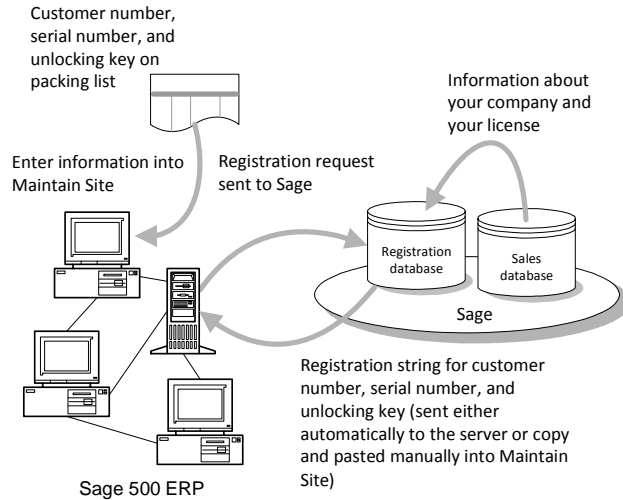
With your package, you receive a packing list with the following information:

- Customer number
- System Manager serial number
- System Manager unlocking key

If you are upgrading, use the customer number, System Manager serial number, and System Manager unlocking key from your current version of the software. If you are unable to get this information, contact Customer Support.

You enter this information into the software, which generates a registration request string based on your system and the software you have installed. The registration request string is sent back to Sage, either automatically or manually at the registration site. Sage returns a registration string that you enter into the software. This string gives you access to the modules and the number of users, companies, and other settings defined in your license.

The following figure shows the registration process:



Methods of registration

The following methods of registration are available:

Method	Description	When to use
Automatic	The system sends registration information to Sage and automatically updates the system with the information.	If you want registration updates to be sent automatically.
Manual	Visit the registration Web site. Copy the registration request message generated in Maintain Site and paste the registration message generated on the page.	If you do not have continuous Internet access and SQL Server scheduling. If automatic registration does not work because of a firewall that blocks messages. If you prefer full control over the registration process.

Registration renewal

You need to register the software again when it is time to renew your maintenance and support agreement. If you decide not to renew the maintenance and support agreement, you must obtain a new registration string, which allows you to continue using the software for an unlimited time, but does not allow you to install patches and updates.

Registration and hardware changes

The registration processes uses the SQL Server name, database name, the MAC address, customer number, System Manager serial number, and System Manager unlocking key to uniquely identify your installation. If any of this information is altered, the registration message becomes invalid and the system becomes unregistered.

During the logon, you will receive notification about your system's registration status and the number of days left in the registration grace period. If you do not register the system within the grace period, it will become unusable. (For an explanation about test systems, see *Number of Systems per License* on page 20.) Contact Sage Customer Support to reinstate your production license.

Registration and fail-over clustering

If you configure your SQL Server for fail-over clustering, install the Sage 500 ERP Database Utilities on each fail-over SQL Server. This enables a production system to stay registered when a node is down because of failure or maintenance.

Registration Grace Period

Introduction

You have 45 days to register the software after the Sage 500 ERP databases have been installed. The 45-day grace period also applies after the registration expires. You need to renew registration within 45 days of the expiration of the maintenance and support agreement to continue using the software, whether or not you plan to continue the agreement.

Handling of unregistered modules

If Sage 500 ERP is not registered or if the registration has expired, a message window appears when you log on.

Click OK to continue to open the software.

If this message window appears even though the registration was renewed, Sage 500 ERP may have been unable to access the Sage registration system through the Internet. Perform a manual registration or register from another client system. For more information, see *Registration Procedure* on page 91.

Access during the grace period

During the grace period, the following access is available to you:

- All modules available for activation
- Data Migrator and DataPorter for demo data companies only
- Five concurrent users

After the grace period

If you have not registered the modules within the 45-day grace period, you cannot access modules or the data in them until you register them. After that, you can access only the modules you have registered, and you will lose any data entered in modules you did not register; therefore, do not activate modules you do not intend to register.

Number of Systems per License

Introduction

The number of systems you can have depends on your license type. To register a system, enter the customer number, System Manager serial number, and System Manager unlocking key, or the indicated word in the Maintain Site window. For instructions, see *Registration Procedure* on page 91.

You are automatically assigned a total of two systems:

- One production system
- One test system

Both systems have the same number of users, companies, and other settings granted by the license.

If you have a developer support license, you are assigned a development system in addition to the two end-user systems.

Production licenses

Use your production license for your actual production system accounting data. To register this production system, enter the customer number, System Manager serial number, and System Manager unlocking key from the packing list.

Test licenses

Use a test license for testing or training. It cannot be used for a production system. A test system by default is identical to the production license, except that a watermark appears on checks.

Selecting a license type

To select a license type for an installation, use Maintain Site in System Manager. For more information, see *Registration Procedure* on page 91.

Additional Software to Install

Introduction

With Sage 500 ERP, you may have purchased other applications provided on the Sage 500 installation website. Instructions for installing these applications are in the following locations:

- For a new installation of the Crystal Reports Designer, see *Installing Crystal Reports Designer* on page 85.
- To install the Business Insights Dashboard module, refer to the *Business Insights Dashboard* guide.
- Abra Link is distributed by Sage Abra on their product CD-ROM. Fixed Assets Link is distributed by Sage FAS on their product CD-ROM. These integration links will import data directly into General Ledger Journal Transactions.
- The FAS Asset Accounting Interface requires the installation of the Fixed Assets SDK. You must have the Sage FAS windows client installed on your PC prior to installing the Fixed Assets SDK. The Sage FAS windows client is located on the Sage 500 ERP installation website. After installation, activate the Fixed Assets Link in Maintain Companies to enable the integration.

Database Creation and Upgrade

3

This chapter shows you how to create new databases and upgrade existing ones. You can create databases in the following ways:

- Run the Database Express Install to create a complete database set without installing the Database Utilities.
- Install the Database Utilities to install or upgrade databases according to the settings you choose.

To help you choose which method to use, see *Choosing an Installation Method* on page 4.

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Using the Database Express Installation

Overview

Introduction

Use the Database Express Installation to create a complete set of databases, including application databases, without installing additional software on your server.

Run the Database Express Installation on the system where you plan to create the databases. To create databases on a remote SQL Server, install the Database Utilities.

Prior to beginning the installation, verify the version and edition of SQL Server you have installed. If you are currently running version 2008 R2 SP3 or 2012, see *Upgrading from SQL Server version 2008 R2 SP3 or 2012* on page 240.

Running the Database Express Installation

Procedure

To run the Database Express Installation:

- 1 Start the Database Express Installation by performing the following:
 - ▶ From the installation window, click New Databases.
- 2 Use the Database Express Setup Wizard to install the databases on your computer.

Installing the Database Utilities

Overview

Introduction

To create or update databases, you need to install the Database Utilities either directly onto the server or on a client workstation.

For information about requirements for installing the software, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

Also, read the information in this section to verify the system meets the necessary requirements.

Upgrade from Prior Versions

Consider the following when upgrading to the current version.

- If you are upgrading from version 7.3 through 7.7, you must first upgrade to version 7.4 and then upgrade to version 2016.
- If you are upgrading from version 7.4, 7.5, or 2014, you can upgrade directly to version 2016.
- Only three prior versions can be directly upgraded to the current version.

Where to install the Database Utilities

Note the following when deciding where to install the Database Utilities and databases:

- The server where you install the databases can be located anywhere on the network, as long as the SQL Server is visible using SQL Server Enterprise Manager or SQL Server Management Studio.

- If you configure your SQL server for fail-over clustering, install the Sage 500 ERP Database Utilities on each fail-over SQL server. This enables a production system to stay registered even when a node is down because of failure or maintenance.

Preliminary Steps

Procedure

This section provides information you need before starting the database installation. This includes preliminary steps and a flow chart to follow for installing new or updating existing databases.

Before you create or update databases, perform the following:

- 1 Log on to the server as local Administrator.
- 2 Start the SQL Server service.
- 3 Uninstall previous versions of the Database Utilities, service packs, and updates before installing the new version of the Database Utilities.

If you need to move or copy databases as part of your database creation or upgrade procedures, see Chapter 6, *Managing and Protecting Databases* for instructions.

Distributed Management Objects requirement

The system where you install the Database Utilities needs to have Distributed Management Objects (DMO). To install DMO, install the client software provided with SQL Server. See the SQL Server documentation for instructions.

Use of Windows Installer

All installation programs use Microsoft Windows Installer. If you already have Windows Installer, the version of Windows Installer that is already on your system is used. If you do not already have Windows Installer, it is installed by Sage 500 ERP. It may take a moment to install the Windows Installer before the installation starts.

Demo Data

Description

You have the option of installing demo data when you create new databases. If you plan to install demo data, note the following information in this section.

Demo data companies

When you install demo data, three demonstration companies are added to the database for your use: CAD, COA, and SOA.

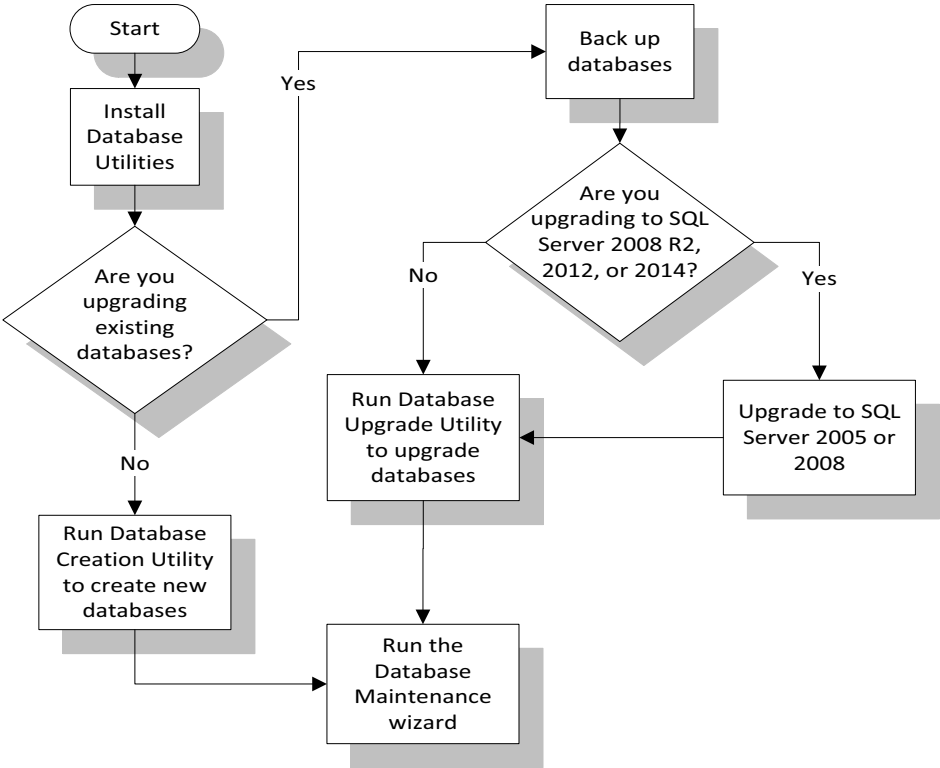
Use the following demo companies for different types of evaluation and testing:

- **All modules:** The Systems of America (SOA) company contains an extensive amount of data in all of the Sage 500 ERP modules that you can use for testing or viewing.
- **Manufacturing:** Consultants of America (COA) and SOA contains Manufacturing demo data. Use these companies for training and when following the examples in the Manufacturing Help system.
- **Accounting:** The Canadian Inc. (CAD) company contains demo data for all accounting modules using Canadian dollars as the home currency. CAD does not contain manufacturing or replenishment demo data.

Installation Flow Chart

Flow charts

The procedures you follow in this chapter depend on whether you are creating new databases or upgrading existing ones. The following chart shows the general steps for these procedures.



Installing the Database Utilities

Introduction

This section describes how to install the Database Utilities by using the Database Utilities Setup Wizard.

Starting the installation

Start the Database Utilities Setup Wizard by performing one of the following:

- From the installation window, click Database Install. For information about starting installation, see *Starting the Installation* on page 5.
- From the command line in the Run window or the Command Prompt, enter one of the following commands to run either the Database Creation or the Database Upgrade Utility after installing the Database Utilities.
 - ▶ **Setup.exe INSTALLDATABASE=1**
Launch the Database Creation Utility at the end of the installation. The Database Creation Utility runs automatically if no parameter is specified.
 - ▶ **Setup.exe /VUPGRAGEDATABASE=1**
Launch the Database Upgrade Utility at the end of the installation.

Database Utilities Setup Wizard window

When the installation starts, the Database Utilities Setup Wizard appears.

Uninstallation of prior versions

If you already have the Database Utilities on your system, the installation wizard detects them and gives you the option to remove them before you install the new software. Click Remove to uninstall the old software. The wizard then starts the installation process.

Procedure

Click Next to start the installation and follow these steps:

- 1 Review the license agreement that appears. Select I accept the terms in this license agreement and then click Next to continue.
- 2 When you are prompted to enter your information, the fields display the name and organization recorded in the Windows Registry. You can change this information as desired. You can also select whether the software is available to all users or just yourself. Click Next to continue.
- 3 You have the following installation options:
 - ▶ Select Complete to install all database components into C:\Program Files\Sage Software\Sage 500 ERP Database Utilities.
 - ▶ Select Custom to select the drive and folder where files will be installed and what will be installed.

Select the option and click Next.

If you selected Custom, go to the next step. If you selected Complete, go to step 5.

- 4 If you selected Custom, the Custom Setup window appears. Perform one of the following:
 - ▶ To install the software in the default folder, click Next to continue.
 - ▶ To install the software in a different folder, click Change to select the folder from a window. Click Next to continue.

Note: All of the features listed in the window must be installed. None of the items can be removed from the installation list.

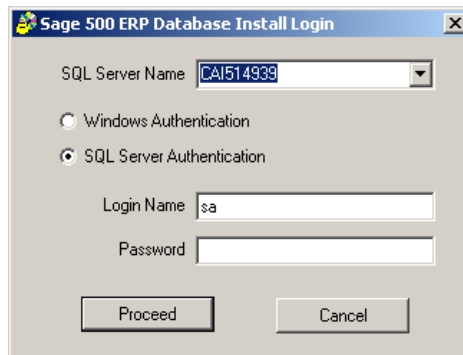
- 5 Click Install to install the software. A status bar indicates the progress. To cancel the installation, click Cancel.

Prompt when the installation is completed

When the Database Utilities are finished installing, the following utility starts:

- If you launched the Database Utilities Installation directly from the Sage 500 ERP installation website or from the menu on the left side of the Installation window, the Database Creation Utility starts.
- If you launched from a command prompt, the utility you specified with the variable appears. If you did not specify a variable, the Database Creation Utility starts.

The logon window to start the utility appears. The following is the logon window for the Database Creation Utility:



If you do not want to run the utility, click Cancel. To continue with the utility, perform the following:

- 1 Select the server where you want to install or upgrade the databases.
- 2 Type the system administrator logon name and password.
- 3 Click Proceed.

- 4 Continue the database installation or update process by going to the following section:
 - ▶ If you are creating new databases, see the next section, *Creating New Databases* on page 32.
 - ▶ If you are updating existing databases, see *Upgrading Existing Databases* on page 39.

When you are finished creating or updating the databases, you can install the client software as shown in Chapter 4, *Client Installation*.

Creating New Databases

Overview

Introduction

Follow the procedures in this chapter if you are creating new databases. Some of the situations for when to create a new database include the following:

- Creating new production databases for a new installation.
- Creating demo databases for evaluation, testing, or training. In this procedure, you set an option that creates the databases and automatically loads them with demo data.
- Creating blank databases into which you will import data from another source.

Do not use these procedures if you are upgrading an existing database. For more information, see *Upgrading Existing Databases* on page 39.

Starting the Database Creation Utility

Description

Use the Database Creation Utility to create databases. Database creation is a lengthy process and can take up to one hour, depending on the server configuration. Plan accordingly before starting the database creation process.

Starting the Database Creation Utility

If you are prompted to start the program after the Database Utilities have been installed, click Yes to continue.

You can also start the Database Creation Utility at any time by selecting Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > Database Creation Utility.

Which Databases to Create

Database requirements

You must create an application database.

Additional databases

You also need to install databases that apply to the modules you are using.

To use the additional databases, you must activate the associated module to populate the data in the database. For more information, see *Setting Up Companies and Modules* on page 100.

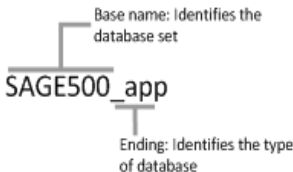
For an explanation of the databases used by Sage 500 ERP, see *Databases* on page 9.

Note: You can create more than one database set on the same SQL Server. For more information, see Chapter 6, *Managing and Protecting Databases*.

Database Naming Requirements

Introduction Note the following information when naming databases. By following these requirements, you will make your databases easier to identify and manage.

Base names and endings A database name includes a base name and an ending. The base name identifies the database set and the ending identifies the type of database.



The following standard endings are used:

Type of database	End name with	Default
Application	_app	SAGE500_app

Naming requirements

Database names must meet the following requirements:

Requirement	Valid Examples	Invalid Examples
No spaces	new_company_app NewCompany_app	new company_app newcompany app
No SQL reserved characters and wildcards	dollarco_app	\$co_app
First character alphabetical	company1_app	1company_app
Standard ending (_app)	acctg_app	acctg_app_new
Maximum 30 characters, including ending	nsbayseafood_app	northshelterbay seafoodcompany_ app

Transaction log names

The file names of transaction logs have the same name as the database with the letter L at the end. For example, the transaction log for SAGE500_app is SAGE500_appl.

Default Administrative Logon

Description

As you create the database set, you are prompted to enter a default admin logon. This logon is used the first time you run the software so that you can set up the system, grant user access, and perform other administrative tasks.

You should create a new logon instead of using an existing SQL Server user. The default administrative logon for Sage 500 ERP is also a SQL Server administrative logon.

The default admin name and password you specify in the Database Creation Utility is saved in the Sage 500 ERP database set. Sage 500 ERP maintains its own table of user names and passwords.

Default settings

The Database Creation Utility provides the following default settings:

- Default Admin name: admin
- Password: (no password)

Defining a logon

If you do not want to use these defaults, type a user name and password when prompted by the Database Creation Utility. Entering a new logon and password automatically creates the administrator in SQL Server.

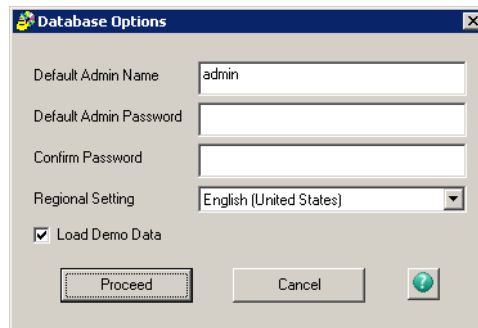
Warning: Make a note of the default administrative logon name and password. You will not be able to log on for the first time without them.

Procedure for Creating Databases

Procedure

Follow these steps to use the Database Creation Utility:

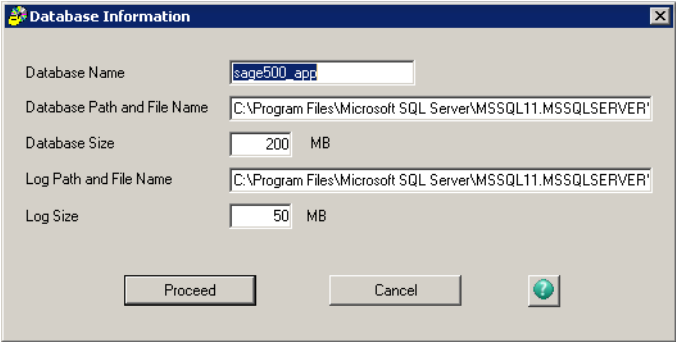
- 1 Log on to the server where you are creating the databases. Use the SQL Server password. The Database Options window appears.
- 2 Enter a default admin name and create an admin password.
- 3 If you want to include demo data, select the Load Demo Data check box.



- 4 Click Proceed. The Database Information window appears.
- 5 Type the name of the database followed with `_app` to indicate that it is an application database with system information. (For more information, see *Base names and endings* on page 34.) You can change the database names if needed.

Tip: To make the databases easier to manage, give all of them the same base name.

- 6 The path and file name fields display the drive and path on the SQL Server for the physical database and log files. When you type the database name, the file names change to match it. For information about these files, refer to the SQL Server documentation.
- 7 Type the sizes for the database and log. For more information, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at:
<https://customers.sagenorthamerica.com>



- 8 Click Proceed to start the database creation process. Allow for sufficient time for the process to complete.
- 9 When the database creation process is finished, you have the option of running the Database Maintenance Wizard to set up periodic maintenance for the databases. If you do not run the wizard at this time, you can do so later. For more information, see *Establishing a Maintenance Plan* on page 54.

Upgrading Existing Databases

Overview

Description Follow the procedures in this section if you plan to upgrade existing databases. Before proceeding, verify you have installed the Database Utilities, including upgrade scripts for the version of Sage 500 ERP currently installed.

Overview of the Upgrade Process

General steps Upgrading databases consists of the following general steps:

- 1** Post any outstanding batches in your production companies. The upgrade cannot proceed with unposted batches.
- 2** Back up the following databases, especially if you have customizations: master, msdb, model, and Sage 500 ERP database. Also back up triggers and stored procedures.
- 3** Upgrade to SQL Server 2008 R2 SP3, 2012, or 2014.

Note: If you plan to use the Data Import Manager module to import data from source tables into the destination (permanent) tables, you must install SQL Server 2005 with Service Pack 1 or higher and SQL Server Integration Services (SSIS) before installing the software.

For more information about system requirements, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

For more information about installing and configuring the Data Import Manager module, see Appendix B, *Data Import Manager Installation & Configuration*.

- 4 Start the Database Upgrade Utility, the program you use to upgrade the databases.
- 5 If necessary, compare the databases and generate scripts for the upgrade. For more information, see *Comparing Databases* on page 46.
- 6 Perform the upgrade. The system uses the scripts to update tables, stored procedures, and triggers and copy the data into the modified databases.
- 7 Upgrade and recompile customized stored procedures or triggers after the database upgrade process. If you are using third-party products, create or upgrade to the version that supports this version of the software.

Time requirements

The database upgrade process takes considerable time, especially with large databases. Schedule the upgrade to have the least impact on your users.

Upgrading Customized Databases

Introduction

If you have customized databases, the Database Upgrade Utility can generate scripts that identify schema changes and update the databases to work with these changes.

Using database comparisons

To find schema changes, run a comparison of the database to upgrade. You have the following options for performing the comparison:

- Compare your database against the standard databases for a release.
- Compare two databases. Use this option to identify modifications made between two previously created database sets.

Generated upgrade scripts

From the comparison, the Database Upgrade Utility generates database upgrade scripts:

- usc_sys.sql for the application database with system information
- usc_appl.sql for the application database with enterprise resource planning (ERP) information

The scripts created are saved in the ..\Program Files\Sage Software\Sage 500 ERP Database Utilities\DBUpgrade folder in a subfolder with the name of the version currently used by the database.

To use them for database upgrade, rename the files to sc_app.sql and sc_sys.sql, respectively.

You can generate a script when you are comparing databases. You can only compare the current version with one version prior.

Effects of upgrades on customized objects

The Database Upgrade Utility overwrites customizations in native Sage 500 ERP objects, including triggers and stored procedures. Tables outside of native Sage 500 ERP objects are not affected, but objects such as custom triggers appended to native Sage 500 ERP objects might be dropped; therefore, back up all customized objects before performing the upgrade. Add the customizations, as needed, manually into the new triggers and stored procedures installed with the new version.

Adding Databases to an Existing Installation

Introduction To add a database to an existing database installation, upgrade the existing databases to the current version and then add the new databases. This procedure is explained in this section.

Procedure Follow these steps:

- 1 Upgrade your existing databases by using the Database Upgrade Utility as shown in *Upgrading Databases* on page 49. This upgrades the databases to the new version and enables the application database to work with the new databases.
- 2 Start the installation of the new database by running the Database Creation Utility as shown in *Creating New Databases* on page 32.
- 3 Log on to either the SQL Server where your upgraded application database is located or into a different SQL Server.
- 4 In the window that displays which databases you are creating, select only the databases you are adding.
Warning: Do not use database names that already exist. Creating a new database with the same name as an existing one overwrites it.
- 5 Select the application database to which the new databases are to be attached at the Link to App DB field. This field is available only if the Application check box is cleared. Click Proceed to continue.
- 6 In the Database Information window that appears, type the information for each database you are adding. Only the tabs of the databases you are adding become enabled. Click Proceed to create the databases.

- 7 Activate the modules for the databases you have added to populate the data in them and enable them to be used. For instructions, see *Setting Up Companies and Modules* on page 100.

Preliminary Steps

Introduction

Before upgrading the databases, complete the tasks shown in this section.

Database protection

Because your databases contain crucial information, it is important you perform the following before upgrading:

- 1 Post all batches in all of your current modules and companies. If you have posted Sales Order batches, verify they have been made into open Accounts Receivable batches and posted through Accounts Receivable.
- 2 Back up the databases and test the backup. Keep the backup copy until you are sure the upgraded databases are working properly. For instructions on backing up the databases, refer to the documentation for Enterprise Manager, SQL Server Management Studio, or the backup utility.

The Database Upgrade Utility also prompts you to back up the databases before proceeding with the upgrade.

- 3 Perform a test upgrade on copies of your production databases before you perform the actual upgrade. You can test and verify the upgrades before performing the upgrade on your production data.

For instructions on copying databases, see Chapter 6, *Managing and Protecting Databases*.

Upgrade databases to SQL Server 2005, 2008, or 2012

If you are using Microsoft SQL Server 2000, you must upgrade the Sage 500 ERP databases to SQL Server 2005, SQL Server 2008, or SQL Server 2012 before upgrading the databases to this version of Sage 500 ERP. For more information about system requirements, refer to the *Compatibility and Resource Guide* located in the Support page of the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

Follow these steps:

- 1 Make backups of your databases.
- 2 Upgrade Microsoft SQL Server to version 2008 R2 SP3, 2012, or 2014 as shown in the SQL Server Documentation on the Microsoft Web site.

Perform the following:

- ▶ For best results, use the Direct Pipeline method for upgrading.
- ▶ Be sure to include the application database when you upgrade.

Note: If you plan to use the Data Import Manager module to import data from source tables into the destination (permanent) tables, you should perform the items mentioned in this step. For more information, see Appendix B, *Data Import Manager Installation & Configuration*.

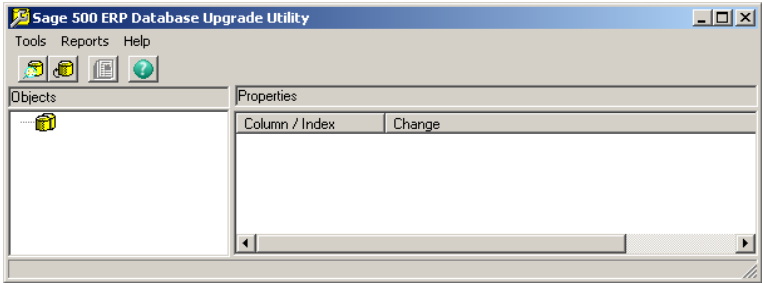
Starting the Database Upgrade Utility

Procedure

If you are prompted to start the program after the Database Utilities have been installed, click Yes to continue. You can also start the Database Upgrade Utility by selecting Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > Database Upgrade Utility.

Run the Database Upgrade Utility. When prompted, log on to the SQL server containing the databases. Use your system administrator password.

The Database Upgrade Utility window appears:



Tip: Use the toolbar for common commands. Place the pointer over a button to see a tooltip.

Comparing Databases

Introduction

The comparison feature allows you to generate upgrade scripts by comparing the database you are upgrading to a standard database for that release or against another database. The comparison shows differences in the schema and does not examine customized procedure code.

Determining if you need to do a comparison

There are some situations when you do not need to run the comparison. Refer to the following chart:

Type of database upgrade	Comparison needed?
Database set has no customizations.	No. Skip to <i>Upgrading Databases</i> on page 49.
To compare the database against a standard database set for this release.	Optional, because the upgrade can generate a script against a standard database set as it does the upgrade. To review the upgrade script before you perform the upgrade, perform the comparison as shown in this section.
To compare the database against another set of customized databases.	Yes.
To modify the upgrade scripts.	Yes. Use the comparison to generate scripts to customize.

For more information about upgrading customized databases, see *Upgrading Customized Databases* on page 40.

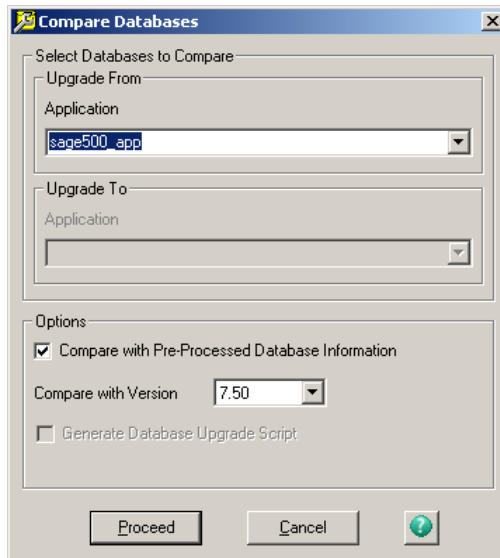
Time for performing the comparison

This comparison process takes a considerable amount of time, depending on the size of the databases and amount of customizations. Allow sufficient time for the process to complete.

Procedure for running the comparison

Follow these steps to run the database comparison:

- 1 Select Tools menu > Compare Databases. The following window appears.

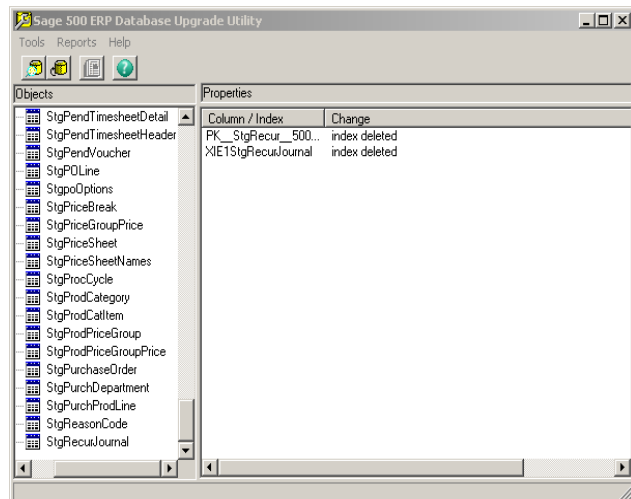


Complete the window as follows:

- a At the Upgrade From database fields, select the databases to compare.
- b To use the standard database for comparison, select the Compare with Pre-processed Database Information check box. The version of the software used for that database automatically defaults to the Compare with Version field. If the version is not correct, select the correct version.

Warning: At the Compare with Version field, select the version you are currently using, not the version to which you are upgrading. If you select the wrong version, the upgrade information will be incorrect, creating errors in the upgraded databases.

- c To compare the databases you are upgrading to another database, clear the Compare with Pre-processed Database Information check box. Select the databases you are comparing at the Upgrade To fields.
 - d To have the Database Upgrade Utility generate the upgrade scripts, select the Generate Database Upgrade Script check box. This check box is available only if you are comparing a database with databases or the version immediately before it. If the comparison is greater than one version, this check box is not available.
- 2 Click Proceed. The following changes occur in the Database Upgrade Utility window:
 - ▶ The left pane shows the objects in the database.
 - ▶ The right pane shows any differences identified in a database object.
 - ▶ A status bar shows the progress of the comparison process.
 - 3 Review the changes identified by the database comparison. To get a complete report, select Reports menu > Schema Changes.

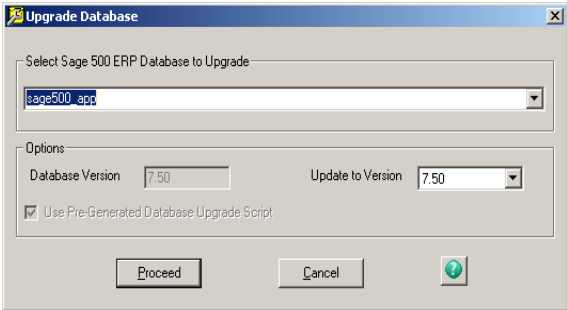


Upgrading Databases

Procedure

When you are ready to upgrade the databases, follow these steps:

- 1 Select Tools menu > Upgrade Existing Databases. The following window appears:



- 2 Select the system and application database to upgrade. The Database Version field displays the version of the software used for that database.
- 3 Indicate how you want to upgrade the databases by performing the following.

Warning: Follow the instructions in this step carefully. If you choose the wrong selections for your type of upgrade, you can lose your data, customization, or customized scripts.

Upgrade you are performing	What to do
Database has no customizations.	Verify that the Update To Version field displays the correct version of the software. Select the Use Pre-generated Sage 500 ERP Database Upgrade Script check box.

Upgrade you are performing	What to do
<p>Database set has customizations, you are not comparing against another customized database set, and you want to generate scripts while performing the upgrade.</p>	<p>Verify that the Update To Version field displays the correct version of the software.</p> <p>Clear the Use Pre-generated Sage 500 ERP Database Upgrade Script check box.</p>
<p>You want to use scripts you generated in <i>Comparing Databases</i> on page 46.</p>	<p>In the ..\Program Files\Sage Software\Sage 500 ERP Database Utilities\DBUpgrade folder, look for the folder for the version currently used by the database. Find the files usc_app.sql and usc_sys.sql and rename them to sc_app.sql and sc_sys.sql, respectively. For more information, see <i>Upgrading Customized Databases</i> on page 40.</p> <p>Verify that the Update To Version field displays the correct version of the software.</p> <p>Select the Use Pre-generated Sage 500 ERP Database Upgrade Script check box.</p>

Upgrade you are performing	What to do
The current databases are more than one version prior to the version you are upgrading to.	<p>The Use Pre-generated Database Upgrade Script check box is automatically selected and can only be viewed.</p> <p>To use a script generated by a comparison, in the ..\Program Files\Sage Software\Sage 500 ERO Database Utilities\DBUpgrade folder, rename usc_app.sql to sc_app.sql and usc_sys.sql to sc_sys.sql. For more information, see <i>Upgrading Customized Databases</i> on page 40.</p>

- 4 Select the Use Pre-Generated Database Upgrade Script check box.

Note: Clear this check box if you are upgrading a system that has schema modifications that you want to retain. When the check box is cleared, the usc_appl.sql customer upgrade script is generated and can be used in the upgrade process.

- 5 Click Proceed. You are shown the last time the databases were backed up and prompted whether to back up the databases, continue with the upgrade without performing a backup, or cancel. Respond to the prompt as follows:
 - ▶ Click Backup Now to back up the databases before continuing the upgrade. The Database Maintenance Wizard appears. (For more information, see *Establishing a Maintenance Plan* on page 54.) To use another backup utility, close the Database Maintenance Wizard by clicking Exit and run the

utility. When you are finished with the backup, go back to the Database Upgrade Utility window and continue the upgrade.

- ▶ If you have already backed up the databases, click Continue. The upgrade starts.
 - ▶ If you do not want to continue the upgrade, click Cancel.
- 6** When the database upgrade is completed, the Database Upgrade Utility displays a log of the operations that occurred.

To save a report of the operations, select Reports menu > Schema Changes. The report is saved to the ..\Program Files\Sage Software\Sage 500 ERP Database Utilities\DBUpgrade\StrtChng.txt file. To view the report, click Yes when you are prompted to open the file.

- 7** Review the DBError.log file generated by the upgrade process. This is saved in the following folder:
C:\Users\<user ID>\AppData\Roaming\Sage Software\Sage MAS 500
The file contains information about the upgrade and any errors encountered in the process.
- 8** When the database upgrade process is finished, you have the option of running the Database Maintenance Wizard to set up periodic maintenance for the databases. If you do not run the wizard at this time, you can do so later. For more information, see the next section, *Establishing a Maintenance Plan* on page 54.

Database Auditing Triggers

Introduction

Triggers are used to keep track of modifications (changes) made to the system. The database trigger tracks changes made by non-Sage 500 ERP applications to the database tables. The application trigger tracks changes made to the applications for deletions, additions, and modifications. These auditing triggers are enabled by default.

Procedure

To enable or disable the Database Auditing Triggers, perform the following:

- 1** Run the SQL Server Management Studio.
- 2** In the SQL Server Management Studio window, launch a new query.
- 3** Select your Sage 500 ERP database.
- 4** To disable triggers, execute the following command:
spEnableDBAuditTriggers 0
- 5** To re-enable triggers, execute the following command:
spEnableDBAuditTriggers 1

Establishing a Maintenance Plan

Overview

Introduction

When the databases have been created or upgraded, you have the option of scheduling and performing the following database maintenance tasks:

- Validation
- Optimization
- Backup

Use the Database Maintenance Wizard to set up and schedule these tasks. All database objects are maintained.

Starting the Database Maintenance Wizard

When you are prompted to start the wizard

You have the option of starting the Database Maintenance Wizard in the following situations:

- On completion of the Database Creation Utility or Database Upgrade Utility.
- Before starting a database upgrade so that you can use the wizard to back up the databases before continuing.

You can also start the wizard at any time by using the procedure shown in this section.

Starting the wizard

To start the Database Maintenance Wizard, perform the following:

- 1** Select Windows Start menu > Run.
- 2** Click Browse to locate CreateDB.exe. The .exe file is located at C:\Program Files\Sage Software\Sage 500 ERP Database Utilities\DBInstall. Select the file and click Open.
- 3** In the Run window, the Open field displays the file name and path for CreateDB.exe. Add /M to the end of the line as shown, and click OK:

"C:\Program Files\Sage Software\Sage 500 ERP Database Utilities\DBInstall\CreateDB.exe" /M
- 4** The Sage 500 ERP Database Install Login window appears. Type the password and click Proceed.

Setting Up Database Maintenance

Fields to complete Complete the Database Maintenance Wizard as follows:

- **Application:** Select the database for which to schedule maintenance tasks.
- **Data Validation:** Select this check box to have the system run consistency tests on the databases. The system runs DBCC CHECKDB to report on data and index page consistency, and DBCC CHECKCATALOG to report on the consistency of the system tables.
- **Data Optimization:** Select this check box to optimize table indexes for improved performance. The system rebuilds the table indexes using the free space percent value as the inverse of the index fill factor. This option also updates the index statistics used in the compilation of stored procedures.
- **Backup Options:** Select the Perform Scheduled Backups To check box to perform periodic backups. Select the drive and path to store the backup files and whether to delete backup files older than the selected number of weeks.

Note: Do not select a folder on the same drive as your database. The server must always have access to the folder selected. The file names of the backup files are created at run time as the database name with a current date (YYYYMMDD) extension.

- **Plan Frequency:** Select the task to be performed daily, weekly, or monthly. Select the start time at the At Time field. For weekly tasks, select the day of the week at the On Day field.

Tip: If you have a large number of transactions, select the task to be performed daily. Schedule the tasks at off hours.

- **Generate Report To:** Enter the path to which the results of the maintenance activities will be created. A valid path is required at this field.
- **E-Mail To:** Select an established SQL Server Operator to whom completion messages will be sent. For more information on how to create SQL Server Operators, see the *Microsoft SQL Server Online Help* topic, *Creating an Operator*.

Starting the backup

To back up the databases immediately, click **Backup Now**. The system backs up the selected databases using the settings you selected.

Accepting the changes

When you have completed the desired maintenance plan, click **Create Plan**. You can create a maintenance plan for another database or click **Exit**.

Note: The **Create Plan** button is not available when you launch the Database Maintenance Wizard prior to backing up the databases. At that point of the upgrade process, the wizard is provided only for backing up the databases. You have the option of running the Database Maintenance Wizard to set up a maintenance plan after the database upgrade is complete.

Running and Viewing Scheduled Tasks

Introduction

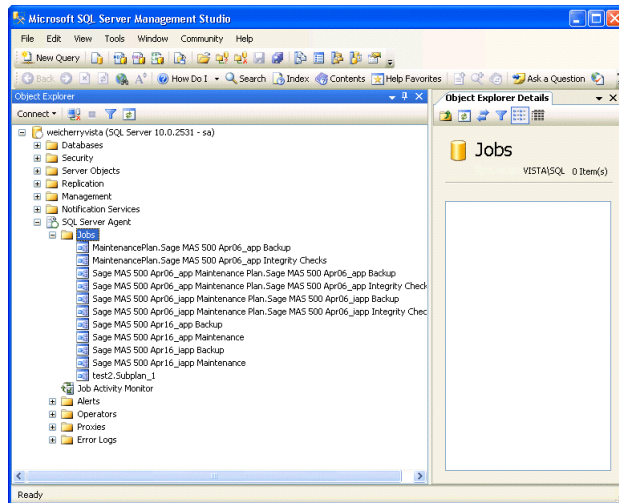
When you click **Apply** to save a maintenance plan, it is added to the schedule tasks for the SQL Server Agent. You can view and change the maintenance plan jobs in Enterprise Manager or SQL Server Management Studio.

The SQL Server Agent also processes automatic registration and data update tasks for the Business Insights Dashboard.

Viewing maintenance plans

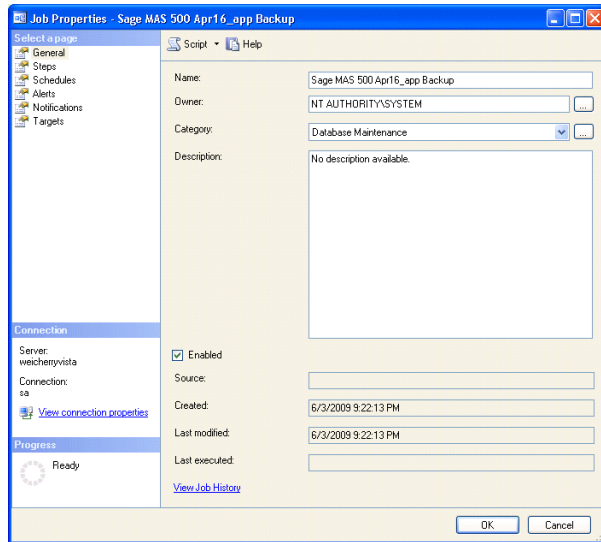
To view the maintenance plan in Enterprise Manager or SQL Server Management Studio, follow these steps:

- 1 In the Tree pane, expand the listing for the SQL Server. Expand the Management folder, and then the listing for SQL Server Agent.
- 2 Click Jobs. The jobs appear in the right pane, as shown in the following figure:



- 3 Locate the maintenance plan generated by the Database Update Wizard. Scroll across the right pane to get an overview of the status of the maintenance plan.

To get more details about the plan or change settings, right-click it, and from the menu that appears, select Properties. The following window appears:



Changing a maintenance plan

Use the maintenance plan Properties window to change settings such as the following:

- Servers where the job is run
- SQL commands used in the job
- Schedule for processing jobs
- E-mail notifications when a job fails or finishes

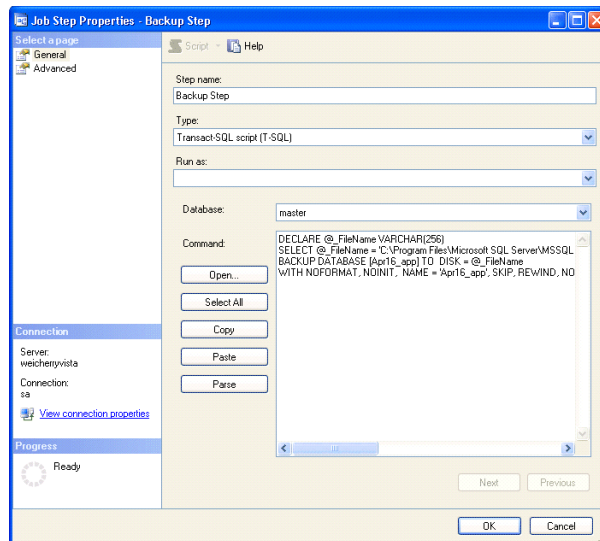
Troubleshooting maintenance plans

You can use the maintenance plan Properties window to correct problems or improve performance in processing.

For example, if it takes too long to process a job, it might be caused by redundant options in the SQL command. If the command contains both `-UpdSts` and `-RebldIdx`, remove either of these options to improve performance. For information about these options, refer to SQL Server Books Online.

Follow these steps to fix this and other errors in the SQL commands for a job.

- 1 In the maintenance plan Properties window, click Steps.
- 2 Select the step to change and click Edit. The following window appears.



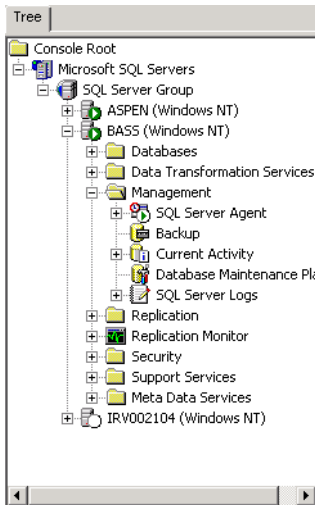
- 3 Verify that Operating System Command (CmdExec) is selected at the Type field.
- 4 Type the changes in the Command box.

- 5 Click the Advanced tab to set options for completed or failed jobs and select whether to generate an output file. Click OK.

Running maintenance plans

The SQL Server Agent must be running in order for the maintenance plan jobs to be run. If the agent is not running, perform the following in Enterprise Manager or SQL Server Management Studio to start it:

- 1 In the Tree pane, expand the listing for the SQL Server, and then the Management folder. SQL Server Agent appears below the Management folder as shown:



- 2 Right-click SQL Server Agent. From the menu that appears, select Start.

For more information about using SQL Server Agent, see [SQL Server Books Online](#).

Client Installation

4

This chapter guides you through the process of installing, removing, reinstalling, and upgrading the client software.

In this chapter

Preliminary Steps	63
Installing the Client Software	66
Terminal Services Installation	73
Completion of Client Installation	78
Installing Crystal Reports Designer	84

Preliminary Steps

Overview

Introduction This section describes the steps you need to perform before installing the client software, especially if you are upgrading from a previous version of the software. Also note the use of Windows Installer with the client installation.

Options for Installing Client Software

Description You have the following options for installing and running client software:

- Install the software directly on each client system by running the installation wizard or by using the silent installation feature to install the software with the parameters you specify.
- Use Terminal Services to run the software on a dedicated Terminal Services system and connect to it from other machines, instead of installing the software on each system. For information on Terminal Services requirements, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

Overview of procedures Perform the preliminary steps and then use the procedure that applies to your installation. For information on reinstalling components, changing an installation, or uninstalling the client software, see *Changing the Installation* on page 69.

Preliminary Steps for Upgrades

Introduction	If you are upgrading the client software, you need to uninstall the previous version of the software and the version of Crystal Reports that came with it before you install this version of the software.
Software that is uninstalled	<p>If you have the client software, the installation wizard detects it and gives you the option to remove it before installing the new software. This removes the application and any service packs, monthly updates, and hot fixes. It does not remove user files, form customizations, and any components added to the client. The wizard starts the installation process.</p> <p>When you remove the software, it also removes the runtime version of Crystal Reports if it is not used by other programs. If you have Crystal Reports Designer, or if Crystal Reports is used by another program, you need to uninstall it manually before installing the new version of the software.</p>
Preserving customizations	If you have customizations to apply to the version of the software you are about to install, save the files used to create the customizations in a separate folder before continuing.

Prerequisite Steps for Clients on SQL Server

Description	Before installing, reinstalling, or upgrading the client on a workstation or server running SQL Server, shut down all SQL Server services, including SQL Server, SQL Executive, and DTC.
--------------------	--

Use of Windows Installer

Description All installation programs use Microsoft Windows Installer. If you already have Windows Installer, Sage 500 ERP uses the version that is already on your system.

If you do not have Windows Installer on a system, it is installed automatically when you run the Setup program.

Pre-installation Checklist for Client Installation

Introduction Before you begin installing the client software, verify you have the following information. Complete the following checklist:

Information

Where to install the client software	<input type="checkbox"/> On each client workstation. Continue following the instructions in this section. <input type="checkbox"/> Remotely through Terminal Services. For instructions, see <i>Terminal Services Installation</i> on page 73.
SQL Server	_____
Type of client installation	<input type="checkbox"/> Installation of new client workstation software <input type="checkbox"/> Upgrading existing client workstation software
User of the software	<input type="checkbox"/> All users of the system <input type="checkbox"/> Only the user who installs the software
Applications to install	All applications are installed.

Installing the Client Software

Overview

Introduction Follow the procedures in this section if you are installing the client software directly from the Sage 500 ERP website to the local drive.

Installing Client Software

Procedure This section describes how to install the software by using the Client Installation Wizard. To use the silent installation feature, see Appendix E, *Silent Installation*.

- 1 Verify you have logged on to the client system as the local Administrator. If not, log off the system and log back on as the local Administrator.
- 2 Start the client installation by performing the following:

From the installation window, click Client Install. For information about starting the installation, see *Starting the Installation* on page 5.
- 3 You are prompted to install the .NET Framework if it is not already installed. Click OK to continue. You need .NET Framework to run the Sage 500 ERP client software.

Note: For information on supported .NET Framework version, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>
- 4 The Client Setup wizard appears. Click Next to continue.

- 5 Review the license agreement that appears. Select I accept the terms in this license agreement, and then click Next to continue.
- 6 When you are prompted to enter your information, the fields display the name and organization as recorded in the Windows Registry. You can change this information, if necessary.

Depending on your configuration, select one of the following options:

- ▶ If you are installing on a dedicated client system, you have the option of selecting whether the software is available to all users or just yourself.
- ▶ If you are installing on a Terminal Server, you must select All Users.

Click Next to continue.

- 7 If you are performing a new installation, you are prompted to type the name of the SQL Server you will be using with the client software. Type the name of the server and click Next.

You are not prompted to type the name of a SQL Server if you are upgrading an existing installation. The new client software uses the SQL Server you previously used.

- 8 The following options are available for setting up:
 - ▶ Select Complete to install all client components into a default folder on drive C.
 - ▶ Select Custom to select the drive and folder where files will be installed.

Select the option and click Next.

If you selected Custom, go to the next step. If you selected Complete, skip to step 10.

- 9 If you selected Custom, the Custom Setup window appears.
 - ▶ Click Change to change the drive and path where the files will be installed.
 - ▶ Click Disk Usage to see how much space is available on your drives and how much space will be used by the database installation software. Note that some files will be installed on drive C.

Note: All modules are installed except Active Planner Client and Allocations Client. You need to select these two clients if you want to install them. The Custom Setup window lists the modules, but none of them can be deselected from the installation.

Click Next to continue.

- 10 If you select to install the Active Planner Client and/or the Allocations Client, a Network Location window appears. This window allows you to specify the network location where the application installs are located.
 - ▶ Click Browse to change the location for network location for the application.

Click Next to continue.

- 11 Click Install to start the installation. A status bar indicates the progress. To cancel the installation, click Cancel.
- 12 You might need to reboot your computer to complete the installation. When prompted, click Yes to reboot.

Installing CAD viewer software

To view CAD drawings in Manufacturing, install the optional Dr. DWG ActiveView Pro software. The Sage 500 ERP website has a limited-use demo of the software with information on ordering the full product. The demo version expires 30 days after the installation.

You can install the demo software before or after installing the Manufacturing client. Follow these steps:

- 1 From the Windows Explorer, on the Sage 500 ERP installation, open the Support folder, and then the CADViewer folder.
- 2 Run ViewProfessional5.0Rest.exe.
- 3 In the dialog box that appears, click Setup. Follow the instructions on the screen to complete the installation.

To purchase the full version of the software, use the order form installed with the demo software. Select Windows Start menu > All Programs > Dr. DWG ActiveView Prof > Dr. DWG-ActiveView Order Form.

Changing the Installation

Introduction

You can remove the software, change the configuration, or reinstall components by running the installation program. When you run an installation on a system that already has the current version of Sage 500 ERP software, the program detects the software and presents an appropriate set of options.

Procedure

Follow these steps to run the client installation to make changes:

- 1 Start the installation by performing one of the following:
 - ▶ From the installation window, click the link for the software installation. For information about starting installation, see *Starting the Installation* on page 5.

- ▶ Select Windows Start menu > Settings > Control Panel. In the Control Panel window, double-click Add/Remove Programs. In the Add/Remove Programs window, select the Sage 500 ERP software, and click Add/Remove.

When the installation software starts, click Next to continue.

2 The Program Maintenance window appears.

Select one of the following options:

- ▶ To review settings, click Modify. Click Next to continue.
- ▶ If you experienced problems with the software or need to repair a corrupted installation, select Repair. This reinstalls any missing or damaged files. Click Next to continue.
- ▶ To uninstall the software from the system, select Remove. Click Next to continue.

Note: Selecting Remove in this window does not uninstall service packs, monthly updates, and hot fixes you added to the current version of the software. If you are running the installation program to update an older version, clicking the Remove button does remove those items.

3 A window appears where you can confirm your action. Click Install (for Modify or Repair) or Remove to proceed.

Enabling .Net framework 3.5 on Windows and Windows Server

Introduction

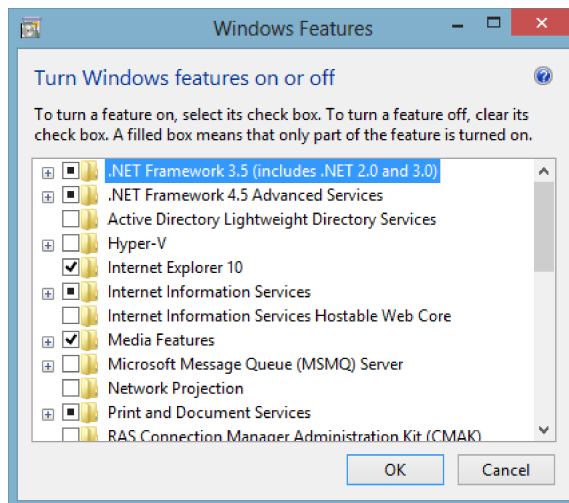
Microsoft .Net Framework 3.5 is required for the Sage 500 ERP client application. .Net Framework 3.5 can be enabled, but not installed, on Windows version 8 and 8.1 and Windows Server version 2008 R2, 2012, and 2012 R2.

Enabling .Net framework 3.5 in Control Panel

You can enable the .NET Framework 3.5 through the Microsoft Control Panel. In Control Panel:

- 1 Choose Programs and Features.
- 2 Choose Turn Windows features on or off.
- 3 Select the Microsoft .NET Framework 3.5.1 check box.

Note: This option requires an Internet connection.



- 4 Click OK.

Enabling .NET Framework 3.5 using the installation media

When enabling the .NET Framework 3.5 in the Control Panel, you may get error message 0x800f0906: "Windows couldn't connect to the Internet to download necessary files. Make sure that you're connected to the Internet, and click Retry to try again." This message may appear for the following reasons:

- Your computer is not connected to the Internet. Please connect, and then retry the operation. If you are unable to connect your computer to the Internet, you can enable the .NET Framework 3.5 by using the installation media (ISO image or DVD) from which you installed the Windows. Mount the installation media and type the following command from a command prompt:

```
Dism /online /enable-feature /featurename:NetFx3 /All /
Source:x:\sources\sxs /LimitAccess
```

Where x: is the drive letter for the ISO image or DVD.

- If your administrator has configured your computer to use Windows Server Update Services (WSUS) instead of Windows Update for servicing, ask your administrator to enable the policy to use Windows Update instead of WSUS.

Enabling .NET Framework 3.5 on Windows Server through Add Roles and Features Wizard

To enable the framework on Windows Server 2012 and 2012 R2 using the Add Roles and Features Wizard:

- 1 Open Add Roles and Features Wizard.
- 2 Select .NET Framework 3.5 Features and click Next.
- 3 Select specify an alternate source path link in the Confirm installation selections screen.
Path: D:\Sources\SxS (where D drive is installation media) and then click OK.
- 4 Click the Install button.

Terminal Services Installation

Overview

Introduction

If you are using Sage 500 ERP with Terminal Services, verify the system requirements. For system requirements, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <https://customers.sagenorthamerica.com>

After verifying the requirements, you can install the software for multiuser access by performing one of the following:

- Use Add/Remove Programs in Control Panel.
- Use the change user command at the command prompt before and after installing the software.

Precautions on Using Terminal Services

Description

Any changes you make to the software affect all users on Terminal Services, especially the following:

- If you select Windows authentication, it applies to all other users who connect after this setting is saved.
- Selecting new values for any of the fields or options in the Client Configuration Utility in a terminal server session affects all users connecting to the software through that Terminal Services.

Using Add/Remove Programs

Procedure

Follow these steps:

- 1 Log on to Terminal Services as the local Administrator.
- 2 Close all other applications.
- 3 Select Windows Start menu > Settings > Control Panel. Double click Add/Remove Programs.
- 4 On the Install/Uninstall tab, click Install. You are prompted to specify the installation program. Click Browse to locate the client installation, and then click Next.
- 5 In the Change User Option dialog box, select All users begin with common application settings, and then click Next.
- 6 Install the software on a local NTFS-formatted drive.
- 7 In the Finish Admin Install dialog box, click Finish.

Connecting to the Terminal Services section

You are now ready to connect to the software. Review the Terminal Services documentation for information on connecting to, disconnecting from, and logging off of a Terminal Services session.

If you establish a new session under the same Windows user account, and an old session is still open and running, attempting to run the software on the newly established session will fail.

Using the Change User Function

Procedure

Follow these steps:

- 1 Log on to Terminal Services as the local Administrator.
- 2 Close all other applications.
- 3 Select Windows Start menu > All Programs > Accessories > Command Prompt.
- 4 At the Command Prompt, type the following:

change user/install

To see whether execute mode is enabled and .ini file mapping is on, use this command:

change user/query

- 5 Install the software on a local uncompressed NTFS-formatted drive.
- 6 When the installation is complete, type the following command:

change user/execute

Connecting to the Terminal Services section

You are now ready to connect to the software. Review the Terminal Services documentation for information on connecting to, disconnecting from, and logging off of a Terminal Services session.

If you establish a new session under the same Windows user account, and an old session is still open and running, attempting to run the software on the newly established session will fail.

Configure Windows Server 2008 Terminal Services RemoteApp using TS Web Access

Description Windows Server 2008 includes Terminal Services RemoteApp (TS RemoteApp). Sage 500 ERP can be deployed using TS RemoteApp programs, such as Terminal Services Web Access (TS Web Access). You can use TS Web Access to provide access to RemoteApp programs through a Web page on the Internet or over an intranet.

Install the Terminal Services role before installing any application that is available to terminal server users. If a Terminal Service role is installed after any applications are installed, the application may not function correctly in a multi-user environment.

Procedure

To install the Terminal Service role service.

- 1 Select Windows Start menu > Administrative Tools > Server Manager.
- 2 Under Roles Summary, click Add Roles.
- 3 On the Before you Begin page of the Add Roles Wizard, click Next.
- 4 On the Select Server Roles page, select the Terminal Services and TS Web Access check box, and then click Next.
- 5 On the Terminal Services page, click Next.
- 6 On the Select Role Services page, select the Terminal Server check box, and then click Next.
- 7 On the Uninstall and Reinstall Applications for Compatibility page, review the information, and then click Next.
- 8 On the Specify Authentication Method for Terminal Server page, select the desired authentication method, and then click Next.

- 9 On the Specify Licensing Mode page, select the licensing mode that applies to your Terminal Services environment, and then click Next.
- 10 On the Select User Groups Allowed Access to this Terminal Server page, add any users or groups that you want to add to the Remote Desktop Users group, and then click Next.
- 11 On the Confirm Installation Selections page, verify that the Terminal Server role service will be installed, and then click Install.

Install Sage 500 ERP on the terminal server

Install the software on the terminal server after you have installed the Terminal Server role service. To ensure that an application is installed correctly to work in a multi-user environment, the Terminal Server must be switched into Install mode before the software is installed on the server.

A Terminal Server can be placed into Install mode using one of the following methods.

- Use the Install Application on Terminal Server option in the Control Panel to install the software.
- Before you install a program, run the change user / install command. After the software is installed, run the change user/execute command to exit from Install mode. For more information, see *Using the Change User Function* on page 75.

Completion of Client Installation

Overview

- Introduction** When the client installation is completed, shortcuts are added to your Start menu and additional software and Registry settings are created to support the client software. These are described in this section.
- File locations** The installation copies all components of Sage 500 ERP, including programs, Help, and reports, to the Client folder. Within the folder, there are subfolders for each module.

Sage 500 ERP Shortcuts

- Start menu** The following shortcuts are created in the Sage 500 ERP program group on the Windows Start menu under Programs:
- Sage 500 ERP Desktop: Starts the client software.
 - Utilities: A program group containing shortcuts to the following:
 - ▶ Client Configuration Utility: Enables you to specify the database used for logging on and other logon options.
 - ▶ System Inspector: Shows the files and Registry settings associated with the client software. Use this utility for troubleshooting.
 - Sage 500 ERP Active Planner: Starts the Sage 500 ERP Active Planner software.
 - Sage 500 ERP Active Planner Admin Tool: Starts the Sage 500 ERP Active Planner Admin Tool software.

- Sage 500 ERP Allocations: Starts the Sage 500 ERP Allocations software.
- Sage 500 ERP Allocations Admin Tool: Starts the Sage 500 ERP Allocations Admin Tool software.

If you already have a Sage 500 ERP Utilities program group from installing the Database Utilities, the shortcuts for the Client Configuration Utility and System Inspector are added to it.

ODBC, Registry, and OLE DB Additions

Description	<p>The client installation automatically adds and configures ODBC components, as follows:</p> <ul style="list-style-type: none"> • Adds two 32-bit ODBC and SQL Server communications components. • Adds the User Data Source Name (DSN), MAS 500, to ODBC. The MAS 500 DSN contains vital information used in accessing the SQL Server where the Sage 500 ERP databases have been created.
Database Connection Registry Settings	<p>Do not modify database connection settings manually. Instead, use the Client Configuration Utility. For more information, see <i>Viewing System Settings</i> on page 146.</p>

Installing the Sage Advisor Update

Overview

Introduction

The Sage Advisor Update tool enables you to keep your Sage products up to date with the latest releases and updates. Sage Advisor Update recognizes the Sage products you have locally installed and lists the updates available for those products. If you have a current Sage Business Care Plan for a product, you can download and install the updates available.

Before You Begin

It is recommended that Sage Advisor Update be installed on an administrator's machine so that Product Update release can be properly managed. The updates can be downloaded by the administrator when available and distributed to client machines once the server update is completed. The client and server for Sage 500 ERP must have compatible versions.

Installing the Sage Advisor Update

Procedure

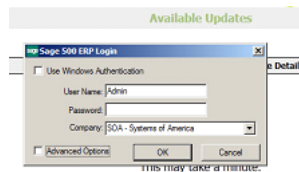
Download the Advisor Update Utility from the Customer/ Partner Portal using the following steps:

- 1 Log in to the Sage Partner/Customer Portal and enter your user name and password.
- 2 Click the [Sage 500 ERP Version 2016](#) link to download the Advisor Update.
- 3 After the download is complete go to the folder where the install was downloaded.
- 4 Run the install by clicking Sage500ERPAdvisorUpdate.exe file.

Using Sage Advisory Update

After the installation is complete, Sage Advisor Update automatically starts and is accessible through a system tray icon. The system tray icon may not be visible in the main area of your system tray, but can be configured by modifying your Customized Notification Settings.

When the Sage Advisor Update attempts to query for new updates you are prompted to log into the Sage 500 ERP system using your Sage 500 ERP credentials.

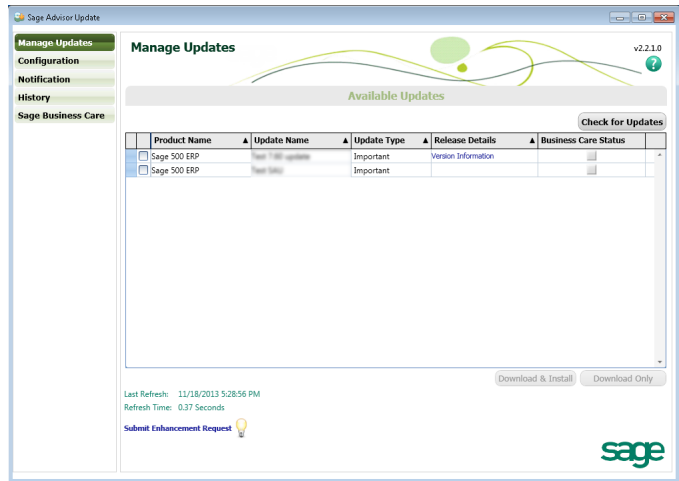


Note: If you have stopped the System Tray Icon instance of Sage Advisor Update you can start the Sage Advisor Update by running it from the Start->Program menu. You are then prompted for then login credentials for the Sage 500 ERP system.

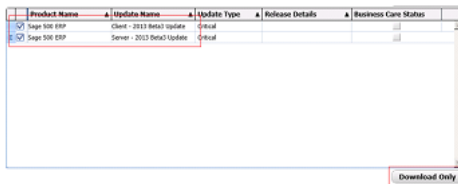
The available downloads for the current version of your Sage 500 ERP System display, based on the information provided during the Login Process. To change the database/Registration information being used, you need to exit Sage Advisor Update and start it again to log into the desired system.

Installing the updates

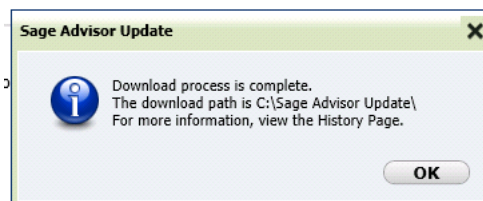
- 1 When updates are available they are listed in the screen shown below:



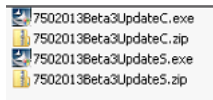
- 2 Click the check box for the item(s) you would like to download. Then click the **Download Only** button.



- 3 When the download is complete a message displays showing where the downloaded file(s) are located.



- 4 Go to the location where the files were downloaded.
 - ▶ You will see two files in this location. One file is a compressed version of the file which is used for transmission and the other file is the extracted version of the compressed transmission file.
 - ▶ In the example below there were two files downloaded but you see four files in the folder. Two of the files are the compressed files and two are the extracted files.



- 5 Select the .exe file you need to install and apply your updates where appropriate (client or server).

Installing Crystal Reports Designer

Overview

Introduction

During installation of the client, the Crystal Reports runtime engine is also installed. This provides you with the ability to print and preview reports in the software.

To modify or create reports, install the Crystal Reports Designer. This component accompanies your software, but you must install it separately. It is included with a local installation license. Contact Business Objects to purchase a network license.

Prerequisites

Description

Before you install the software, do the following:

- Uninstall previous versions of Crystal Reports and Crystal Reports Designer.
- Shut down all running software.
- Have a default print device.

Installing Crystal Reports Designer

Procedure

You are now ready to install Crystal Reports.

- 1 Start the Crystal Reports installation from the Sage 500 ERP folder. The installation software checks for any earlier versions of the software and prompts you to remove them before installing the software.
- 2 Complete the windows in the Installation wizard as prompted.

Registration and Security

5

The final steps in completing the installation are to register the software and grant access rights to users. These functions are part of System Manager, and this chapter provides instructions for using System Manager to perform these tasks.

In this chapter

Starting Sage 500 ERP as an Administrator	87
Registering the Software.	90
Setting Up Companies and Modules.	100
Setting Up Users.	106

Starting Sage 500 ERP as an Administrator

Overview

Introduction

To register the software and assign access rights to users, log on to the software using the admin logon you defined when you created the databases. As administrator, you can set up appropriate security for users on the SQL Server where the databases are located, including users configured for Windows authentication.

This section explains the logons available for administrators. For information about logging on to the software, refer to the *Getting Started* guide.

Default Logon

Default admin logon

Use the default admin logon the first time you log on to the software. The admin logon allows you to grant users access rights and perform other administrative tasks.

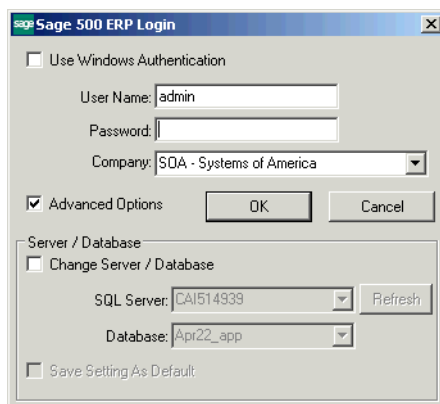
Use the logon name and password entered in the Database Creation Utility. For an upgraded database set, use an admin logon that was created for the database or the default of admin and no password. For more information, see *Default Administrative Logon* on page 36.

Before modifying passwords and permissions for the admin logon or any other users, see *Setting Up Users* on page 106.

Logging on as an Administrator

Description

To start Sage 500 ERP, select Windows Start menu > Sage 500 ERP Desktop. The Sage 500 ERP Login window appears.



First-time logon

For your first-time logon as admin, complete the window as follows:

- 1 Clear the Use Windows Authentication check box.
- 2 Log on with the admin user name and password. For an explanation of which user name and password to use, see *Default Logon* on page 87.
- 3 Select the Advanced Options check box. If this check box is selected, the logon window expands and displays the fields for selecting the server and database.
- 4 Verify the server and database fields display the server and system and application databases to use. If not, select the Change Server/Database check box, and select the server and databases to use. If you do not see the servers or databases you want, click Refresh to list the SQL servers in the domain and the databases in the selected SQL server.
- 5 Select the company to use at the Company field.

- 6 Select the Save Setting As Default check box to log on to the same server and database each time you start the software.

When you are finished, click OK to log on. The Desktop opens. For information on using the Desktop, refer to the *Getting Started* guide.

Admin logon with Windows authentication

If you are logging on with Windows authentication and the admin logon uses SQL Server authentication (which is the case if you use the default logon), use the Client Configuration Utility to change to SQL Server authentication and log on as admin. For information about using the Client Configuration Utility, refer to the *Getting Started* guide.

Registering the Software

Overview

Description

After you install the software, register it as shown in this section. For an overview of the registration process, see *Registration Process* on page 16.

If your software is already registered, you must reregister it if you perform any of the following:

- Rename the SQL server
- Rename the Sage 500 ERP database
- Change the network card on the SQL server
- Move the Sage 500 ERP database to another server

Prerequisite Steps

Procedure

Before registering the software, do the following:

- Have all users log off.
- Get the packing list that accompanied your Sage 500 ERP package. The packing list contains your customer number, System Manager serial number, and unlocking key.
- To use automatic registration, verify that the SQL Server Agent is running and ready to run a scheduled event, and that you have a continuously working Internet connection.

Serial number and unlocking keys

The serial numbers and unlocking keys contain alphanumeric characters, which can be entered in upper or lower case letters. Unlocking keys are unique to each system and cannot be used for other installations.

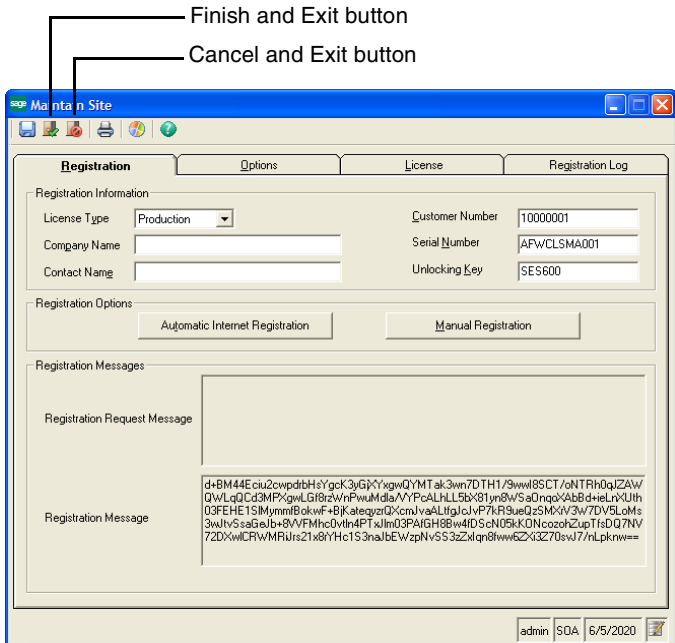
If you have questions about the unlocking keys, contact the Sage 500 ERP Product Registration Department at (800) 944-5487.

Registration Procedure

Starting the registration

Follow these steps to register the software:

- 1 Log on to the software. For more information, see *Starting Sage 500 ERP as an Administrator* on page 87.
- 2 In the Tasks pane, select System Manager Maintenance menu > Maintain Site. The Maintain Site window appears.



- 3 At the License Type field, select whether you are installing a Demonstration, Developer, Test, or Production system.
- 4 Enter the Company Name and Contact Name fields.
- 5 Complete the Registration tab with the information from the packing list:
 - a Type the customer number as it appears on the packing list at the Customer Number field.
 - b Type the System Manager serial number in capital letters as it appears on the packing list at the Serial Number field. This field is available only if Production is selected at the License Type field.
 - c Type the System Manager unlocking key as it appears on the packing list at the Unlocking Key field.

Important: If you are upgrading from a previous version, use the customer number, System Manager serial number, and System Manager unlocking key from that version. If the customer number has ten digits, enter the first nine digits.

- 6 Click Save to save the customer number, System Manager serial number (if entered), and System Manager unlocking key.
- 7 Select whether you are performing an automatic or manual registration. For an explanation of these options, see *Registration Process* on page 16. Depending on which method you use, see *Automatic registration* or *Manual registration* to continue the procedure.

**Automatic
registration**

Before performing automatic registration, do the following:

- 1 Have all other users log off.
- 2 Verify that you have a working Internet connection either at the server or the client where you are performing the registration.

Then, follow these steps:

- 1 Click Automatic Internet Registration. The system processes the registration and enables automatic updates on a periodic basis.
- 2 Go to *Verifying and completing the registration* on page 95 for instructions on completing the installation.

**Manual
registration**

Before performing manual registration, verify that you have a working Internet connection. Then, follow these steps:

- 1 Click Manual Registration.
- 2 Highlight *all* of the text in the Registration Request Message box in the Maintain Site window by placing the cursor in the Registration Request Message box and pressing CTRL+A. After the text is selected, press CTRL+C to copy the text to the clipboard.

- 3 In a Web browser, go to this address:

<http://registration.sagesoftware.com/registration>

The following page appears:

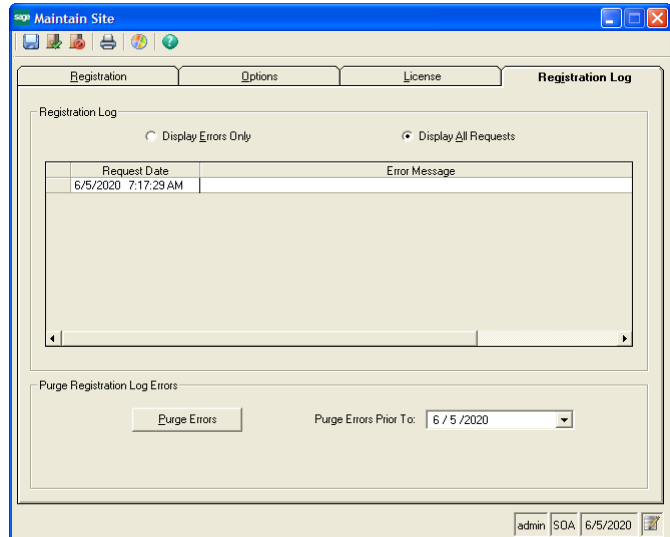
The screenshot shows a web browser window displaying the Sage 500 ERP Registration page. The page has a blue header with the Sage logo and the title "Sage 500 ERP Registration". Below the header, there are two text input fields. The first field is labeled "Registration Request Message:" and contains the instruction: "Paste the Registration Request Message from the Registration Request Message textbox in the Maintain Site form and click the Submit button." The second field is labeled "Registration Message:" and contains the instruction: "Copy the Registration Message and paste it into the Registration Message textbox in the Maintain Site form." At the bottom of the form, there are two buttons: "Submit" and "Clear".

- 4 Paste the registration request message at the Registration Request Message field. Place the cursor in the text box next to the Registration Request Message and press CTRL+V.
- 5 Click Submit. A registration message appears in the bottom box.
- 6 Highlight all of the text at the Registration Message field (CTRL+A) in the Web browser and copy it (CTRL+C) to the clipboard. Close the Web browser.
- 7 Return to the Maintain Site window and paste (CTRL+V) the text at the Registration Message field.
- 8 Click Save in the Maintain Site window to record the message.
- 9 Go to the next section, *Verifying and completing the registration*, for instructions on completing the installation.

Verifying and completing the registration

After you complete the automatic or manual registration, follow these steps to verify and complete it.

- 1 Click the Registration Log tab. The tab shows registration requests and any errors that occurred.



Read the log as follows:

- ▶ If a request was successful, the Error Message column is blank. Scroll to the right to view more information about the registration.
- ▶ If an error occurred, a description of it appears to the right of the date and time in the Error Message column.

Note: The log can be printed or exported to Excel. Right-click the log and select Print or Export from the menu that appears.

To purge the log of errors, enter the date at the Purge Errors Prior To field and click Purge Errors. Errors logged before the date entered are purged.

- 2 Run the Site Profile listing to view the license information and list of registered modules. Click the Print button in the toolbar to generate the report. Confirm that the license information in your system is correct. For more information about this report, see *Site Profile List* on page 171.

Note: You can also view license information by clicking the License tab.

The screenshot shows the 'Maintain Site' application window with the 'License' tab selected. The 'License Profile' section contains the following fields:

Expiration Date	12/31/2020	SQL Server Edition	Enterprise
License Type	Production	License Version	Lic03.0
Allow Updates	Yes	Last Valid Registration	6/5/2020 7:17:29 AM

The 'License Agreement' section contains a text box with the following text:

For license terms and conditions, please click the "License Agreement" button or go to the Help files and choose "License Agreement."

Below the text is a button labeled 'License Agreement'.

The 'License Limits' section contains a table with the following columns: 'Limit' and 'Unlimited'.

	Limit	Unlimited
Budgets	<input type="text"/>	<input checked="" type="checkbox"/>
Business Insights Users	<input type="text"/>	<input checked="" type="checkbox"/>
Companies	<input type="text"/>	<input checked="" type="checkbox"/>
Concurrent Users	<input type="text"/>	<input checked="" type="checkbox"/>
eCustomers	<input type="text"/>	<input checked="" type="checkbox"/>
eSalespeople	<input type="text"/>	<input checked="" type="checkbox"/>
Timesheet Users	<input type="text"/>	<input checked="" type="checkbox"/>
Warehouses	<input type="text"/>	<input checked="" type="checkbox"/>

At the bottom right of the window, there is a status bar showing 'admin SDA 6/5/2020'.

If the settings do not match your license, contact Sage for assistance.

- 3 When you are finished, click Finish and Exit to close the window.
- 4 Close and reopen the software. The settings defined in the license take effect.

Registration Renewals

Introduction

You are prompted to renew registration when your maintenance and support agreement is about to expire. Register again whether or not you plan to continue with the maintenance and support agreement as follows:

- If you are continuing with the maintenance and support agreement, renewing your registration enables you to continue to install patches and updates according to your license agreement.
- If you are not continuing with the maintenance and support agreement, renew your registration so that you can continue using the software. The new registration does not enable you to install patches and updates.

Grace period after registration expires

If you do not renew the registration before it ends, the system enters a 45-day grace period. During this grace period, you have access to the same modules with the same number of users as you did when the software was registered.

Procedure

To renew your registration, repeat the registration procedure with the following exceptions:

- Do not change the customer number, System Manager serial number, and System Manager unlocking key. The registration system uses the same information for renewals.
- If you are using automatic registration, the registration renewal is sent automatically when required.
- If you are using manual registration, you have the following options:
 - ▶ To renew registration automatically, click Automatic Internet Registration. The registration will continue to be renewed at regular intervals.

- ▶ If you still cannot use automatic registration, renew the registration manually. Click Manual Registration to generate a new registration request message. Repeat the procedure for manual registration as shown in *Manual registration* on page 93.

Troubleshooting Automatic Registration

Description

If you have difficulties with automatic registration, perform the following:

- 1 Verify that SQL Server Agent is running. If you need to start it, use an administrative logon. For information, see *Running and Viewing Scheduled Tasks* on page 57.
- 2 Set the automatic registration schedule to the desired interval.
- 3 Run automatic registration from a client workstation with an Internet connection instead of a server.
- 4 Verify that you have a working Internet connection either at the server or the client where you are performing the registration.
- 5 Check for recently installed operating system patches. A patch may interfere with registration data. If you have any problems, contact Sage Customer Support.
- 6 Verify that the license components are installed correctly in the Windows system folder.
 - ▶ For 32-bit Windows, LicRegClient.dll and LicRegServer.dll are installed in the C:\Program Files\Common\Sage Software\Sage 500 ERP\Shared folder for both the client and the server.

- ▶ For 64-bit Windows, LicRegClient.dll is installed in the C:\Program Files\Common Files\Sage Software\Sage 500 ERP\Shared folder for the client, and LicRegServerX64.dll is installed in the System32 folder for the server.
- 7 Use manual registration if automatic registration fails or if you have a firewall that prevents registration through the Internet.

Setting Up Companies and Modules

Overview

Introduction

The next task is to create the companies that you will use in the system and activate the modules to be used with each company.

Multiple companies

You can create more than one company in a set of system and application databases. All of the companies are linked together so that they can be consolidated or used for intercompany transactions. The number of companies you can create in a database set is determined by the license you purchased.

Company setup and security

Company setup is important from a security standpoint for the following reasons:

- You grant users access by company, as well as module and task. For example, you might want an Accounts Payable clerk to only enter vouchers for one company and not the others.
- You activate modules by company. For example, if you designate a company to be a parent for consolidations, you might only activate the Advanced Consolidations module.

Warning: Only activate the modules that have been registered. You cannot access data in unregistered modules after the grace period has expired. For an explanation, see *Registration Grace Period* on page 18.

Information Used in Setting Up Companies

Required information

When you set up the company, provide the following information:

- Company name, address, phone numbers, and tax IDs. This information is used in reports and transaction documents.
- Home currency for the company. A set of predefined currencies is provided. You can set up additional currencies with the Multicurrency module. For more information, see *Multicurrency* in the Help system.

Setting Up the Company

Procedure

Follow these steps:

- 1 Log on as shown in *Logging on as an Administrator* on page 88.
- 2 In the Desktop, select System Manager Maintenance menu > Maintain Companies.

Save button (available when you enter a company code)

Activate Modules button (available when you enter a company code)

- 3 At the Company field, type a code for the company you are creating. This code is used to identify the company.

The company code must start with a letter for consolidations to work properly.

- 4 Enter the remaining fields. This information is used in financial statements, reports, and other documents generated for that company.
- 5 Click Save.

Activating Modules

Introduction

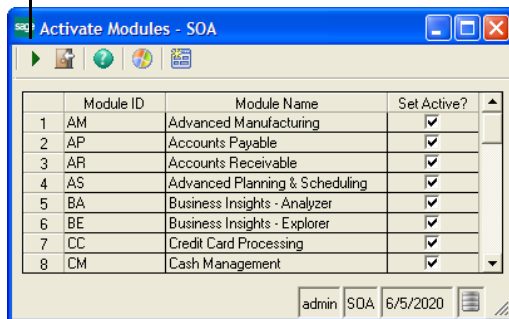
You are now ready to activate the modules for that company. Do not activate modules you do not intend to register. You cannot access data in modules that are not registered after the grace period has expired.

Procedure

Follow these steps from the Maintain Companies window.

- 1 Click Activate Modules. The following window appears:

Proceed button



- 2 The window lists all of the modules you have installed. For each module to activate for the company, select the Set Active check box. If a module requires tasks in another module, those specific tasks are activated as well.

- 3 When you have finished selecting the modules, click Proceed. The system updates the database to support the module. When the process is complete, close the window.
- 4 When you are finished setting up companies, close the Maintain Companies window, or create or change another company in the Maintain Companies window.

Activating a module does not affect the appearance of modules in the Desktop. If you try to use a module that is not activated for that company, you get the following message: "Unable to start the selected task. The module associated with this task is not activated." You can customize the Desktop to remove modules that you did not activate for any of the companies. For more information, see *Desktop Customizations* on page 131.

Fixing modules that are activated but not registered

If you activate a module that you did not register, you will not be able to access data in that module after the grace period ends. You cannot deactivate a module after you have activated it.

The only way to stop the system from generating inaccessible data is to reinstall the database. You will lose any data you have entered. Follow this procedure:

- 1 Run the Database Creation Utility to create a new database set. See *Creating New Databases* on page 32.
- 2 Register the modules you purchased.
- 3 Activate only the modules you registered.

Editing Companies

Procedure

To change company information, do the following in the Maintain Companies window:

- 1 At the Company field, type the company code, or click the Navigator button to select it from a list.
- 2 Edit the fields and click Save.

The following fields can only be viewed:

- ▶ Company: You cannot change the company code.
 - ▶ Home Currency: You cannot change the home currency after transactions are entered.
- 3 Repeat these steps to change another company or close the Maintain Companies window.

Deleting Companies

Precaution

If you delete a company, it permanently deletes all data for that company. It cannot be restored, and you cannot undo the deletion. If you mistakenly delete a company, you must use backup files to restore information.

Prerequisites

Before deleting a company, do the following:

- Stop all other activity on the software.
- Back up the databases used by the software.
- Delete all open intercompany transactions for the company you are deleting.
- Look for closed intercompany transactions for that company. If there are any, the company cannot be deleted.
- Allow sufficient time for this process to be completed.

Procedure

To delete a company, do the following in the Maintain Companies window:

- 1** At the Company field, type the company code, or click the Navigator button to select it from a list.
- 2** Click the Delete button.

A dialog box asks you to confirm. When you start, the dialog box shows the status of the deletion. When the deletion is finished, the dialog box closes.

- 3** Repeat these steps to delete another company or close the Maintain Companies window.

Setting Up Users

Overview

Introduction

To set up users, follow these general steps:

- Set up security groups for different types of users, such as administrators, clerks, and managers. You can define a default group that applies to all new users, unless you specify a security group for that user.
- Create users. You can create new users directly from Sage 500 ERP or grant access to Sage 500 ERP to existing SQL Server and Windows Domain users. As you create users, you set their access rights.

These steps are described in this section.

Set Up Security Groups

Description

A security group defines a set of access permissions, which are the rights to view, change, or manipulate data. Users you assign to a security group have the access permissions of that security group. Set up security groups to grant access rights to different modules and tasks for different sets of users.

Ways of setting up security groups

You can set up security groups in the following ways:

- By a specific module: For example, you might assign all Accounts Payable clerks to a security group called APTASKS and give that group access only to tasks within the Accounts Payable module.
- By type of task: You can define a group that accesses similar tasks across all modules. For example, you might assign those who analyze your financial data to a group called REPORTS and give that group access to all reporting tasks.

- By default: You can create a default security group that is used when users are not granted a specific security group for a company. This default security group should contain permissions only to tasks necessary for all users within all companies.

Prerequisites for setting up security

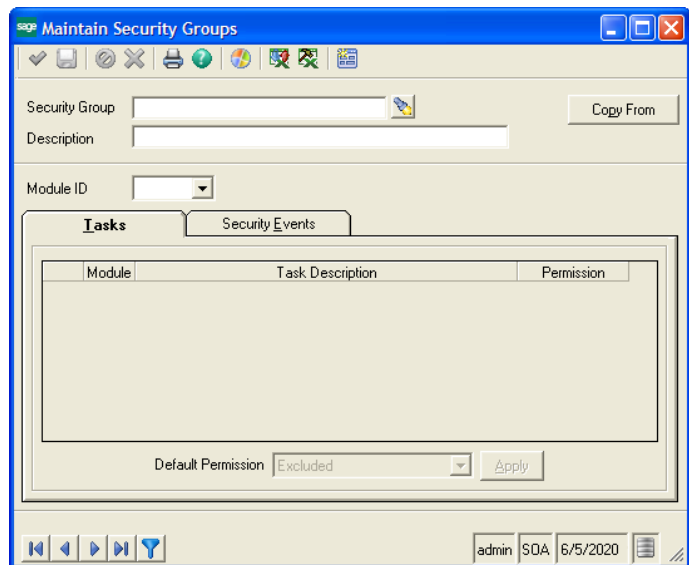
When you set up security groups, do the following:

- See the module guides for information about which tasks different users need.
- Assign permissions from least permissive to most permissive.

Procedure

Follow these steps to set up security groups:

- 1 Verify that the company for which to assign security groups is active. For information about logging on to different companies and changing between them, refer to the *Getting Started* guide.
- 2 Select System Manager Maintenance menu > Maintain Security Groups. The following window appears:



- 3 Type a name and description for the security group.
- 4 You have two options for creating a new security group:
 - ▶ Create a new group. By default, a new security group is excluded access from all tasks and security events for all modules. Set up security to the tasks and security events.
 - ▶ Copy access rights from another group and make necessary changes. Click Copy From. Select the security group to use as the basis for the group you are creating. You can then change the security setup for your new group.

Warning: Do not use the system-defined security group SysAdmin as the basis for the default group. SysAdmin provides high-level security access, such as module activation, which should be carefully restricted.

- 5 At the Module ID field, select the module for which to assign access rights. You can grant rights to all modules at one time by selecting All.
- 6 The Tasks tab allows you to grant levels of access to the commands that you can perform with the selected module. For each task, select one of these security levels:
 - ▶ Select Excluded to prevent the user from seeing the task.
 - ▶ Select Display Only to allow the user to see data in the task but not change or use it.
 - ▶ Select Normal to allow the user to use the task and change the data at all of the fields in the task window.

- ▶ Select Supervisory to allow the user all the normal rights, and has the ability to perform supervisory tasks, such as posting private batches.

Select the level for each task. If you select a different module ID, you are prompted to save the settings.

Tip: To change the permissions of all of the tasks or security events at one time, click the plain gray box in the upper left corner of the Tasks grid. This selects all rows and enables the Default Permission field. Select the security level and click Apply.

- 7 The Security Events tab allows you to grant access to module-specific overrides in tasks. Security Events handle special circumstances that occur occasionally, such as when a customer exceeds a credit limit or when you need to grant override approval to continue processing data. You may prefer to grant only a few people the permission to override security events. For each security event, you can select either of the following:

- ▶ Select Yes to allow the user to perform the event.
- ▶ Select No if the user is not allowed to perform the event.

Select the choice for each security event. If you select a different module ID, you are prompted to save the settings you made.

- 8 Repeat steps 5 through 7 for each module (if you did not select All).
- 9 Click Save. You can create another security group or close the window.

Changing security groups You can change settings for existing security groups. Open the group by typing its code at the Security Group field or click the Navigator button to select it from the list. When you save the changes, they will apply to all users who are assigned to that security group.

Deleting security groups When you delete a security group, users assigned to that group lose the access rights defined in that group. You can assign users to other security groups to give them access.

Warning: You cannot undo the deletion of a security group.

To delete a security group, open it and click the Delete button. A deletion cannot be undone. To reestablish a security group that you have deleted, you must reenter all information for the security group or copy the information from another security group.

Setting Up Users

Ways of adding users You can set up users in the following ways:

- Add an existing SQL Server user.
- Add an existing Windows user or group, who can be on the same or a different domain. The domain needs to be one to which you have permissions and is accessible from the SQL Server.
- Create a new user who is not already on the SQL Server but has a Windows logon.

SQL Server access for users When you add a user, that person is also granted access rights to the SQL Server where the databases are located. You can restrict access to databases on that SQL Server from other applications by using application roles. For more information, see *Security Options* on page 115.

Restriction in logon names

Do not use reserved SQL Server names, keywords, or characters.

Requirements for users on the SQL Server

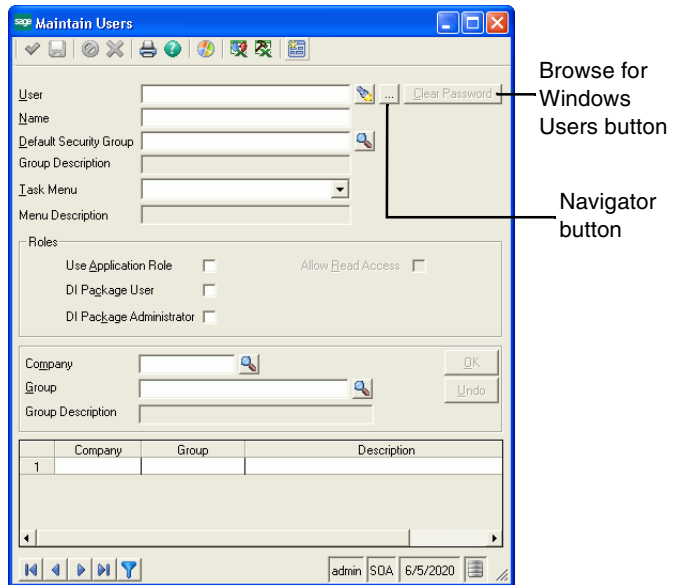
You do not need to create logons in SQL Server before you add them. When you select an existing Windows domain user or group or create a new user in Maintain Users, the SQL Server logon is created automatically. For Windows users who already have a SQL Server associated with them, the software uses that SQL Server logon.

It is not necessary to create a logon on the SQL server before adding it to the software.

Procedure

To add users, follow these steps:

- 1 Verify that the company for which to assign security groups is active. For information about logging on to different companies and changing between them, refer to the *Getting Started* guide.
- 2 Select System Manager Maintenance menu > Maintain Users. The following window appears:



- 3 Perform one of the following to define or select a user ID:

Existing logon	Methods for selecting ID
None	Type the logon name at the User field.
SQL Server	Do either: <ul style="list-style-type: none"> Type the SQL Server logon name at the User field. Click Navigator and select the SQL Server logon.
Windows	Do either of the following: <ul style="list-style-type: none"> Type the Windows logon name and domain at the User field (such as domain\user). If this is a user on the current domain, type just the logon name; the domain name appears automatically. Click the Browse for Windows Users button and select the user from the domain. For more information, see <i>Selecting the Windows user and domain</i> on page 114.

Note: If you have logged on with a logon other than the default admin logon, when you click the Browse for Windows Users button, you are prompted to enter the system administrator password.

- 4 Type the user's name at the Name field.

- 5** If desired, select a default security group for this user. This security group is used if you do not assign the user to a group for a company. The default group is also assigned to the user automatically when new companies are added to the system.

If you do not assign a default security group, the user needs to be assigned to a security group for each company to which the user has access. If you do not assign the user to a security group for a company when there is no default, that user will be excluded from all tasks within all companies in which permissions have *not* been granted. You can use this approach to exclude users from a company.

You can set roles for users that control access for AppRole and read-only status by selecting the Use Application Role or Allow Read Access check box. You can also set roles for users who will be creating, maintaining, or running import jobs within the Data Import Manager module. These roles are established by selecting the DI Package User or DI Package Administrator check box for users. For more information, see *Security Options* on page 115 and Appendix B, *Data Import Manager Installation & Configuration*.

- 6** To assign the user to a different security group for each company, do the following:
 - a** Select a company code at the Company field.
 - b** Select a security group at the Group field.
 - c** Click OK. The group is added to the list at the bottom of the window. If you change your mind about adding the company and security group to the user, click Undo.

Repeat this step for each company to which to assign the user a security group other than the default.

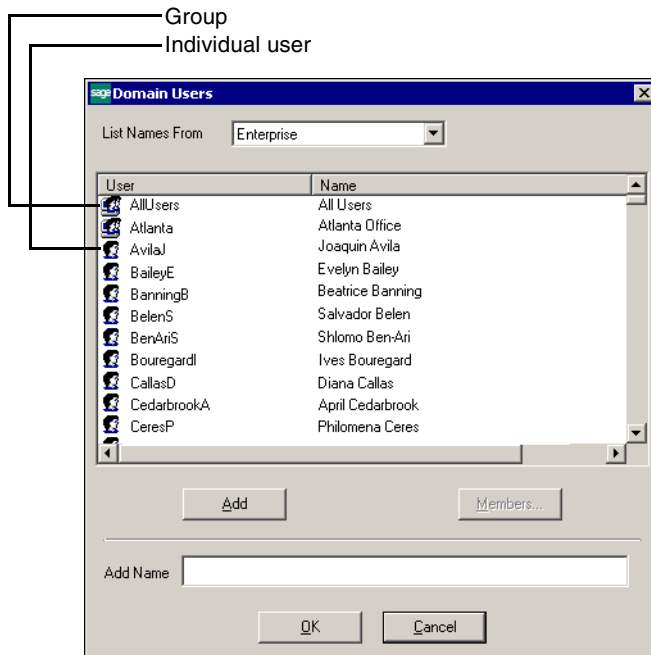
You can assign users to more than one security group. If the user is in more than one security group for the same company, the system grants the user access permissions of the security group with the highest access permissions per task.

Note: You must specify a default security group if you are implementing modifications by group using the Customizer module.

- 7 When you are finished assigning security groups to that user, click Save. You can then assign security groups to another user or close the window.

Selecting the Windows user and domain

If you are assigning a Windows user or group, click the Browse for Windows Users button in the Maintain Users window to select the domain and user or group name. The Domain Users window appears:



Perform the following:

- 1 At the List Names From field, select the domain where the user or group is located. The list changes to show the users and groups in the domain.
- 2 Select the user or group. If you select a group, you can click Members to list the members in the group.
- 3 Click Add. The user or group you selected appears at the Add Name field.
- 4 Click OK. The Domain Users window closes and the user or group you selected appears at the User field in the Maintain Users window.

Security Options

Description	When you add users, they are granted access to the SQL server where the databases are located. If you have databases from other applications, you can control the access that Sage 500 ERP users have to them. You can also enable read-only access to Sage 500 ERP databases from other applications.
Using application roles	The application roles (also known as AppRoles) feature allows users to access databases through the client software, but not other applications. This option creates an application role logon on the SQL server that enables the application to assume the access rights to complete tasks without granting the user explicit rights. The user can have the access you granted while in the software, but not access to the other application databases on that SQL server.

- Procedure** To use application roles, you need to follow these steps in System Manager:
- 1** In the Maintain Site window, click the Options tab and select the Enable Application Role check box to set up the ApplicationAppRole. Assign a password.
 - 2** When you use Maintain Users to grant user access rights, select the Use Application Role check box to restrict the rights of that user to the databases.
- For more information about application roles, see the SQL Server Books Online.
- Allow read access** When the application role is enabled and the Use Sage AppRole option has been selected, users cannot access databases except through the client software. Select the Allow Read Access option to grant users read-only access to databases from other programs.
- Setting Data Import Manager roles** You can set roles for users who will be creating, maintaining, or running import jobs within the Data Import Manager module. These roles are established in the Maintain Users window by selecting the DI Package User or DI Package Administrator check box for users. For more information, see Appendix B, *Data Import Manager Installation & Configuration*.
- Requiring passwords** Another way to add security to the system is by requiring passwords for users. In the Maintain Site window, click the Options tab and select the Require Passwords check box.

Changing User Settings

Introduction

To change settings or delete a user, follow the instructions in this section.

Changing user security rights

You can change the security groups to which the user has access at any time. Follow these steps:

- 1 At the User field, select the user to change. For users set up in the system, Yes is selected at the Is Sage 500 ERP User field.
- 2 Make the changes. Note the following:
 - ▶ To remove the user from a security group, right-click it and select Delete from the menu that appears.
 - ▶ To insert a row into the list, right-click where to put the row and select Insert Line. A blank row is inserted above the row you selected. Select the company at the Company field and security group at the Group field, and click OK. The information is inserted into the blank row.
- 3 Click Save.

Clearing passwords

The Maintain User window also enables you to clear the password of users who have forgotten them. This applies only to users with SQL Server authentication.

Open the user information by selecting the user at the User field. Click Clear Password. Users can define a new password in the User Preferences window, which is described in Chapter 7, *System Configuration and Management*.

Deleting users

When you delete a user from the system, you remove all access rights to all companies for that user. You are not deleting the user from SQL Server. Deleting user access also does not affect references to that user in Sage 500 ERP data, which preserves the audit trail.

Open the user information by selecting the user at the User field and then click the Delete button.

To delete a user from both Sage 500 ERP and SQL Server, delete the user from Sage 500 ERP first. Then, delete the user from SQL Server.

Managing and Protecting Databases

6

This chapter shows how to move and copy databases, and synchronize users.

In this chapter

- Using the Database Synchronization Utility 120
- Options for Copying or Moving Databases 124

Using the Database Synchronization Utility

Overview

Introduction

Use the Database Synchronization Utility after you move or copy databases. This utility enables you to use databases on another SQL Server by adding users in the databases to the new SQL Server and resetting internal database references in the databases.

This section explains how to use the Database Synchronization Utility and configure the client software after moving or copying the databases. For instructions on how to move or copy databases in different configurations, see *Options for Copying or Moving Databases* on page 124.

Precautions

Introduction

This section lists information you should be aware of before you move or copy databases.

Installation

The Database Synchronization Utility is installed with the Database Utilities. If you have not installed the database software, see Chapter 3, *Database Creation and Upgrade* for procedures.

Preliminary tasks

Before performing the procedures shown in this chapter, note the following:

- Verify that the SQL Server meets the requirements. For more information, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at:
<https://customers.sagenorthamerica.com>

- To perform these procedures, you must have knowledge of SQL Server and systems functions. The operations are, therefore, beyond the general scope of Sage Customer Support. If you are not familiar with these operations, defer the procedure to a knowledgeable professional.

Effects on registration

Registration of the software is tied to a database set and the SQL Server where it is installed. If you change the database names or place the databases on another SQL Server, you need to reregister. For more information, see *Registering the Software* on page 90.

Starting the Database Synchronization Utility

Procedure

To start the Database Synchronization Utility, follow these steps:

- 1 Select Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > Database Synchronization Utility.
- 2 You are prompted to log on. Select the SQL Server where you put the moved or copied files. Type the sa password for that SQL Server. Click OK.

Using the Utility

Description

To use the utility, select the databases that you moved or copied to the SQL Server. You then use options to indicate what items to reset, as described in this section.

Synchronize users

The Synchronize logons on a new SQL Server check box adds the users created in Sage 500 ERP to the SQL Server where you put the databases. Select this check box if you copy or move databases to a new SQL Server.

When you recreate the users on the new SQL Server, the following options are available:

- The Create new SQL Server logon with no password and clear user password option creates a new SQL Server logon for each user with a null password. The users in the databases are removed and recreated, and their database object permissions are regranted.
- The Create new SQL Server logon with the same name and password option creates a new SQL Server logon for each user with the password defined in the software. The new logons are linked to the users in the databases, and their database objects permissions are retained.

Check database name references

The Check database references check box resets the internal name references used by the software to refer to the other databases in the set. Select this check box when you rename databases or copy them to another server.

Registering the new databases

Databases need to be registered when they are moved to a new server. To register the databases as you sync them, select the Send new registration request check box. Type your existing information or new registration information at the Customer Number, SM Serial Number, and SM Unlocking Key fields.

To develop databases on a test server and then move them to another server when you are ready to use them for production use, first create the databases on the test server using TEST as the System Manager serial number along with your customer number and System Manager unlocking key. When you move the databases and run the Database Synchronization Utility, select the Send new registration request check box and type the same customer number and System Manager unlocking key, but enter the System Manager serial number from your packing list.

During synchronization, the system performs automatic registration. If automatic registration fails, you need to run manual registration after the database has been synchronized.

For more information about the registration process, see *Registration Process* on page 16. For the registration procedure, see *Registering the Software* on page 90.

Connecting the Client

Procedure

After moving or copying databases, change the pointers the software uses to find the server and clients. Perform these changes by following these steps:

- 1 Start the Client Configuration Utility within ODBC and add any required advanced information for the new server. For detailed instructions, see Appendix D, *Protocol Issues*.
- 2 Run the Client Configuration Utility as shown in *Viewing System Settings* on page 146.
- 3 Select the server and click Refresh. Select the system and application database to use.
- 4 Start the client. For instructions, see *Starting Sage 500 ERP as an Administrator* on page 87.
- 5 In the logon window, select the Advanced Options check box to verify or change the server and databases to which the client is connecting.

Options for Copying or Moving Databases

Overview

Introduction This section explains ways for copying or moving databases either to the same SQL Server or another SQL Server.

Copying Data Between Companies

Description Note the following to make copies of settings used by a company: Assisted Company Setup enables you to copy settings and data from one company to another within the same set of databases. It cannot transfer settings from a company on another database.

To create a company using settings in another database, do the following:

- 1 Make a copy of the database containing the company you want using the procedures in this section.
- 2 Create the company on the database.
- 3 Use Assisted Company Setup to copy settings from the desired company to a new one.
- 4 If desired, delete the company from which you copied the settings after you have set up the company to your satisfaction.

Single-User Unique Set on the Same SQL Server

Procedure

You can create more than one database set on the same SQL Server.

To create a second unique database set using the same server with access granted to the “admin” user ID only, follow the steps below. This scenario does not allow a password or password change in either database set for the admin user.

- 1 Run the Database Creation Utility. For instructions, see Chapter 3, *Database Creation and Upgrade*.
- 2 From the Database Creation Utility, specify device and database names different from those previously created.

Multi-user Duplicate Set on the Same SQL Server

Procedure

You can create a duplicate database set on the same SQL Server with access granted to multiple users.

To create a second duplicate database set using the same server with access granted to multiple users, follow the steps below. This scenario does not enable a password change in either database set for SQL Server users. This does not apply when using Windows authentication.

- 1 Run SQL Server Management Studio.
- 2 Create a new database for the application database by performing the following:
 - a Select the server where you want to put the database.
 - b From the Action menu, select New > Database.
 - c Specify the same file sizes for the database and transaction log as those shown in the production database.

- 3** Back up the application database. On the Tools menu, select Tools > Backup Database. Then select these options:
 - a** Select the application database to back up.
 - b** Under Backup, select Database - complete.
 - c** Under Destination, add a new backup destination. It can be either a local or mapped hard drive or tape. Verify there is enough space to accommodate the data.
 - d** On the Options tab, select Overwrite existing media, Verify backup upon completion, and Initialize and label media. Assign the proper name and description to the media set.

Click OK to start the backup.
- 4** Repeat steps 1 and 2 for the production system database.
- 5** Restore the databases you backed up into the databases you created. From the Tools menu, select Restore Database. Starting with a restore of the application database, specify the settings as follows:
 - a** At the Restore as database field, select the database you created on the destination server as the application database.
 - b** Select From device.
 - c** Select the device where you backed up the production application database.
 - d** Select Restore backup set and Database - complete.

- e On the Options tab, select the Force restore over existing database check box and the Restore database files as check box. Enter the drive, path, and file name where the database will be restored.

Click OK to start the restore. When you are finished with the application database, repeat this step to restore the system database.

- 6 Run the Database Synchronization Utility as shown in *Using the Database Synchronization Utility* on page 120. Log on to the destination SQL server.
- 7 Log on and select the new databases created. Select Check database reference, and click Proceed.

Multi-user Duplicate Set on a Separate SQL Server

Description

You can create a duplicate set of databases on a separate SQL server. You can grant access to either set to multiple users, and this configuration enables the use of passwords and permits password changes for all users.

If all users created use Windows authentication and the new SQL Server does not connect to the same domain, these users will no longer have logon abilities into the software. New Windows or SQL Server users will have to be created.

To make a duplicate set, you back up the original databases and restore the data into new databases you create on the other SQL Server.

In this procedure, the SQL server on which the databases originate is referred to as the production server. The destination SQL Server is referred to as the destination server.

Procedure

Follow these steps. If you need more information about performing these procedures, see the SQL Server documentation.

- 1** Run SQL Server Management Studio.
- 2** Verify that the production and destination servers are registered.
- 3** Back up the application database. From the Tools menu, select Tools > Backup Database. Then select these options:
 - a** Select the application database to back up.
 - b** Under Backup, select Database - complete.
 - c** Under Destination, add a new backup destination. It can be either a local or mapped hard drive or tape. Verify there is enough space to accommodate the data.
 - d** On the Options tab, select Overwrite existing media, Verify backup upon completion, and Initialize and label media. Assign the proper name and description to the media set.

Click OK to start the backup. When you have finished backing up the application database, repeat this step to back up the system database.

- 4** On the destination server, create two new databases: One for restoring the system database and the other for restoring the application database. Make the new databases and their accompanying transaction logs the same size as the ones on the production server.
- 5** Select the destination server. From the Tools menu, select Restore Database. Starting with a restore of the application database, specify the settings as follows:
 - a** At the Restore as database field, select the database you created on the destination server as the application database.

- b** Select From device.
- c** Select the device where you backed up the production application database.
- d** Select Restore backup set and Database - complete.
- e** On the Options tab, select the Force restore over existing database check box.

Click OK to start the restore. When you are finished with the application database, repeat this step to restore the system and Internet Application databases.

- 6** Run the Database Synchronization Utility as shown in *Using the Database Synchronization Utility* on page 120. Log on to the destination SQL Server.
- 7** In the Database Synchronization Utility, enter the destination databases into which you restored the databases. Select the Synchronize logons on a new SQL Server check box and the Check database references check box. Click Proceed.

The new databases are ready to use.

System Configuration and Management

7

This chapter shows you how to customize the Desktop and perform system management tasks.

In this chapter

Desktop Customizations	131
System Management	143

Desktop Customizations

Overview

End-user customizations

End users can customize the Desktop by adding tasks to My Tasks, arranging and changing toolbars, and docking the Desktop to the tops of their screen. For customization procedures, refer to the *Getting Started* guide.

Administrator customizations

As an administrator, you can make additional customizations to the Desktop:

- Change tasks in the Tasks tab. This determines which tasks are available to the users.
- Select a task menu that applies to all users.
- Create different menus for different users. For example, you can create a task menu for Accounts Payable clerks and assign it to each clerk.

These are described in this section.

When customizations are applied

All customizations to the Desktop take effect the next time you start the software. To apply the customizations, shut down the software and log back on. The customization changes appear in the Desktop.

Prerequisites for Making Administrative Customizations

Requirement for access rights To make administrative customizations, you need Supervisory or Normal rights for SM Desktop Customizer. For information about setting access rights, see *Set Up Security Groups* on page 106.

Important: Set all other security groups to Excluded for SM Desktop Customizer. This prevents unauthorized users from making changes that affect all users.

Changing and Saving Task Menus

Understanding tasks menus You can modify the collection of folders, tasks, and shortcuts in the Tasks pane and save it as a task menu. You can save multiple task menus for different types of users.

Default task menu The following task menus are provided:

- **Standard:** Default task menu. Use it when restoring a customized Task menu to its original settings.
- **Sage 100 ERP (formally Sage MAS 90 and 200) Menu:** Uses the same organization as Sage 100 ERP menus. This task menu is helpful if you are migrating from Sage 100 ERP.

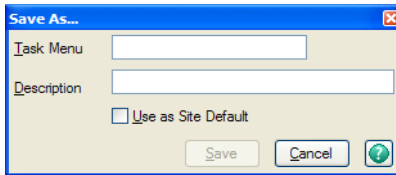
These provided task menus cannot be changed or deleted.

Commands for customizing task menus Commands for customizing task menus are available from the Tools menu by using the Menu Maintenance toolbar. To open the toolbar, right-click a toolbar and select Menu Maintenance.

Saving task menus

To change the menu in the My Tasks menu and save it, do the following:

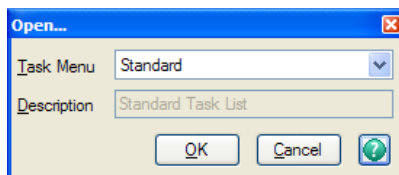
- 1 In the My Tasks menu, add, move, or delete tasks and folders as shown in the *Getting Started* guide and the Help Center.
- 2 From the Tools menu, select Organize Menu > Save As. The Save As window appears:



- 3 Type a name and description for the task menu. The name can be up to 15 characters, and the description can be up to 30 characters. Select the Use as Site Default check box to use the task menu as default for this site. Click Save.

Opening an existing task menu

To open a task menu, from the Tools menu, select Organize Menu > Open. A task menu can also be accessed by clicking the menu bitmap on the status bar or by double-clicking the menu on the status bar. The following window appears:



Select the task menu and click OK. The task menu changes to the tasks you selected.

Restoring a task menu

To undo modifications to the current task menu made from the previously saved task menu, select Tools menu > Organize Menu > Reset. Any changes you have made from the last saved version will be lost.

Changing a task menu

To make further changes to a task menu, select Tools menu > Organize Menu > Save. This saves your changes using the same task menu name.

This command is not available when the standard or Sage 100 ERP task menu is active. Use the Save As command to save the task menu under a different name.

Deleting a task menu

To delete the open task menu, select Tools menu > Organize Menu > Delete. This command is not available when the standard or Sage 100 ERP task menu is active.

Setting Task Menus for Users

Description

You can select a task menu for all users and assign task menus for individual users.

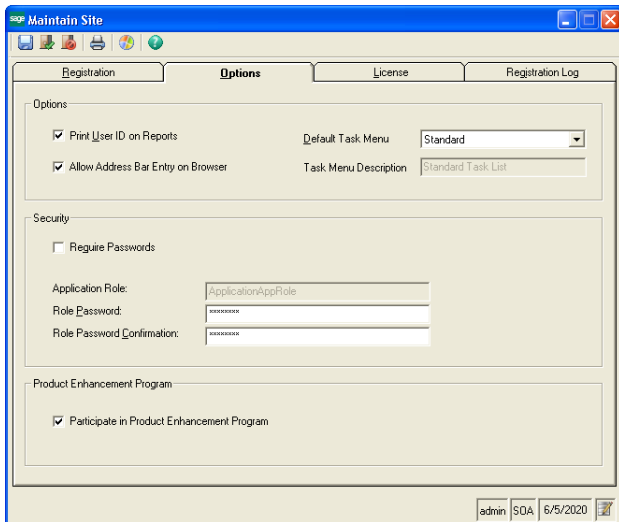
Setting the task menus for all users

In Maintain Site, set the default task menu. This is used for all users for whom you have not assigned a task menu. For security, assign the task menu with the minimum needed menu items.

Perform the following:

- 1** Create and save the task menu to set as default as shown in *Changing and Saving Task Menus* on page 132.
- 2** In the Desktop, select the System Manager Maintenance menu > Maintain Site.

- 3 On the Maintain Site window, click the Options tab.



At the Default Task Menu field, select the task menu to use as default. Click Finish and Exit.

Setting a task menu for a user

You can set a task menu for an individual user or user group. Perform the following:

- 1 In the Desktop, select System Manager > Maintenance > Maintain Users.
- 2 At the User field, select the user or user group to whom you are assigning the task menu.
- 3 At the Task Menu field, select the task menu you are assigning.

Note: It is recommended that you assign the System menu only to system administrators.

- 4 Save the settings.

For more information about Maintain Users, see *Setting Up Users* on page 106.

Adding Custom Reports

- Description** You can create custom reports that can be used from the Desktop. You create the report in Crystal Reports Designer and then add it to the Desktop.
- Custom reports** To see examples of custom reports, see the files in the Sample Custom Reports folder in the client folder. The following sample reports are provided:
- CustomerListing.rpt: A simple list of customers selected from one table in the database.
 - CustomerSalesByPeriod.rpt: A more complex example that selects header and detail records from two separate tables. This report totals sales per customer, and groups sales per fiscal period.
- Creating reports** Follow the instructions in the Crystal Reports Designer documentation to create a report.
- For the database connection, use ODBC with the DSN name, MAS 500.
- The following formulas are available to populate data from the databases and to select data to include in the report. For example, a report can be restricted to include only the records of the company from which the report was run.
- CompanyID
 - CompanyName
 - UserID
 - BusinessDate
 - RunDate
 - RunTime
 - ReportFileName
- Create the formulas in Crystal Reports as "".

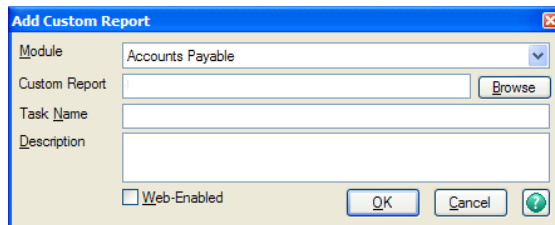
Where to place a report

When you finish a report, you can save it either on your local drive or on the network. If you save it on your local drive, only you will have access to it. To make the report available to other users, save it on a network drive and grant users access to the folder where you saved the report file. If you are saving the file on an NTFS volume, grant NTFS and Share permissions to the users who will use the report. Users who do not have these permissions will not be able to run the report even if they have been granted rights to run it in System Manager.

Adding reports to the Desktop

Follow these steps:

- 1 In the Explorer Bar, navigate to where you want to place the report.
- 2 Right-click and select Create New Task > Custom Report. The following window appears:



- 3 Complete the window as follows:
 - a Select the module for the custom report.
 - b Type the file name at the Custom Report field or click Browse. If the file is on the network, use the UNC path (\\server\path) so that users do not need to have the drive mapped to that path.
 - c At the Name field, type the name that you want to appear in the Desktop and Web Reports.

- d** At the Task Name field, type a name that will be used internally by the software to identify the report. This name will be used when you grant security access, create shortcuts elsewhere in the Desktop, and other tasks.
 - e** Type a description of the report.
 - f** To use this report in Web Reports, select *Web Enabled* and follow the instructions in the *Web Reports* guide.
 - g** Click OK. The report is added to the Desktop and created as a task in the software.
- 4** In *Maintain Security Groups*, create or modify groups to grant access to the custom report you added. The report is listed in the *Tasks* tab and using the module and task name you assigned. Save the changes you made.
 - 5** In *Maintain Users*, assign the security group to the users or groups who will be able to run the report. Verify that the user also has access to the folder where the report file is located.

In the Desktop, users who have access to the report can open it like any other report.

Search Form Customization

Administrative customizations

Users can customize the Search form by selecting the columns to appear in the grid, setting their column width and order, and then saving the settings in views. Search criteria settings on the Filter tab can be saved with the view. For instructions, see the *Getting Started* guide.

As an administrator, you can control Search form customizations by changing the SQL view by the lookup, or by customizing the lookup view using *Maintain Lookup Views*. Changing the SQL view is more complex than

Maintain Lookup Views but offers the maximum flexibility in customization. For each lookup, you can limit the columns that users can select and create your own views.

Procedure for maintaining lookups

Maintain Lookup allows you, as an administrator, to associate a lookup ID with a SQL view. You can use SQL to create your own views that can then be used by a lookup.

Note: Tasks are dependent on some fields returned from the view. Because of this, you should never remove columns from a SQL view. When creating your own SQL views, start by making a copy of the SQL view used by the software and then altering the new SQL view to add the new columns or tables.

Perform these steps:

- 1 Select System Manager Maintenance menu > Maintain Lookups. The Maintain Lookups window appears.
- 2 At the Lookup field, select the lookup to change.
- 3 At the Current SQL Command field, type or select a SQL view to associate with this lookup. The SQL view currently associated with this lookup automatically displays.

You can also choose to include both ANSI and non-ANSI queries.

Note: For all customizations to take effect, users need to close any tasks they are currently running and reopen them.

Effects to the underlying SQL query

The following table outlines some of the possible effects to the underlying SQL query in various circumstances:

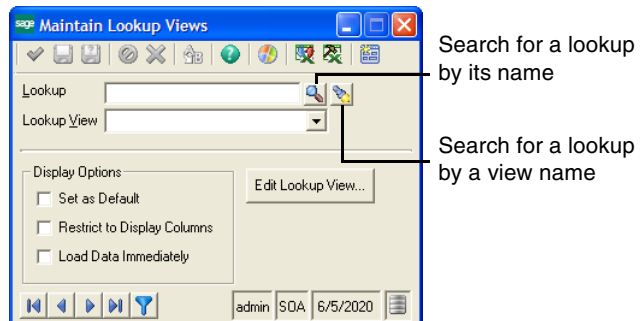
If...	Then...
...the customization refers to a column that no longer exists	...the customizations are automatically removed without notification. This allows administrators to change the lookup without causing error messages to appear on end user workstations.
...the customization impacts the query and causes an error	...the lookup attempts to use the standard (factory) settings to retrieve the data.
...the SQL query is modified so that critical columns required by the program are missing or the factory definition fails	...an error message displays and no data is returned.

Procedure for maintaining lookup views

Maintain Lookup Views allows you, as an administrator, to control the customizations that end users make to the Search window. You can also create customized lookups and make them available to users.

Follow these steps:

- 1 Select System Manager Maintenance menu > Maintain Lookup Views. The Maintain Lookup Views window appears:



- 2 At the Lookup field, select the lookup to change.
- 3 Select the view for the lookup to which to apply settings.
- 4 Select the display options for the view.
 - a Select the Set as Default check box to use the Lookup View field as the default for this lookup. When users open the Search form, it opens with the default view.
 - b Select the Restrict to Display Columns check box to limit which columns a user can add to a view. When a user opens the Lookup View Columns window to select columns, that user can only view the columns you have selected. Select this check box when there are columns with sensitive data that you do not want users to view.

- c** Select the Load Data Immediately check box to load data when the Search window is opened. If search criteria is saved with a view or the Search window, the lookup retrieves the data according to the criteria.

Note: Select the Load Data Immediately check box to reduce the number of steps a user must perform in order to find data, if there is only a small dataset to load. Clear this check box for large datasets so that excessive amounts of data are not returned.

- 5** To change the width and order of columns, click Edit Lookup View. The Search window appears, where you can change column widths by dragging column borders and add or remove columns by clicking the Form Customizer button. Save the view. For instructions, refer to the *Getting Started* guide.
- 6** Save the changes.

System Management

Overview

Introduction

The software has several system management features that enable you to monitor and manage the usage of the system. These features enable you to perform the following:

- Set the business date.
- Monitor who uses the system.
- View system settings.

These are described in this section.

Setting the Business Date

Description

The business date is the default date for the reports and transactions you generate. For an explanation of how the software uses dates, refer to the *Getting Started* guide.

End users have some control over what date is used as the business date through the User Preferences task in System Manager. The system date (that is, the date in the client system) can be used as the business date, or the same business date can be used for all modules.

When to change the business date

There are situations to use a different business date, such as when you need to enter a journal entry for a future date. You can change the business date ahead to next month, write the journal entry, and return the business date back to the present month.

Procedure

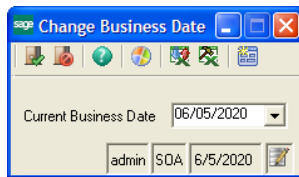
To change the business date, do either of the following in the Desktop:

- Select File menu > Change Business Date.
- Double-click the business date at the far right of the status bar.



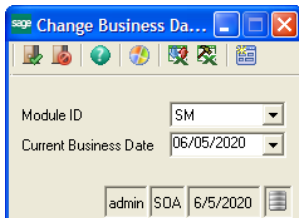
Depending on the settings in User Preferences, one of the following versions of the window will appear.

- If the Use Same Business Date for All Modules check box is selected, the following window appears.



Select the business date and then click the Finish and Exit button (on the left). The date applies to all modules.

- If the Use Same Business Date for All Modules check box is cleared, the following window appears.



Select the module and then select the business date for that module. Repeat for each module you need, and then click the Finish and Exit button.

Monitoring System Usage

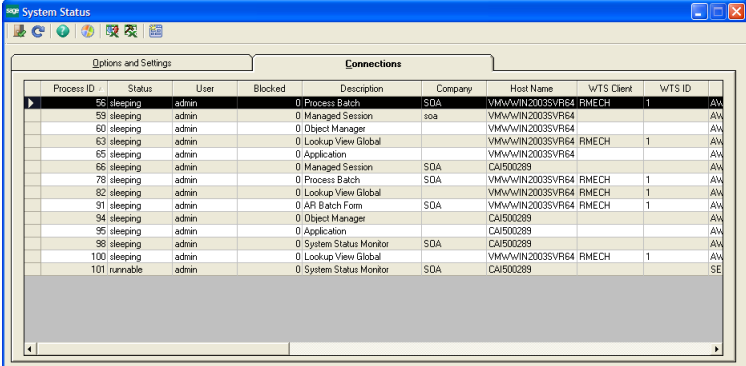
Ways of tracking usage

The software has several tools that enable you to track who is using the system.

System Status window

To view who is currently logged on to the database you are using, use System Status. In the Tasks pane, select System Manager Tools menu > System Status.

A window appears that displays the user ID and name, when the user logged on, and what companies the person is using. The window appears as follows:



The screenshot shows the 'System Status' window with the 'Connections' tab selected. The table below represents the data displayed in the window.

Process ID	Status	User	Blocked	Description	Company	Host Name	WTS Client	WTS ID
56	sleeping	adrian	0	Process Batch	SQA	VMW\WIN2003S\VR64	RMECH	1
59	sleeping	adrian	0	Managed Session	soa	VMW\WIN2003S\VR64		
60	sleeping	adrian	0	Object Manager		VMW\WIN2003S\VR64		
63	sleeping	adrian	0	Lookup View Global		VMW\WIN2003S\VR64	RMECH	1
65	sleeping	adrian	0	Application		VMW\WIN2003S\VR64		
66	sleeping	adrian	0	Managed Session	SQA	CAJ500289		
78	sleeping	adrian	0	Process Batch	SQA	VMW\WIN2003S\VR64	RMECH	1
82	sleeping	adrian	0	Lookup View Global		VMW\WIN2003S\VR64	RMECH	1
91	sleeping	adrian	0	AR Batch Form		VMW\WIN2003S\VR64	RMECH	1
94	sleeping	adrian	0	Object Manager		CAJ500289		
95	sleeping	adrian	0	Application		CAJ500289		
98	sleeping	adrian	0	System Status Monitor	SQA	CAJ500289		
100	sleeping	adrian	0	Lookup View Global		VMW\WIN2003S\VR64	RMECH	1
101	runnable	adrian	0	System Status Monitor	SQA	CAJ500289		SE

At the bottom of the window, it shows 'Last Refresh: 6/5/2020 4:23:09 PM Next Refresh: Manual' and the user 'admin' is logged in at 'SQA' on '6/5/2020'.

This information is useful when you need exclusive use of the software or of a company.

Tracker Tracker shows messages generated by events, such as opening forms and saving data. Any errors appear in the message. Sage Customer Support might ask you to view the Tracker window to help you resolve a problem.

To open the Tracker window, from the Desktop Tools menu, select Display Tracker.

To close the Tracker window, from the Desktop Tools menu, select Display Tracker again.

User IDs on reports You can print the ID of the user who ran a report. This feature is helpful when several people use a shared printer, or you need to track the report generation when deciding who should have access to reports.

Select System Manager Maintenance menu > Maintain Site. In the Maintain Site window, click the Options tab and select Print User ID on Reports.

Viewing System Settings

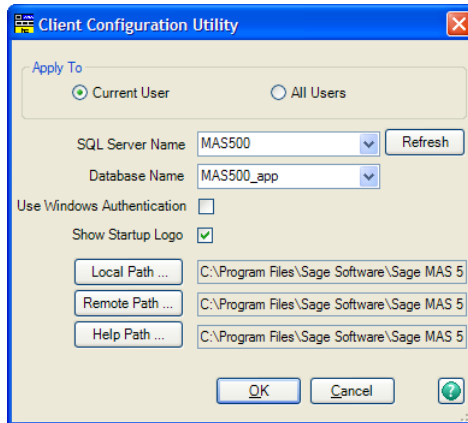
Tools for viewing settings To help you troubleshoot your system, the software has three tools for viewing system settings:

- Client Configuration Utility shows the SQL server and databases you are currently logged on to and the location of program files.
- System Inspector displays system and Sage 500 ERP settings, files, and Registry entries.
- Report Update Utility scans through all Crystal Reports files installed for the client installation and sets the default database name to the database name selected when the utility is run.

These tools are described in the following sections.

Desktop (Client) Configuration Utility

To start the Client Configuration Utility, select Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > Client Configuration Utility. The Client Configuration Utility window appears:



As described in the *Getting Started* guide, the Client Configuration Utility can be used for changing the SQL Server and database you are logged on to. If you are using Windows authentication, you can make the logon window reappear by clearing the Use Windows Authentication check box. You can also clear the Show Startup Logo check box to remove the logo to improve startup speed over Windows Terminal Services.

Note: “Sotaadmin” is no longer used in this utility. If you do not have a windows logon to the SQL Server, a logon dialog will appear.

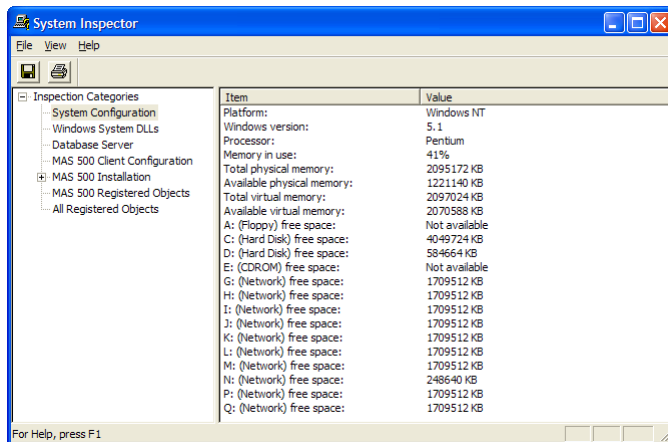
You can configure the settings for each user or for all users on the system. The application settings are written to the registry for each user in C:\Documents and Settings.

The Client Configuration Utility also allows you to view the folders used for program and Help files for the client system you are using. If you get errors in launching parts of the program or Help, this window shows the folders where the files are supposed to go. You can change the path by clicking a path button. Avoid using this feature because you can render the client unusable if you set the folders incorrectly.

If you change settings in the Client Configuration Utility while the software is running, the changes are applied when you close and re-log on to the software.

System Inspector

To start the System Inspector, select Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > System Inspector. The System Inspector window appears:



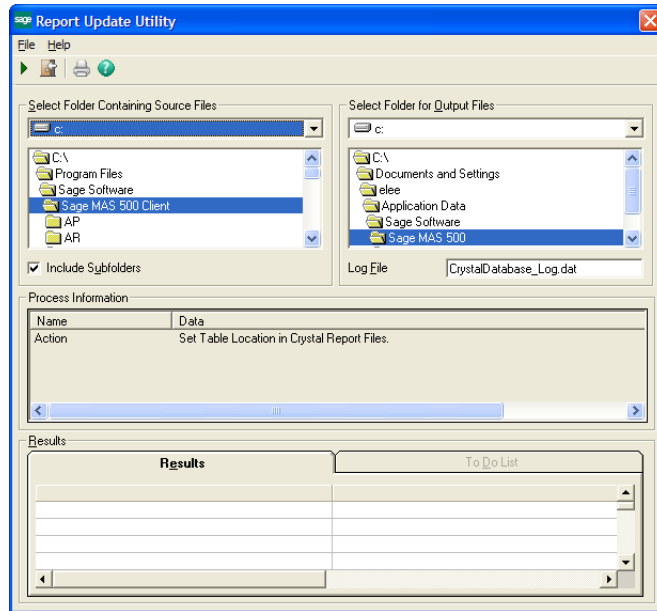
The left pane shows the types of information available in System Inspector. Select the type of information, and the data appears in the right pane. If a type has a + in front of it, double-click it to drill down to additional information.

You can save the information by performing one of the following:

- Click the Save button or select Save As from the File menu to save the information in a file.
- Click the Print button or select Print from the File menu to print the information.

Report Update

To start the Report Update Utility, select Windows Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities > Report Update Utility. The Report Update Utility appears:



Select the location of the Crystal Reports (.rpt) files and where to output the log file. After the utility is run, the results are displayed in the Results grid.

Each report is generated using a template that contains the database name as part of the report structure. By default, the report's database name is set to mas500_app. If you are logged on to a database with a different name, the system must rename the database and validate it for each report that is run. When the database name is changed at runtime, Crystal Reports validates the schema of each table in the report by calling stored procedures in SQL Server. These calls increase the load on the server. If a large number of reports are run on a continual basis, the many validation calls that occur can affect report performance.

To improve SQL Server performance, this utility reduces the number of validation calls by setting the database name in the report files to match the database name used to log on to the software.

Note: Organizations where report processing is a less frequent occurrence are unlikely to see a noticeable gain in performance by using this utility.

Updating the Crystal Report files requires System Administrator privileges in order to save files in the Program Files folder.

The Crystal Report files must be updated on each client system where they are used. In a Citrix or Windows Terminal Server environment, the report files are updated on the terminal server.

Working with Visual Process Flow

8

Visual Process Flow incorporated into Sage 500 ERP graphically displays several business processes typically completed during the normal course of business. These graphical representations allow you to click on graphical components to launch Sage 500 ERP tasks. All Visual Process Flows are displayed within the browser pane of the undocked desktop. If the desktop is docked, all Visual Process Flows appear disabled within the docked desktop's menus. All Visual Process Flow editing is also performed within the browser pane of the undocked desktop.

In this Chapter

This chapter describes the Visual Process Flow features available and how to incorporate them into the Sage 500 ERP product.

In this chapter

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Requirements

Adobe Flash must be installed on the client workstation to view or edit Visual Process Flows. This component is not installed by the Sage 500 ERP installation. This component can be downloaded from Adobe's website.

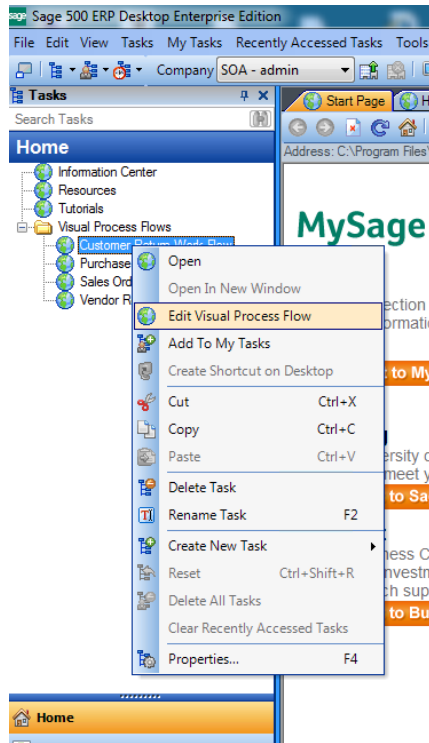
Launch Sage 500 ERP Task Embedded within Visual Process Flow

To launch a Sage 500 ERP task embedded within the Visual Process Flow single-click on the node below the task description.

Edit a Visual Process Flow

To edit an existing Visual Process Flow, do the following:

- 1 Right-click on the Visual Process Flow desired as a template and select Edit Visual Process Flow.



- 2 Edit the Visual Process Flow using the designer.
- 3 Click the **Save** button in upper right corner of designer, if enabled.

If the Save button is disabled then the Visual Process Flow is a factory flow and cannot be overwritten; in this case you must use Save As and create a new Visual Process Flow.

- 4 Close the Visual Process Designer by clicking the X in the upper left corner of the web browser tab or right-click the web browser tab and select **Close**.

Clicking the **Close** button in the upper right corner of the designer causes the designer to close and run the Visual Process Flow.

Create a Visual Process Flow

To create a Visual Process Flow, you can use one of the two following methods.

Using the standard template

- 1 Start the Visual Process Flow Designer menu option.
- 2 Design the Visual Process Flow.
- 3 Click the **Save As** button in upper right corner of designer.
- 4 Enter the name of Visual Process Flow in the Save As dialog and click **Save**.
- 5 Close the Visual Process Designer by clicking the X in the upper left corner of the web browser tab or right-click the web browser tab and select **Close**.
- 6 Add your new Visual Process Flow to menu.

Using existing a Visual Process Flow as a template

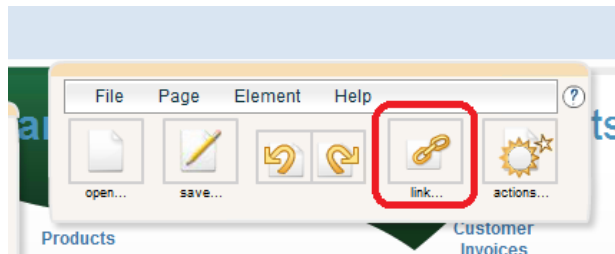
- 1 Right-click the Visual Process Flow you want to use as a template and select **Edit Visual Process Flow**.
- 2 Edit the Visual Process Flow using the designer.
- 3 Click the **Save As** button in upper right corner of designer.
- 4 Enter a name for the new Visual Process Flow in the Save As dialog and click **Save**.

- 5 Close the Visual Process Designer by clicking the X in the upper left corner of the web browser tab or right-click the web browser tab and select Close.
- 6 Add the new Visual Process Flow to menu.

Embed a Sage 500 ERP Task into Visual Process Flow

To embed a task into a Visual Process Flow, do the following:

- 1 Open Visual Process Flow for editing.
- 2 Select the link (node) and click the **Link** button.



- 3 Within the Link to screen, set the Link to drop down to ERP Function and enter, paste or lookup the Sage 500 ERP task ID into the Function text box.

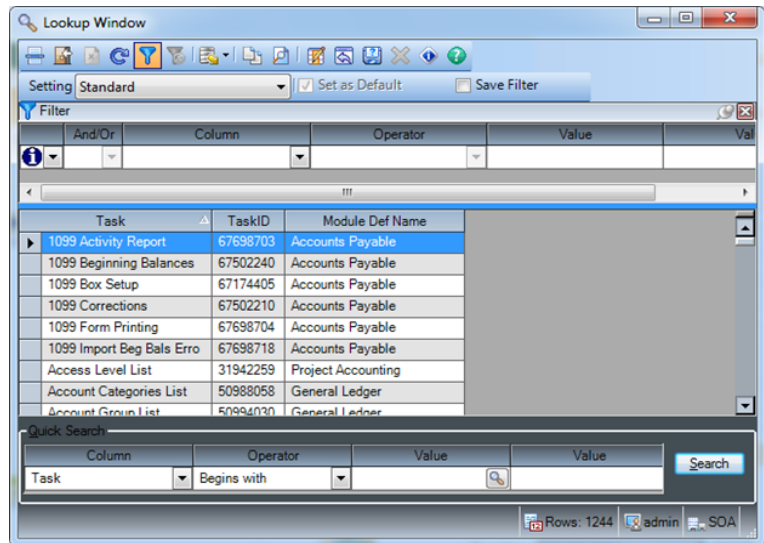
 A screenshot of the 'Link to' dialog box. At the top, it says 'Link to' and has a dropdown menu set to 'ERP Function'. Below this is a 'Function' text box containing the value '184942742', which is highlighted with a red box. To the right of the 'Function' box is a three-dot menu icon. Below the 'Function' box is the text 'Sage 500 ERP TaskID'. Below that is a 'Transaction' text box with a three-dot menu icon. At the bottom is a 'Key' text box. Below the 'Key' box is a blue link labeled 'Remove this link'. At the very bottom are 'OK' and 'Cancel' buttons.

To obtain the Sage 500 ERP task ID through one of the Sage 500 menus, do the following:

- Within the Sage 500 ERP Desktop, find the menu item desired such as Enter Sales Orders and Quotes.
- Right-click the menu item and select Properties from the context menu.
- On the Properties dialog, click the Show More link.
- After the dialog expands, select the Task ID value and copy to the clipboard(Ctrl C).

To obtain the Sage 500 ERP task ID through the lookup:

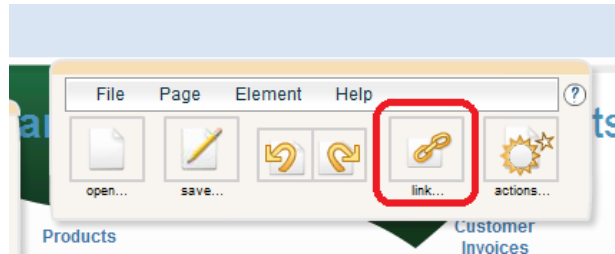
- Click the ... button to the right of the Function text box to display a task ID lookup.



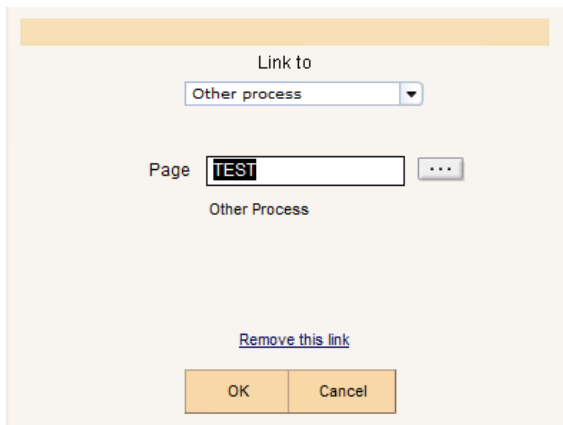
- Locate the desired task and select it.

Embed Link to Another Sage 500 ERP Visual Process Flow

- 1 Open the Visual Process Flow for editing.
- 2 Select the link (node) and click the **Link** button.

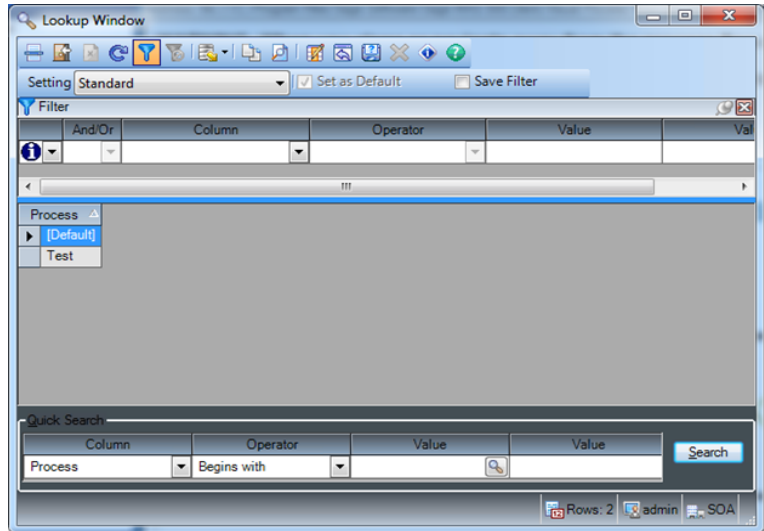


- 3 Within the Link to screen, set the Link to drop down to Other process and enter, paste or lookup the Sage 500 process ID into the Page text box.



To obtain the Sage 500 ERP process ID through the lookup:

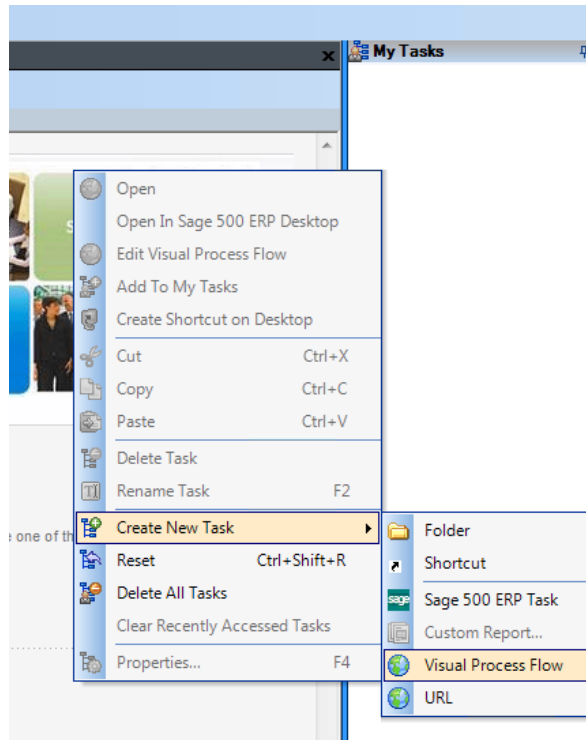
- Click the ... button to the right of the Function text box to display a Visual Process Flow lookup.



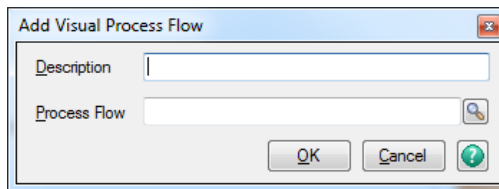
- Locate the desired Visual Process Flow and select it.

Add a Visual Process Flow to Menu

To add a Visual Process Flow menu item to the Desktop menu, right-click the desired menu folder or menu area and select Create New Task and then Visual Process Flow. If the Visual Process Flow toolbar option is not available, see *Add*

Visual Process Flow Toolbar Option.

Within the Add Visual Process Flow screen, fill in the description (this will be the menu caption) and select a Visual Process Flow with the process flow lookup. Click OK.



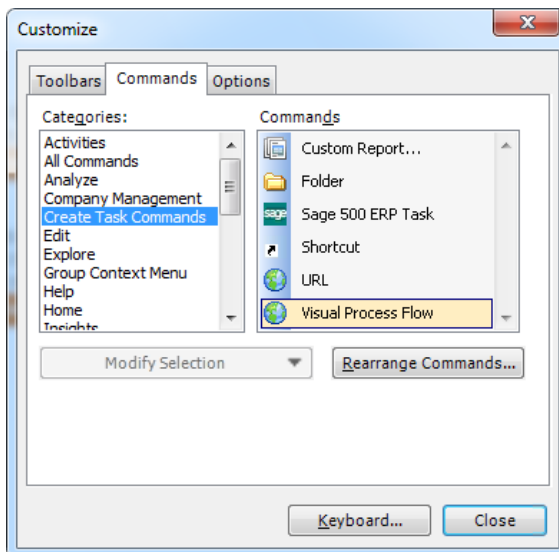
Changing Desktop Users

Visual Process Flows are very similar to Sage 500 ERP menus; in fact both the menus and Visual Process Flows use the same internal mechanisms to launch Sage 500 ERP tasks. The Sage 500 ERP Desktop allows several users to be logged-in at once, when the user context is changed that user's menus are loaded. To ensure the Visual Process Flows are associated with the user context, any Visual Process Flows opened when the user context is changed will be closed.

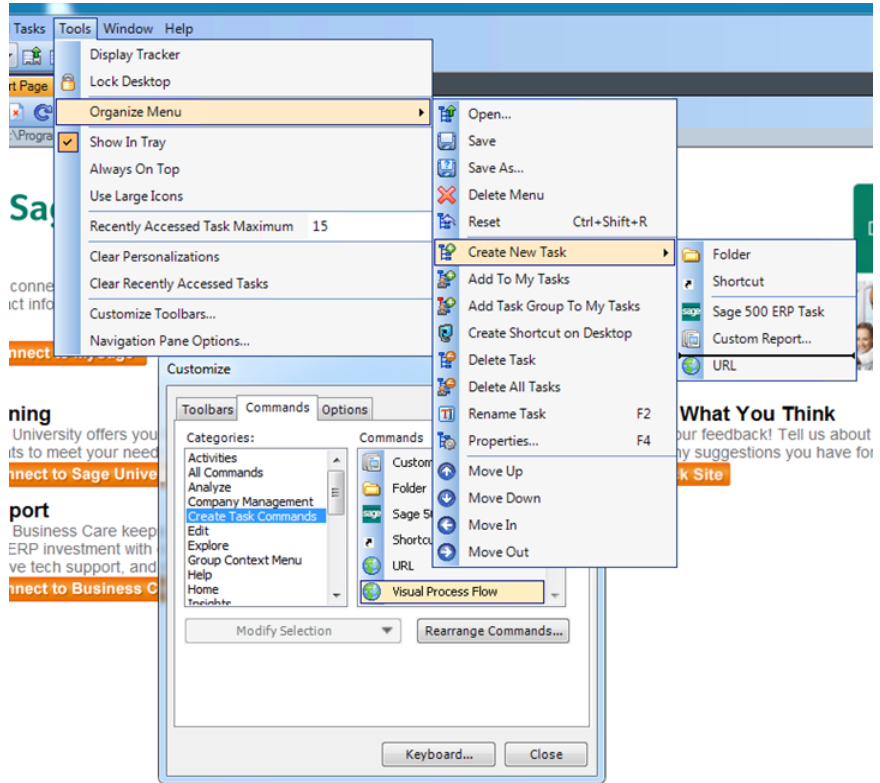
Add Visual Process Flow Toolbar Option

To add the Visual Process Flow toolbar, do the following:

- 1 Click Tools > Customize Toolbars...
- 2 When the Customize dialog appears, click the Commands tab.
- 3 In the Categories list box, click Create Task Commands.



- 4 In the Commands list box, click and drag Visual Process Flow to the Desktop Tools > Organize Menu > Create New Task > under Custom Report... and drop.



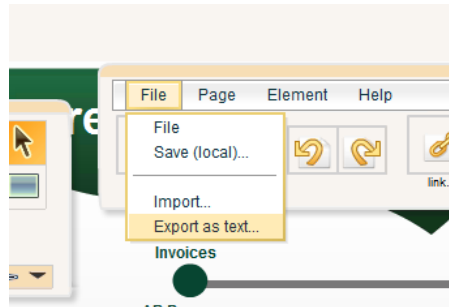
- 5 Click Close on the Customize dialog.

Export/Import

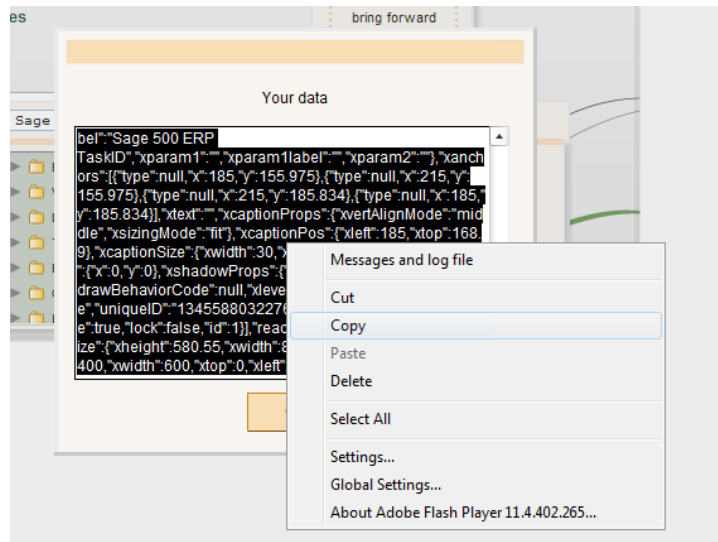
Exporting a VPF

To export the Visual Process Flow, perform the following steps:

- 1 Open the Visual Process Flow for editing.
- 2 Click File -> Export as text...



- 3 In the Export dialog (labeled Your data) ensure all the data is highlighted; right click and select Copy.



Open any text editor (Notepad) and paste contents into it; then save as a text file.

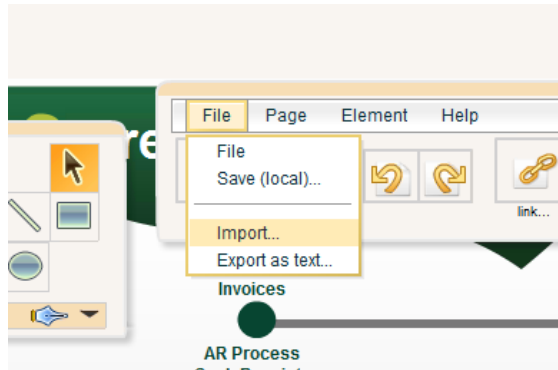
To Import a VPF

To import the Visual Process Flow perform the following steps:

- 1 To import the visual process flow perform the following steps:

Start the Visual Process Flow Designer menu option.

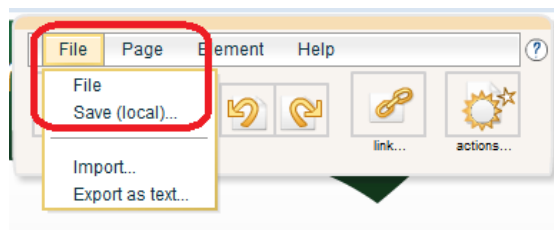
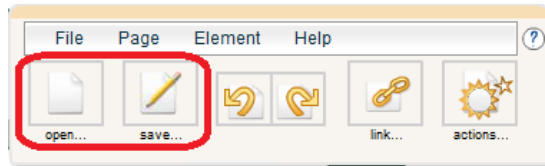
Click File -> Import...



- 2 Open the previously saved exported text file and copy its' contents to the clipboard.
- 3 Within the Import dialog (labeled Paste your data here) right-click and select Paste.
- 4 Click OK on the Import dialog.
- 5 Click Save As button in the upper right-corner of the designer to save the Visual Process Flow.

Miscellaneous

The following methods of opening and saving Visual Process Flows should be avoided:



These options will open and save a Visual Process Flow from/to a file location on the current machine. Since the Visual Process Flows do not go into the Sage 500 ERP database they are not available for other users, cannot be associated with a menu item and are not accessible if the user logs-in through a different machine.

Working with Reports

A

System Manager reports provide information about the system, including system activity, security, and system-wide information. You can use reports to maintain a history of system activity or to troubleshoot problems.

This appendix describes the report and inquiry options available in System Manager. For information on report types and features, and how to generate and print reports, refer to the *Getting Started* guide.

Important: Some reports contain sensitive information. Control access to these reports and keep printouts in a safe location.

In this appendix

System Manager Reports	166
System Manager Lists	169

System Manager Reports

Overview

Definition	Reports present a record of activity over a period of time.
Reports	System Manager reports are generated from the Reports menu. System Activity Log on this page Maintenance Audit Log 167 Company Profile Report 168 Company User Group Permissions Report 168

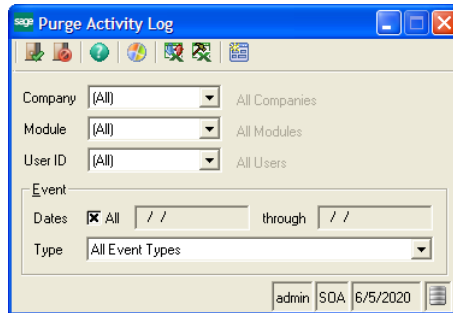
System Activity Log

Contents	This report provides information on any major event that occurs in your system, such as the addition or deletion of users, intercompany transactions, or unrecoverable errors.
Sorting	You can sort the list by: <ul style="list-style-type: none">• Event Date• Event Description• Event Time• User
Generating	Select Reports menu > System Activity Log.

Purging

Periodically, purge the System Activity Log to keep it a manageable size. Follow these steps:

- 1 Back up the data before purging any information.
- 2 Select System Manager Activities menu > Purge Activity Log. The following window appears:



- 3 Select the items to purge.
- 4 Click the Finish and Exit button.

Maintenance Audit Log

Contents

This report provides information on any major event that occurs in your system, such as the addition or deletion of users, intercompany transactions, or unrecoverable errors.

Database option

The report can generate information from the application or system database.

Sorting

You can sort the list by:

- Company
- Operation
- System Date
- User

Generating

Select Reports menu > Maintenance Audit Log.

Company Profile Report

Contents This report provides information for a company, including its address, telephone and fax numbers, Federal ID number, database connections, and home currency. This information is drawn from information you enter in Maintain Companies.

Sorting You can sort the list by:

- Company
- Company Name

Generating Select Reports menu > Company Profile.

Company User Group Permissions Report

Contents This report provides a list of all companies and their corresponding security groups.

Generating Select Reports menu > Company User Group Permissions.

System Manager Lists

Overview

- Definition** Lists contain settings and definitions established for the operation of the system.
- Lists** System Manager lists are generated from the Maintenance or Reports menu, or by clicking the Print button in the associated task.
- User List on this page
 - Security Group List. 170
 - Company List. 170
 - Site Profile List 171
 - Assisted Company Setup List 171

User List

- Contents** The User List provides a list of user codes, names, and default security groups.
- Sorting** You can sort the list by:
- User
 - User Name
- Generating** Produce this list in one of the following ways:
- Select Reports menu > Other Lists > User Group List.
 - In the Maintain Users window, click the Print button.

Security Group List

Contents The Security Group List provides a list of security group codes, descriptions, and assigned access permissions.

Generating Produce this list in one of the following ways:

- Select Reports menu > Other Lists > Security Group List.
- In the Maintain Security Groups window, click the Print button.

Company List

Contents The Company List provides a list of all the companies defined in your system and includes company codes, names, and database connections.

Generating Produce this list in one of the following ways:

- Select Reports menu > Other Lists > Company List.
- In the Maintain Companies window, click the Print button.

Site Profile List

Contents This report lists the modules you have registered and activated and information about the registration. You can print this report and save it for your records.

Format The report is available in these formats:

Format	Description
Site Profile	Displays information about your license; your customer number, System Manager serial number, and System Manager unlocking key; and the registered modules.
Activated Modules	Lists the modules you have activated.

Generating Generate the report by performing one of the following:

- Select Site Profile List from the Reports menu.
- Click the Print button in the Maintain Site window.

Assisted Company Setup List

Contents The Assisted Company Setup List produces a list of all of the phases and steps of Assisted Company Setup. For each phase and step, the list shows the status, the user assigned to it, and comments.

Generating Produce this list in one of the following ways:

- Select Reports menu > Other Lists > Assisted Company Setup List.
- In the Assisted Company Setup window, click the Print button.

Data Import Manager Installation & Configuration



This appendix provides information for installing and configuring SQL Server and for configuring the Data Import Manager (DI) module after installing the software.

Important: The Data Import Manager module is not compatible with Office 365. Refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal to verify what versions of Office and Windows are compatible with the module. Visit the portal at: <https://customers.sagenorthamerica.com>

In this appendix

Installation and Configuration Checklists	173
SQL Server Installation and Configuration	177
Sage 500 ERP Installation and Configuration Requirements.	182

Installation and Configuration Checklists

Overview

Introduction

The Data Import Manager module allows you to import certain predefined data entities, such as customers and sales orders into databases in compliance with Sage 500 ERP business rules. Data Import Manager uses SQL Server Integration Services (SSIS), which is a component of Microsoft SQL Server that provides a platform to build data integration and applications.

Note: SSIS is also known as Integration Services.

Use the following checklists to install and configure your system to work with the Data Import Manager module. The checklist is broken into two sections for the server and client. Depending on your setup, you may have already accomplished some of these checklist items. If so, skip to the next checklist item. The following general steps are described in detail later in this appendix.

Before using the Data Import Manager module to import data from the external data sources to the destination database tables, you should have a strong understanding of the source data structure and predetermine which tables and columns from the source system to map to the destination tables and columns in Sage 500 ERP.

Server-Side Checklist

Use the following checklist for the server-side configuration.

- 1___ Verify that your system meets the hardware and software requirements. For more information, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at: <http://customers.sagenorthamerica.com>
- 2___ Install SQL Server. For more information, see *SQL Server Installation and Configuration* on page 177.
Install the following services and utilities:
 - ▶ Database Services
 - ▶ Integration Services
 - ▶ Client Utilities
- 3___ For SQL Server, use SQL Server Configuration Manager to set the logon accounts for the SQL Server Agent Service. There is a known issue if other methods are used. For more information, refer to the Microsoft knowledge base article 911305 titled, "Replication agent jobs may fail..." at: <http://support.microsoft.com/kb/911305>
- 4___ Ensure the SQL Server Agent Service is running.
- 5___ If data sources are going to exist on a machine other than the server where SQL Server is installed, the Windows Firewall needs to be configured to allow communication with external machines.
- 6___ Install the database. For more information, see Chapter 2, *Overview of Installation*.
- 7___ If you are planning to use Excel 2007 (or greater) files as source data in Data Import Manager, install the 2007 Office System Driver Data Connectivity Components. This installation file is located on the Sage 500 ERP software in the ..\Support\Microsoft\2007 Office system Drive Data Connectivity folder.

- 8___ Designate a Windows account for the Sage 500 ERP Credential in SQL Server Management Studio. For more information, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.

Client-Side Checklist

Use the following checklist for the client-side configuration.

- 1___ For client machines that will be used to create import jobs using Maintain Import Jobs in the Data Import Manager module, run either the SQL Server Tools Install or the SQL Server Servers Install. For more information, see *Sage 500 ERP Client Installation and Configuration Requirements* on page 183.
- 2___ If you are planning to use Excel 2007 (or greater) files as source data in Data Import Manager, install the 2007 Office System Driver Data Connectivity Components. This installation file is located on the Sage 500 ERP software in the ..\Support\Microsoft\2007 Office System Driver Data Connectivity Components folder.
- 3___ Install the client.
- 4___ Log on as admin.
- 5___ Activate the Data Import Manager module in the Maintain Companies task in the System Manager module.
- 6___ Make the Windows account assigned to the Sage 500 ERP Credential a Sage 500 ERP user.

- 7 ____ Create the logon accounts for users, depending on their intended roles (create and maintain, or run import jobs) in Maintain Users. For more information, see *Creating the Logon Accounts for Users Working with Data Import Manager* on page 186.
- 8 ____ Set the passwords for the users with a standard SQL Server logon in User Preferences. Passwords are required for users creating packages. For more information, see *Setting Passwords for Sage 500 ERP Accounts with a Standard SQL Server Logon* on page 190.

You can now use the Data Import Manager module in the client to define the source data connection, create import job definitions, and execute an import job. For more information, see the Help system.

Note: Using local file paths in the Maintain Source Connections task in the Data Import Manager module is not recommended. To eliminate conflicts, configure a file share and use the UNC name in Maintain Source Connections. For more information, see *Accessing Source Files and Shared Folders for Hosting* on page 192.

SQL Server Installation and Configuration

Overview

Introduction

SQL Server is required to run Data Import Manager. The following section provides information for installing and configuring SQL Server, as well as configuring the Data Import Manager.

Procedure

You must perform the following procedures on the SQL Server for the Data Import Manager to work properly.

- 1** Install SQL Server services and utilities. For more information, see *Installing Services and Utilities* on page 178.
- 2** To process Data Import Manager jobs, SQL Server should allow local and remote connections.
- 3** Install the Sage 500 ERP database.
- 4** Install the files needed to process Data Import Manager jobs. For more information, see *Data Import Manager Database Upgrade and Relocation* on page 179.
- 5** Install the files needed to process multi-format text files. This step is optional. For more information, see *Working with Multi-Format Text Files* on page 178.
- 6** Use the SQL Server Configuration Manager to configure SQL Server to allow local and remote connections.

Installing Services and Utilities

Procedure

To install and configure the SQL Server

- 1 Ensure that the SQL Server Agent is running.
- 2 Install SQL Server.

Note: SQL Server and SQL Server Integration Services (SSIS) must reside on the same machine.

Note: If the database resides on a named instance of SQL Server, refer to the following article about configuring SSIS to work with a named instance of SQL Server:

<http://msdn.microsoft.com/en-us/library/ms137789.aspx> Database Services

Working with Multi-Format Text Files

Support for multi-format text files

The Data Import Manager module supports multi-format text files when defining the source type to use for the data source (in the Maintain Source Connection window).

To import data from multi-format files in Data Import Manager, you must install the DI Server Utilities.msi package on the server. The DI Server Utilities.msi installation package is located on the Sage 500 ERP software in the \DIServerUtilities folder. You can access this utility from the Start menu > All Programs > Sage > Sage 500 ERP 2016 > Utilities.

Data Import Manager Database Upgrade and Relocation

Upgrade new server from SQL Server 2005 (32- or 64-bit) to SQL Server 2008 R2 SP3 or 2012 (32- or 64-bit)

Perform the following steps.

- 1 Run the Database Synchronization Utility. For more information, see *Using the Database Synchronization Utility* on page 120.
- 2 Configure the Sage 500 ERP credential created in SQL Server. For more information, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.
- 3 In Maintain Users, make sure that the credential created in SQL Server has the appropriate roles set up to access Data Import Manager.
- 4 Install the necessary files to process multi-format text files. This step is optional. For more information, see *Working with Multi-Format Text Files* on page 178.
- 5 Purge Data Import Manager job history using the Purge Import Job History task.
- 6 Save all DI jobs using the Maintain Import Job task.

Upgrade in-place SQL Server 2008 R2 SP3 or 2012 (32-bit) to SQL Server 2008 R2 SP3 or 2012 (64-bit)

No additional steps need to be performed.

Upgrade new server SQL Server 2008 R2 SP3 or 2012 (32-bit) to SQL Server 2008 R2 SP3 or 2012 (64-bit)

Perform the following steps.

- 1 Run the Database Synchronization Utility. For more information, see *Using the Database Synchronization Utility* on page 120.
- 2 Configure the Sage 500 ERP credential created in SQL Server. For more information, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.
- 3 In Maintain Users, make sure that the credential created in SQL Server has the appropriate roles set up to access Data Import Manager.
- 4 Install the necessary files to process multi-format text files. This step is optional. For more information, see *Working with Multi-Format Text Files* on page 178.
- 5 Purge Data Import Manager job history using the Purge Import Job History task.
- 6 Save all DI jobs using the Maintain Import Job task.

Data Import Manager Configuration for SQL Server 2008 64-bit

Procedure

To process Data Import Manager jobs when using SQL Server 2008 64-bit, you must install the DI Server Utilities.msi package on the server. The Sage 500 ERP DI Server Utilities.msi installation package is located in the ..\DIServer Utilities folder on the Sage 500 ERP software.

Perform the following steps:

- 1 Select Windows Start menu > All Programs > Sage > Sage 500 ERP 2014 > Utilities.
- 2 Select the database to update.

- 3 Click Browse to locate the 32-bit version of the DTEXEC.EXE file. The file is installed by the SQL Server installation and is located in the ..\Programs Files (x86) folder.
- 4 Click Proceed.

Note: If this configuration step is completed after several Data Import jobs have been created, you must run the Database Synchronization Utility to correct the created jobs. For more information, see *Using the Database Synchronization Utility* on page 120.

Sage 500 ERP Installation and Configuration Requirements

Overview

Requirements

After installing the software, you must run certain SQL components from the SQL Server installation media and configure the Data Import Manager module so that users can create, maintain, and run import jobs.

Procedure

You must perform the following procedures on the client for the Data Import Manager module to work properly.

- 1 Install either SQL Server Tools or SQL Server Servers. For more information, see *Sage 500 ERP Client Installation and Configuration Requirements* on page 183.
- 2 Configure the Sage 500 ERP Credential. For more information, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.
- 3 Grant permissions to users who will work with the Data Import Manager module. For more information, see *Creating the Logon Accounts for Users Working with Data Import Manager* on page 186.
- 4 Set up passwords for all Data Import Manager package administrators. Passwords are required in the Data Import Manager module. For more information, see *Setting Passwords for Sage 500 ERP Accounts with a Standard SQL Server Logon* on page 190.
- 5 Set up a file share for use in Maintain Source Connections. This step is optional. For more information, see *Accessing Source Files and Shared Folders for Hosting* on page 192.

- 6 Verify access privileges. For more information, see *Accessing Data Import Manager Tasks* on page 193.

Sage 500 ERP Client Installation and Configuration Requirements

Requirements The following procedure is required only on client machines that will be creating or editing SSIS packages in the Data Import Manager module data. This procedure is not required to run Data Import Manager packages.

Installation options Building SQL Server Integration Services (SSIS) packages inside the Data Import Manager module requires that components be installed from the SQL Server CD-ROM.

For SQL Server 2008/2012, two installation options are available:

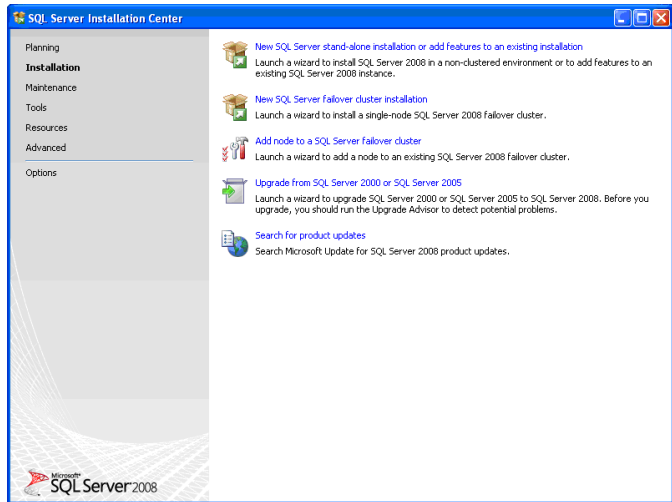
- SQL Server Tools
- SQL Server Servers

For SQL Server 2008/2012, use the SQL Server Installation Center.

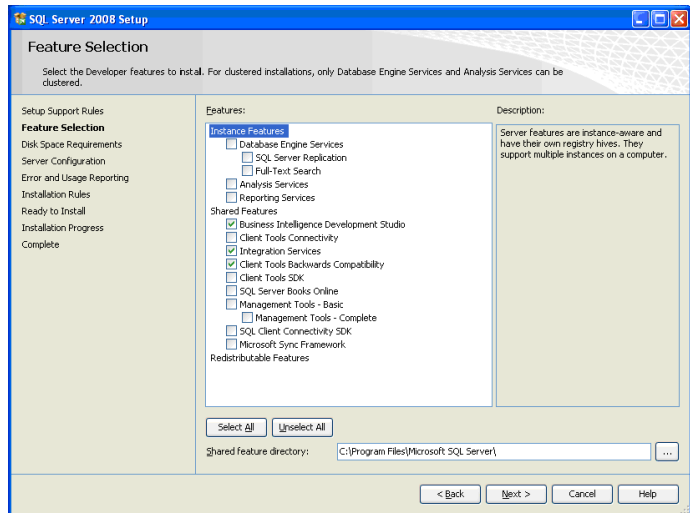
Procedure

- 1 Install the Sage 500 ERP client.
- 2 Run the SQL Server setup from the SQL Server 2008/2012 DVD. From the SQL Server Installation Center message dialog, click Installation.

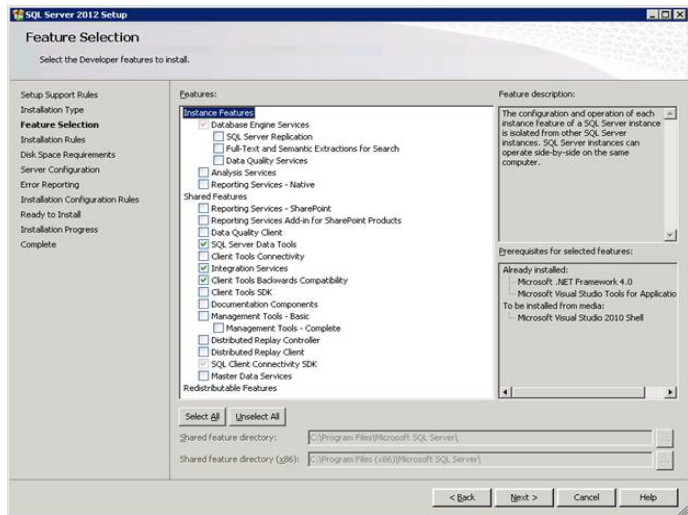
- In the right pane of the Installation option, click New SQL Server stand-alone installation or add features to existing installation.



- On the Feature Selection screen, select the following options for SQL Server 2008.

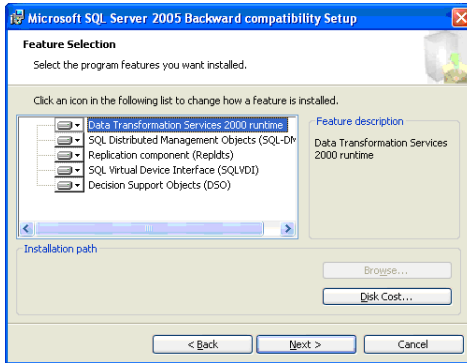


- 5 On the Features Selection screen, select the following options for SQL Server 2012.



- 6 Install the SQL Server backward compatibility components on each client using Data Import Manager. These components are located in the ..\Support\Microsoft\SQL Server 2008 and 2012\Backward Compatibility Components folder on the Sage 500 ERP software. Depending on the type of

machine, launch the appropriate .msi file. On the Feature Selection screen, accept the defaults and click Next.



Creating the Logon Accounts for Users Working with Data Import Manager

Procedure

Use the following procedure to grant create, maintain, or run permissions to users who will be working with import jobs within the Data Import Manager module.

To create logon accounts for users working with Data Import Manager

- 1 Log on to the software.
- 2 Create three user types: credential, administrator, and user. For information about setting up a credential user, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.

For instructions on how to set up administrator and user permissions, perform the following substeps:

- a Select System Manager Maintenance menu > Maintain Users.

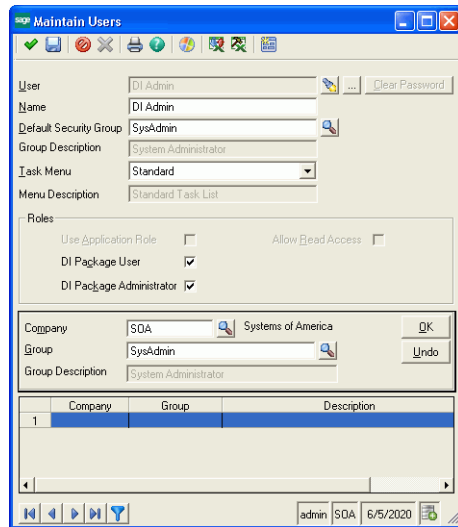
- b** In the Maintain Users window, create a logon for the user account designated in the Sage 500 ERP credential. Select the DI Package User check box.

Note: The DI Package User check box allows the user to run existing import jobs.

- c** In the Maintain Users window, create a new logon for the user to create, maintain, or run Data Import Manager packages. At the Default Security Group field, enter an appropriate security group, and then select the DI Package Administrator check box. When you select the DI Package Administrator check box, the DI Package User check box is selected automatically.

Note: The DI Package Administrator check box allows the user to create, maintain, and run import jobs. The DI Package User check box allows users to run import jobs.

Note: Users who will be creating or maintaining SSIS packages in Data Import Manager must have a SQL Server logon with a password or have a Windows integrated security account.

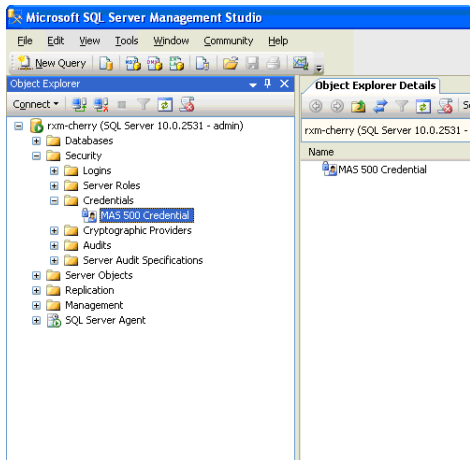


Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP

Overview The Sage 500 ERP Credential in SQL Server must be configured to designate the Windows account that will be used to process import jobs.

Procedure To designate the Sage 500 ERP Credential after installing Sage 500 ERP

- 1 Activate the Data Import Manager module for at least one company (this step creates the Sage 500 ERP Credential and /Sage 500 Proxy).
- 2 Run SQL Server Management Studio.
- 3 Connect to the Sage 500 ERP Server in the Object Explorer.
- 4 Expand the Security node, and then the Credentials node to access Credential Properties.



- 5 If the Data Import Manager data sources *will* reside on the same machine as the SQL Server, set the correct password for the Windows Administrator account on the local machine or change the account to a Windows account that can access the location of the data sources.

If the Data Import Manager data sources *will not* reside on the same machine as the SQL Server, set the account and password to a network account that can access the location of the data sources.

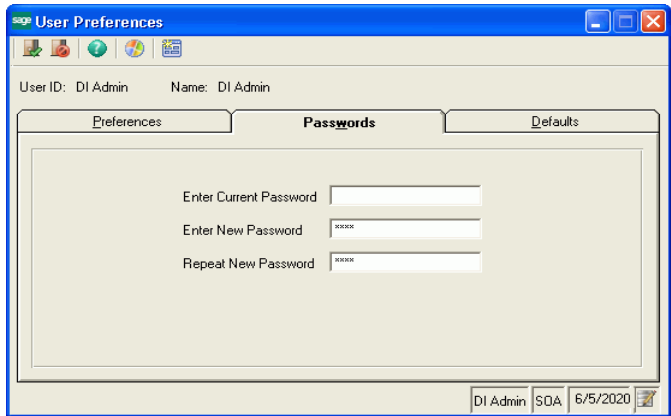
Setting Passwords for Sage 500 ERP Accounts with a Standard SQL Server Logon

Overview Use the following procedure to set the passwords for the Sage 500 ERP accounts with a standard SQL Server logon. Passwords are required in the Data Import Manager module.

Procedure To set passwords for accounts with a standard SQL Server logon

- 1 Log on as a Data Import Manager package administrator. For more information, see *Configuring the Sage 500 ERP Credential After Installing Sage 500 ERP* on page 189.
- 2 Select System Manager menu > Tools > User Preferences.

- 3 In the User Preferences window, click the Passwords tab.



- 4 Type a password at the Enter New Password field, and then repeat the password at the Repeat New Password field.
- 5 Click the Finish and Exit button on the toolbar.
- 6 Repeat steps 1 through 5 for all users who are assigned the role of Data Import package administrator.
- 7 Log off of Sage 500 ERP.

Accessing Source Files and Shared Folders for Hosting

Overview

Using local file paths in Maintain Source Connections in the Data Import Manager module is not recommended. File paths should be in UNC format. Local file paths are absolute paths on a single machine. For example, the file C:\FolderName\FileName.txt is not accessible from both the server and client machine.

To eliminate conflicts, configure a file share and use the UNC name in the Maintain Source Connections task. For example, the file \\MachineName\ShareName\FileName.txt is accessible from both the server and the client machines using that same name.

When configuring file shares, make sure the Windows account configured in the Sage 500 ERP Credential is able to read the source files on the file share where they are stored.

If files will be archived as they are processed, the Windows account configured in the Sage 500 ERP Credential must have permissions to remove files from the source file folder and write them to the archive file folder.

Accessing Data Import Manager Tasks

Accessing tasks

The following table provides information about the access privileges for users set up as DI Package User and DI Package Administrator.

Task in Sage 500 ERP	How Task Is Invoked	No admin authority - password optional		Admin authority - no password		Admin authority - with password	
		No DI pkg auth	DI pkg admin or user	DI pkg admin	DI pkg user	DI pkg admin	DI pkg user
Maintain Source Connection	Data Import Manager Maintenance menu > Maintain Source Connection.	No	No	Yes	No	Yes	No
Maintain Import Job	Data Import Manager Maintenance menu > Maintain Import Job.	No	No	No	No	Create, update, delete, and run an import job	Delete
Process Import Job	Data Import Manager Activities menu > Process Import Job.	No	No	No	No	Delete and run an import job	Delete and run an import job execution

Task in Sage 500 ERP	How Task Is Invoked	No admin authority - password optional		Admin authority - no password		Admin authority - with password	
		No DI pkg auth	DI pkg admin or user	DI pkg admin	DI pkg user	DI pkg admin	DI pkg user
Maintain Source Connection	Data Import Manager Insights menu > Import Jobs. In the Explore - Import Jobs window, select the Manage bar, and then select Maintain Source Connection.	No	No	Yes	No	Yes	No
Maintain Import Job	Data Import Insights menu > Import Jobs. In the Explore - Import Jobs menu, select the Manage bar, and then select Maintain Import Job.	No	No	No	No	Create, update, delete, and run an import job	No

Task in Sage 500 ERP	How Task Is Invoked	No admin authority - password optional		Admin authority - no password		Admin authority - with password	
		No DI pkg auth	DI pkg admin or user	DI pkg admin	DI pkg user	DI pkg admin	DI pkg user
Process Import Job	Data Import Manager Insights menu > Import Jobs. In the Business Insights Explore window, select the Manage bar > Process Import Job.	No	No	No	No	Delete and run an import job	Delete and run an import job execution
Process Import Job	Data Import Manager Insights menu > Job Executions. In the Business Insights Explore window, select the Manage bar > Process Import Job.	No	No	No	No	Delete and run an import job	Delete and run an import job execution
Process Import Job	Any module > Process Import Job (for a specific entity) under that module.	No	Yes	No	No	Delete and run an import job	Delete and run an import job execution

Task in Sage 500 ERP	How Task Is Invoked	No admin authority - password optional		Admin authority - no password		Admin authority - with password	
		No DI pkg auth	DI pkg admin or user	DI pkg admin	DI pkg user	DI pkg admin	DI pkg user
Purge Import Job Execution	Data Import Manager Activities menu > Purge Import Job History.	Yes	Yes	Yes	Yes	Yes	Yes
Explore - Import Jobs	Data Import Manager Insights menu > Import Jobs.	Yes	Yes	Yes	Yes	Yes	Yes
Explore - Import Job Executions	Data Import Manager Insights menu > Import Job Executions.	Yes	Yes	Yes	Yes	Yes	Yes

Working with Alerts

C

Introduction

This chapter provides general information and requirements for Alerts installation and configuration.

In this chapter

SQL Server Agent	198
Database Mail	199

SQL Server Agent

Overview

Because SQL Server Agent is a core component of Alerts, consider the following before you begin Alerts installation:

- SQL Agent must be running.
- We recommend that SQL Agent be configured to auto-start when SQL Service starts.
- You should be familiar with the Jobs dialog box for SQL Agent under Enterprise Management.
- SQL Agent has multiple options for logging errors: by default, Alert jobs log to the SQL Agent Error Log.
- Changes made to job schedules in Enterprise Manager or SQL Server Management Studio will also be made to Sage 500 ERP Set Up Alerts.
- Do not make changes to the Job or Job Step objects for Sage 500 ERP Alerts jobs.

Database Mail

Overview

Introduction

Database Mail must be configured correctly to run Sage 500 ERP Alerts. Consider the following before you begin Alerts installation:

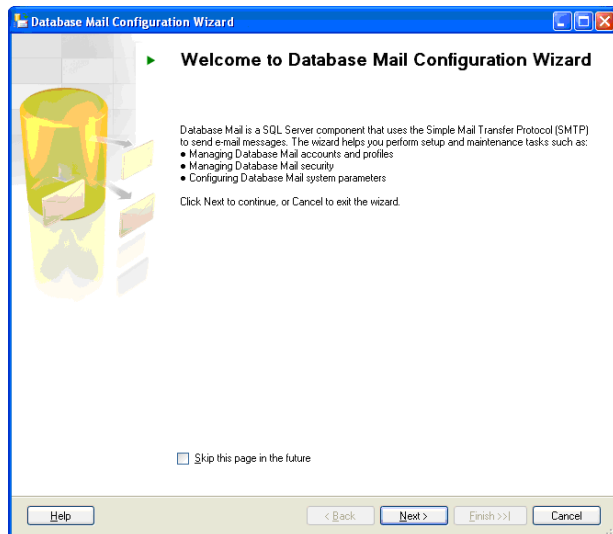
- Database Mail uses the standard Simple Mail Transfer Protocol (SMTP) to send e-mails. You can use Database Mail without installing an Extended MAPI client on the SQL Server.
- Database Mail stores configuration and security information in the msdb database. Configuration and security objects create profiles and accounts used by Database Mail.
- You can create multiple profiles on the server and select the profile to use when you send a message.
- The msdb database acts as the mail-host database that holds the messaging objects that Database Mail uses to send e-mail.
- Database Mail records logging information in the msdb database and the Microsoft Windows application event log.

Configuring Database Mail For SQL 2008

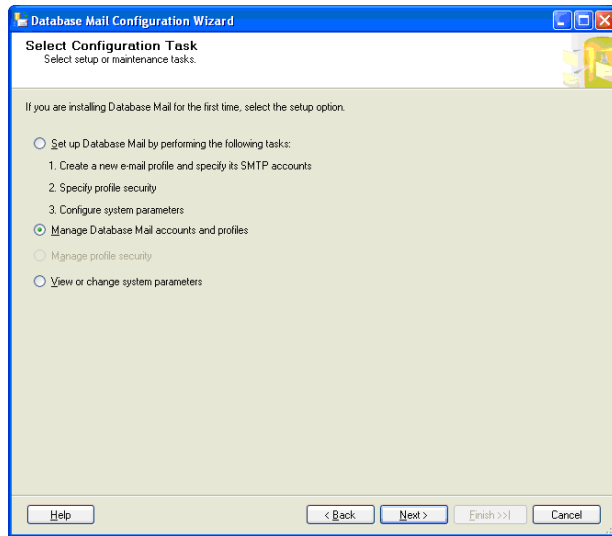
Procedure

This section describes how to configure Database Mail for SQL 2008 using the Database Mail Configuration Wizard.

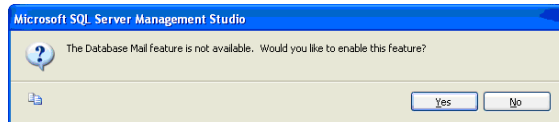
- 1 Start the Database Mail configuration by opening Microsoft SQL Server Management Studio.
- 2 Expand the Management folder, and select Database Mail node.
- 3 Right-click, and select Configure Database Mail from the Context menu.
- 4 The Database Mail Configuration Wizard window appears. Click Next to continue.



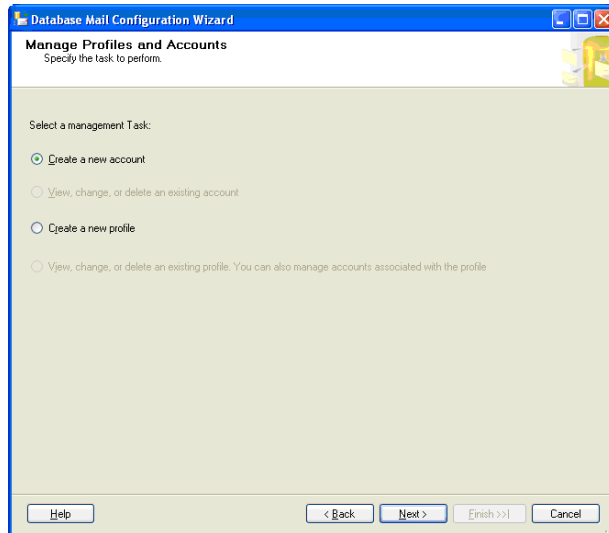
- 5 In the Select Configuration Task, select the Manage Database Mail Accounts and Profiles option, and click Next to continue.



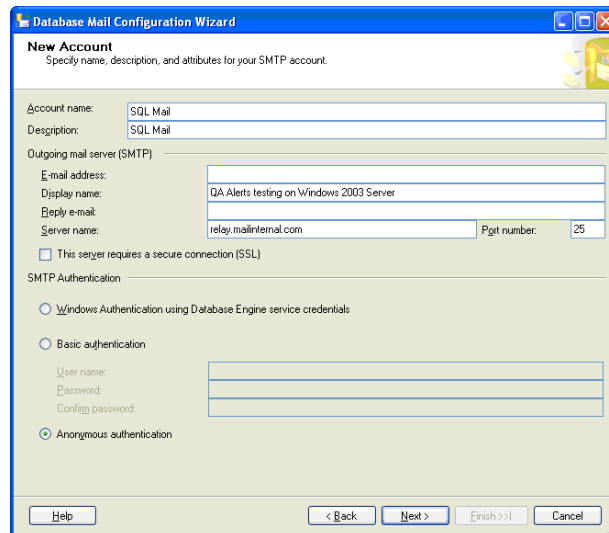
- 6 The following message dialog box displays only when enabling the Database Mail feature for the first time. Click Yes to continue.



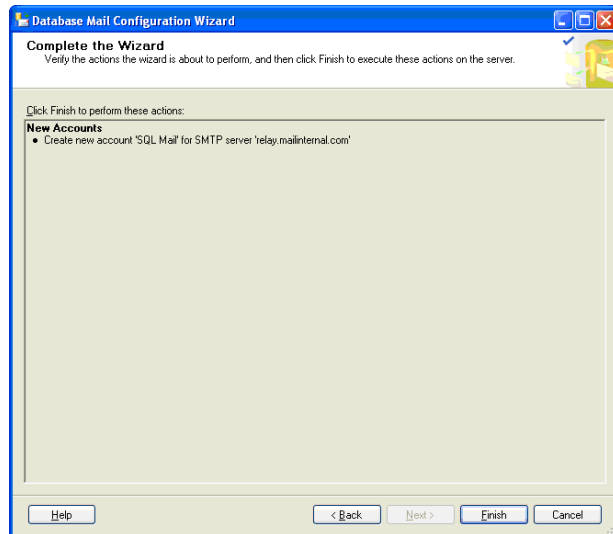
- 7 In the Manage Profiles and Accounts window, verify the Create a new account option is selected, and click Next.



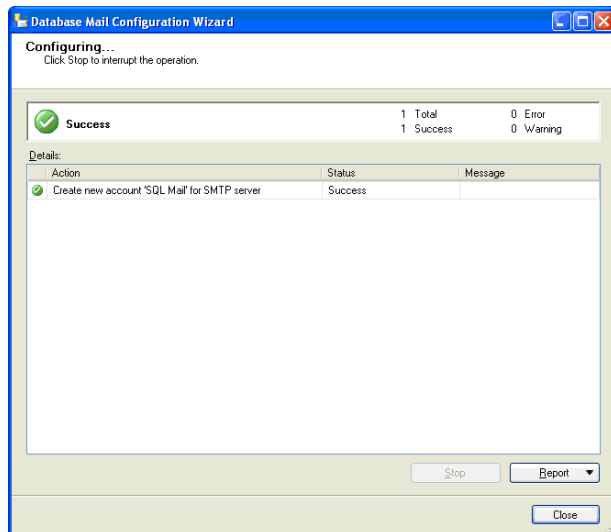
- 8 In the New Account window, enter the information for the new account, and click Next to continue.



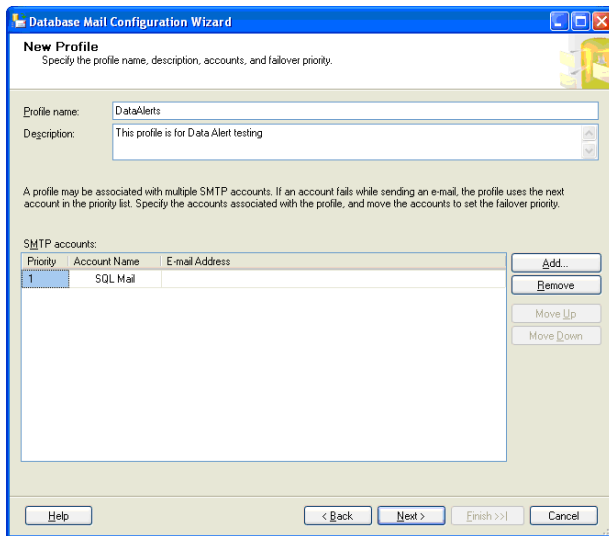
- 9 After entering the information, click Finish to run the wizard.



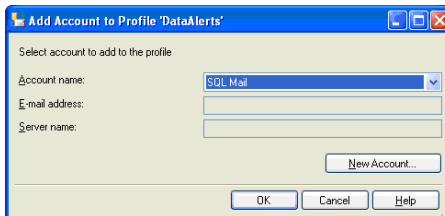
- 10 When the Configuring window displays, click Close to close the window.



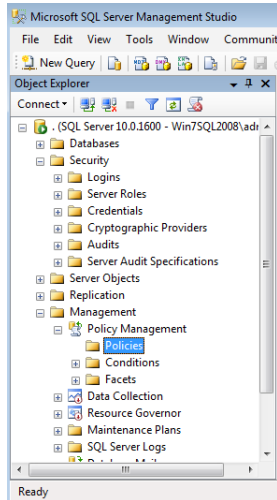
- 11 Start the Database Mail Configuration Wizard again, and click Next to continue.
- 12 In the Select Configuration Task window, select the Manage Database Mail Accounts and Profiles, and click Next to continue.
- 13 In the Manage Profiles and Accounts, select the Create a Profile option, and click Next.
- 14 In the New Profile window, enter the information, and click Add.



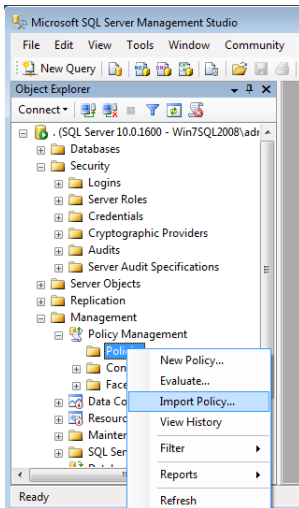
- 15 Verify the SQL Mail option is selected at the Account name field, and click OK.



- 16 From the Programs group, select Microsoft SQL Server Management Studio > Management > Policies.

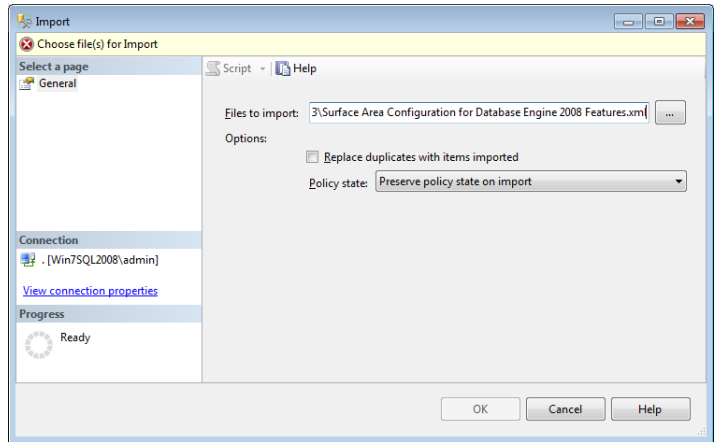


- 17 Right-click the Policies folder and click Import Policy.

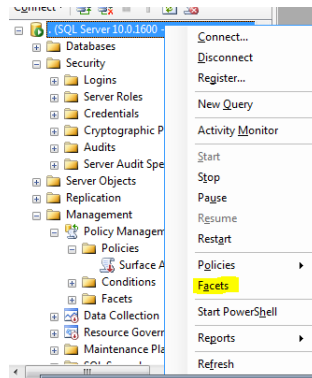


- 18 When the Import Policy window appears, in the Files to import field, select the Surface Area Configuration for Database Engine 2008 Features.xml file and click OK.

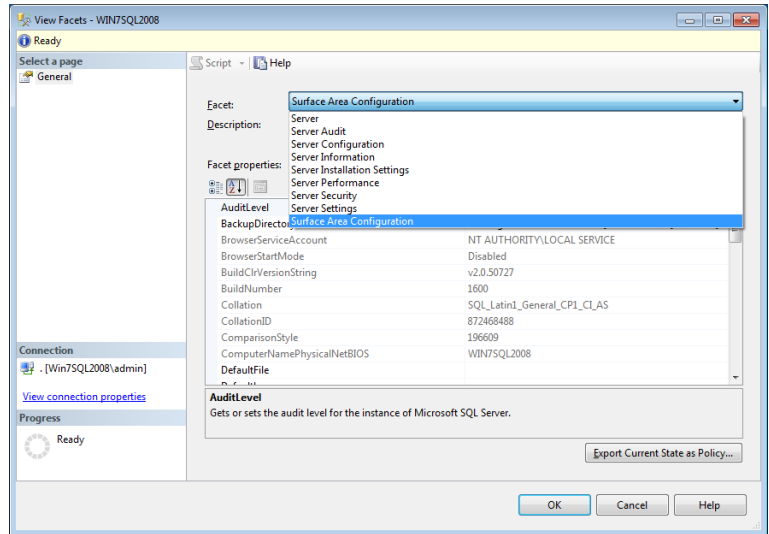
The file is located at:
C:\Program Files (x86)\Microsoft SQL Server\100\Tools\Policies\Database Engine\1033\Surface Area Configuration for Database Engine 2008 Features.xml.



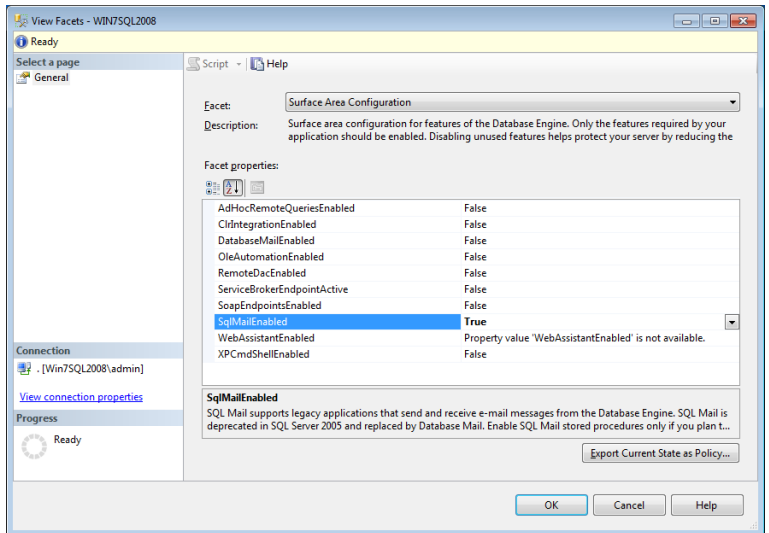
19 Right-click the server name and select Facets.



- 20 In the Facets drop-down menu, select Surface Area Configuration.



- 21 In the Facet properties field, enable SQL Mail and click OK to finish the process.



Protocol Issues

D

This appendix provides detailed information to help you set up network protocol with the server. For more information about network protocols and other requirements, refer to the *Compatibility and Resource Guide* located in the Support page on the Sage Customer Portal at:
<https://customers.sagenorthamerica.com>

In this appendix

Named Pipes over TCP/IP	209
Multi-Protocol over TCP/IP	212
TCP/IP Sockets over TCP/IP Protocol.....	214

Named Pipes over TCP/IP

Description

A general rule for connecting using Named Pipes is that you must be logged on to the domain in which the SQL Server resides, or have an open pipe into a resource at the SQL Server. A pipe can be opened to the IPC\$ sharepoint on the server using the net view command-line utility. Connecting to any other shared resource using the browse or mapping features in Windows Explorer or the Network Neighborhood applet serves the same purpose.

Indication of operating protocol

When you use Named Pipes over TCP/IP, you should be able to do the following:

- Ping the SQL Server at a command prompt from the client machine.
- Connect to the SQL Server using the MAS 500 ODBC DSN.

Use the procedures in the following sections to set up the network protocol.

SQL Server setup procedure

Follow these steps to set up the SQL Server.

- 1 Select Windows Start menu > All Programs > Microsoft SQL Server group > Server Network Utility.
- 2 Select Add.
- 3 Enter the pipe name at the Pipe name field, or accept the default by selecting OK.
- 4 The SQL Server Network Utility returns you to the General tab page. Select OK.

Client (including Terminal Services) setup procedure

Follow these steps to set up the client.

- 1** Remove the NetBEUI protocol from the client system, or specify the TCP/IP protocol as the first in the Workstation binding order.
- 2** Select Windows Start menu > Settings > Control Panel. In the Control Panel window, double-click Administrative Tools. In the Administrative Tools window, double-click Data Sources (ODBC).
- 3** Select the MAS 500 DSN, and select Configure. If no Data Source Names for Sage 500 ERP appear in the list, see Chapter 3, *Database Creation and Upgrade* for installation instructions.
- 4** Verify that the correct server name is entered. Select Next, and select Client Configuration.
- 5** Select TCP/IP in the Network libraries section.
- 6** Type the server IP address at the Computer name field and the port number at the Port number field. Click OK to accept the changes and close the Edit Network Library Configuration window.
- 7** Enter a valid user ID and password or sa as the Logon ID with the appropriate password.
- 8** Select Next to verify connectivity. When verified, select Cancel.
- 9** Run the System Configuration Utility to check the connectivity to Sage 500 ERP. Then, run the Sage 500 ERP client software.

**Configuration
notes**

Note the following when using the protocol:

- The TCP/IP network protocol should be the first protocol bound to the Network Interface Card (NIC). To verify the protocol, use the Network applet in the Control Panel and view the settings for bindings.
- All protocols except TCP/IP may have to be removed from the client system if the protocol bindings are not modified.

Multi-Protocol over TCP/IP

Description

A general rule for connecting using Multi-Protocol is that you must be logged on to the domain in which the SQL Server resides, or have an open pipe into a resource at the SQL Server. A pipe can be opened to the IPC\$ sharepoint on the server using the net view command-line utility. Connecting to any other shared resource using the browse or mapping features in Windows Explorer or the Network Neighborhood applet serves the same purpose.

Note: For the SQL port number, refer to the SQL server documentation available on the Microsoft Web site.

Indication of operating protocol

When you use Multi-Protocol over TCP/IP, you should be able to do the following:

- Ping the SQL Server at a command prompt from the client machine.
- Connect to the SQL Server using the MAS 500 ODBC DSN.

Use the procedures in the following sections to set up the network protocol.

SQL Server setup procedure

Follow these steps to set up the SQL Server:

- 1 Select Windows Start menu > All Programs > Microsoft SQL Server group > Server Network Utility.
- 2 Select Add.
- 3 Enter a server alias. If you want the alias and the computer name to be different, change the name at the Computer Name field.
- 4 Select OK. The SQL Server Network Utility returns you to the General tab page. Select OK.

- 5 Stop, then restart the SQL Server Service.

Client (including Terminal Services) setup procedure

Follow these steps to set up the client:

- 1 Select Windows Start menu > Settings > Control Panel. In the Control Panel window, double-click Administrative Tools. In the Administrative Tools window, double-click Data Sources (ODBC).
- 2 Select the MAS 500 DSN, and then select Configure. If no Data Source Names for Sage 500 ERP appear in the list, see Chapter 3, *Express Installation* for installation instructions.
- 3 Verify the correct server name is entered. Select Next, and select Client Configuration.
- 4 In the Client Configuration section on the Advanced tab, enter the server name or the Server alias.
- 5 Select TCP/IP in the Network libraries section.
- 6 Type the server IP address at the Computer name field and the port number at the Port number field. Click OK to accept the changes and close the Edit Network Library Configuration window.
- 7 Enter a valid user ID and password or sa as the Logon ID with the appropriate password.
- 8 Select Next to verify connectivity. When verified, select Cancel.
- 9 Run the System Configuration Utility to check the connectivity to Sage 500 ERP. Then, run the Sage 500 ERP client software.

TCP/IP Sockets over TCP/IP Protocol

Description

When you use TCP/IP sockets over TCP/IP, you should be able to do the following:

- Ping the SQL Server at a command prompt from the client machine.
- Connect to the SQL Server using the MAS 500 ODBC DSN.

Use the procedures in the following sections to set up the network protocol.

SQL Server setup procedure

Follow these steps to set up the SQL Server:

- 1 Select Windows Start menu > All Programs > Microsoft SQL Server group > Server Network Utility.
- 2 Select Add.
- 3 Enter a server alias. If you want the server alias and the computer name to be different, change the name at the Computer Name field.
- 4 Select OK. The SQL Server Network Utility returns you to the General tab page. Select OK.
- 5 Stop, then restart the SQL Server Service.

Client (including Terminal Services) setup procedure

Follow these steps to set up the client:

- 1** Select Windows Start menu > Settings > Control Panel. In the Control Panel window, double-click Administrative Tools. In the Administrative Tools window, double-click Data Sources (ODBC).
- 2** Select the MAS 500 DSN, and then select Configure. These DSNs are created automatically when you install the client software, as described in *ODBC, Registry, and OLE DB Additions* on page 79.
- 3** Verify the correct server name is entered. Select Next, and select Client Configuration.
- 4** In the Client Configuration section on the Advanced tab, enter the server name or the Server alias.
- 5** Select TCP/IP in the Network libraries section.
- 6** Type the server IP address at the Computer name field and the port number at the Port number field. Click OK to accept the changes and close the Edit Network Library Configuration window.
- 7** Enter a valid user ID and password, or sa as the Logon ID with the appropriate password.
- 8** Select Next to verify connectivity. When this has been established, select Cancel.
- 9** Run the System Configuration Utility to check the connectivity to Sage 500 ERP . Then, run the Sage 500 ERP client software.

IPC mechanism

This IPC mechanism is specific to the TCP/IP protocol. Although it is not required, the connection string specifying the IP address and port number are recommended in the case that the IP name resolution service is not operating or available.

Silent Installation



The silent installation feature enables you to install the software without having to respond to screens. Silent installation is available only for client installation.

In this appendix

Using Silent Installation 217

Using Silent Installation

Overview

Introduction

You perform a silent installation by issuing a command in the Command Prompt window or running it from a batch file. No screens appear while you run the installation.

You can use the basic command to install the software with default settings. You can also add parameters to the command to change options, such as the folder where the software is installed.

When to Use Silent Installation

Description

The silent installation feature allows you to install the software without having to respond to screens. You may want to use the silent installation feature in the following situations:

- You want to install the software in the default configuration, and you do not want to go through the installation wizard.
- You want to install the software on several systems with the same settings. You can just insert the Sage 500 ERP DVD and run a batch file.

Precautions

Description	Before using silent installation, do the following: <ul style="list-style-type: none">• Close any open programs.• If you have a previous version of the software, uninstall it before running the silent installation.
Requirements	When performing a silent installation with parameters, use Setup.exe to test for the presence of .NET Framework and required operating system service packs during client installation.

Installing with Defaults

Description	When you use the version of the command with default settings, the following occurs: <ul style="list-style-type: none">• If you do not already have Windows Installer on the system, it is installed for you.• The client software is installed in the C:\Program Files\Sage Software\Sage MAS 500 Client folder.• All software is installed.• Shortcuts to the client software are added to the Windows Start menu.
Procedure	Follow these steps: <ol style="list-style-type: none">1 Hold down the SHIFT key while you insert the Sage 500 ERP DVD into the DVD drive. This prevents the Autorun feature from starting.2 Open the Command Prompt window.3 Change to the drive where the Sage 500 ERP DVD is located. Then, change to the Client folder.

4 Type the following command:

Setup.exe STARTUPOPTION=0 /qn

Note: There is a space between the 0 and /qn. Also, the 0 is a zero and not the letter O.

After the installation is finished, perform any needed post-installation tasks as shown in the rest of this guide.

Installing with Parameters

Introduction

To change the settings used in installation, run Setup.exe. Follow the Setup.exe command with parameters to specify installation settings, such as the destination folder.

Parameters

The client software installation has the following parameters:

Property	Value
INSTALLDIR	Destination folder where you will install the software to.
SERVERNAME	The server to which you will connect the client software.
APPFILENAME	Sage 500 ERP database name.
ADDFEATURE	Installs Active Planner and Allocations if specified.
ACP_NETWORK_PATH	Folder path where Active Planner Network is installed.
AA_NETWORK_PATH	Folder path where Allocations Network is installed.

Procedure

Follow these steps to install the Sage 500 ERP software:

- 1 Hold down the SHIFT key while you insert the Sage 500 ERP DVD into the DVD drive. This prevents the Autorun feature from starting.
- 2 Open the Command Prompt window.
- 3 Change to the drive where the Sage 500 ERP DVD is located. Then, change to the Client folder.
- 4 Type the appropriate command. The basic syntax is as follows:

Setup.exe *Parameter=Value* STARTUPOPTION=0 /qn

Note: There is a space between the 0 and /qn. Also, the 0 is a zero and not the letter O.

Where *Parameter=Value* is how you set options for the installation.

For example, if you are installing the client software to D:\Program Files\Sage Software\Sage MAS 500 Client and connecting to server AcctData, you would issue the command as follows:

**Setup.exe INSTALLDIR="D:\Program Files\Sage Software\Sage MAS 500 Client"
SERVERNAME=AcctData STARTUPOPTION=0 /qn**

Note the following:

- ▶ The parameters STARTUPOPTION and /qn are always required.
- ▶ INSTALLDIR is required when using parameters.
- ▶ Enclose paths with spaces with double quotation marks, such as "C:\Program Files".
- ▶ Separate multiple parameters with spaces.
- ▶ There is a space between the 0 and /qn. Also, the 0 is a zero and not the letter O.

Example 1:

Use the following command to install Active Planner Client with Sage 500 ERP Client.

```
setup.exe ADDFEATURE="ActivePlanner" ACP_NETWORK_PATH="D:\Sage 500 ERP Active Planner\" STARTUPOPTION=0 /qn
```

Example 2

Use the following command to install both Active Planner and Allocations Client with Sage 500 ERP Client.

```
setup.exe ADDFEATURE="ActivePlanner,Allocations" ACP_NETWORK_PATH="D:\Sage 500 ERP Active Planner\" AA_NETWORK_PATH="D:\Sage 500 ERP Allocations\" STARTUPOPTION=0 /qn
```

After the installation is completed, perform any needed post-installation tasks as shown in this guide.

Desktop and Command Shortcuts



You can launch Sage 500 ERP tasks directly from the Windows Desktop or from a command line. This section describes how to create shortcuts and obtain a list of Sage 500 ERP task IDs.

In this appendix

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Task IDs and Programs	231

Command Formats

Overview

Introduction This section shows how to issue commands to launch Sage 500 ERP tasks directly and notes on how to use these commands.

Methods for Creating Shortcuts

Automatic and manual methods

You can create shortcuts of tasks by performing one of the following:

- Drag and drop the task from the Desktop to the Windows Desktop.
- On the Desktop, right-click the task, and from the menu that appears, select Create Shortcut on Desktop.
- From a command line (either with the Run command, at the Command Prompt window, or from a batch file), use the Desktop-launching command and specify the task's ID.

Command Syntax

Description

The following programs are used to launch or control from the command line:

- **BusinessDesktop.exe:** This is the Desktop program itself. From the command prompt, you can launch it directly, have it launch a specified task, or run in a specific mode. The program is located in the Sage 500 ERP Client\Managed Applications folder.
- **BusinessDesktopLoader.exe:** This is the helper application that communicates with the Desktop. This file is located in the system32 folder in your Windows folder.

Example of command syntax

To execute a task from a command, specify the following command:

path\executable parameters

Where:

- *Path* is the complete path to the program. For BusinessDesktopLoader.exe, use C:\windows\system 32\ where *windows* is the Windows folder. For BusinessDesktop.exe, it is the BusinessDesktop folder where the Sage 500 ERP client is located (usually C:\Program Files\Sage Software\Sage 500 ERP Client\Managed Applications).
- *Executable* is BusinessDesktopLoader.exe or BusinessDesktop.exe.
- *Parameters* are the command-line parameters you use to specify features.

Desktop commands

BusinessDesktopLoader.exe uses the following parameters.

(No parameters)

If you launch BusinessDesktop.exe with no parameters, the Desktop opens. If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe
```

Note: This command is the same as launching BusinessDesktopLoader.exe with no parameters.

/Mode:Remote

Starts the Desktop Loader, but does not log on a user. This command is used in the Startup program group to place the Desktop in the Windows System Tray so that Sage 500 ERP loads quicker. The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Mode:Remote
```

You can follow /Remote with /Tasks parameters to launch tasks. The user is prompted to log on for each task.

/Mode:RemoteLogin

Starts the Desktop service and logs users on to Sage 500 ERP (either through the logon window with SQL Server authentication or automatically if Windows authentication is used), but does not open the Desktop. The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Mode:RemoteLogin
```

You can use /Mode:RemoteLogin with /Tasks to start individual Sage 500 ERP tasks. Users are prompted to logon only the first time. The logon stays active even after the last specified task is shut down.

/Mode:RemoteShow

Starts the Desktop and prompts users to log on, if SQL Server authentication is used, or logs users on automatically if Windows authentication is used. When the user shuts down tasks, the Desktop and Desktop Loader stay loaded. The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Mode:RemoteShow
```

Note: This command represents the default mode.

/Mode:StandAlone

Opens the Desktop as a standard application. If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. When you exit Sage 500 ERP, both the Desktop and Desktop Loader are closed.

The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Mode:StandAlone
```

/Tasks:xxxxx

Opens the Desktop service and the task with the specified task ID number. For information on obtaining a list of task ID numbers, see *Task IDs and Programs* on page 231.

If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. The following is an example of the command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Tasks:16843152
```

This command uses BusinessDesktop.exe to launch task ID 16843152 for Assisted Company Setup.

You can also use /Tasks with other parameters and use multiple /Tasks parameters to open several programs at the same time. The /Tasks parameters come after other BusinessDesktopLoader.exe parameters. For example, to launch View/Edit Invoices and the Aged Receivables Report while the system is in stand-alone mode, use the following command:

```
C:\Program Files\Sage Software\Sage 500 ERP  
Client\Managed Applications\BusinessDesktop.exe  
/Mode:StandAlone /Tasks:84279346 /Tasks:84479240
```

Note: This command is the same as launching BusinessDesktopLoader.exe with the /T parameter.

Desktop Loader parameters

BusinessDesktopLoader.exe uses the following parameters.

(No parameters)

If you launch BusinessDesktopLoader.exe with no parameters, the Desktop opens. If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. The following is an example of the command:

```
C:\Windows\system32\BusinessDesktopLoader.exe
```

This is the command used for launching the Desktop from the Windows Start menu.

Note: This command is the same as launching BusinessDesktop.exe with no parameters.

/L

Starts the Desktop loader, but does not open the Desktop or log on any users. The following is an example of the command:

```
C:\Windows\system32\BusinessDesktopLoader.exe /L
```

/S

Opens the Desktop but does not show the Desktop icon in the Windows System tray. If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. The following is an example of the command:

```
C:\Windows\system32\BusinessDesktopLoader.exe /S
```

/Txxxxxx

Opens the task with the specified task ID number. For information on obtaining a list of task ID numbers, see *Task IDs and Programs* on page 231.

If SQL Server authentication is used, the logon window appears. If Windows authentication is used, the Desktop appears directly and logs on the current Windows user. The following is an example of the command:

```
C:\Windows\system32\BusinessDesktopLoader.exe  
/T16843152
```

This command uses BusinessDesktopLoader.exe to launch task ID 16843152.

Note: This command is the same as launching BusinessDesktop.exe with the /Tasks parameter.

/X

Closes the Desktop and the Desktop loader in the Windows System tray. The following is an example of the command:

```
C:\Windows\system32\BusinessDesktopLoader.exe /X
```

Directly Launched Tasks and the Desktop

Description Tasks launched through shortcuts behave just like every other Sage 500 ERP task. The Desktop supports shortcuts and does not appear unless specifically launched.

Logon and company used If you launch a task from a shortcut, and it is the first Sage 500 ERP task to run on that machine, you are prompted with the logon window. After a successful logon, only the task invoked appears; the Desktop does not. Subsequent executions of shortcuts in this session do not launch the logon window. This limits you to working in only the company specified during the original logon. If it is necessary for you to work within multiple companies in one session, start the Desktop.

If the Desktop is running when you launch a task directly, a shortcut execution launches the task in the company currently specified in the Desktop.

If you launched a task from a shortcut, and the Desktop is not running, a subsequent execution of the Desktop does not invoke the logon window.

Shutting down the Desktop If the Desktop is shut down, all tasks, including tasks started with a shortcut, are shut down.

Task IDs and Programs

Overview

Introduction You can generate a list of task IDs with menu titles and program names to identify the tasks for which to create shortcuts. This section describes how to obtain the task IDs.

Obtaining the Task ID

Description In a query tool, such as SQL Server Query Analyzer or SQL Server Management Studio, run the queries on the system database as shown in this section to get task IDs and program names. The queries shown here sort and present the information in different ways.

Listing tasks for a specific module The following query lists only the tasks for a specific module. Tasks are organized by menu title. An ampersand (&) appears if shortcut characters are considered in the sort.

```
SELECT DISTINCT f.Caption AS 'Menu Item',
CASE TaskInterfaceType WHEN 5 THEN
CONVERT(CHAR(255),TaskOleProgID) ELSE
CONVERT(CHAR(255),
UPPER(SUBSTRING(t.TaskOleProgID,1,8)))
END AS 'Program Name',
t.TaskID AS 'Task ID'
FROM tsmPrimaryMenuItem f JOIN tsmPrimaryMenu p
ON f.PrimaryMenuKey = p.PrimaryMenuKey JOIN
tsmTask t
ON f.TaskID = t.TaskID
JOIN tsmModuleDef m ON t.ModuleNo = m.ModuleNo
WHERE p.PrimaryMenuID = 'Standard' AND m.ModuleID
= 'XX'
ORDER BY [Menu Item]
```

Replace XX with the abbreviation of the module to obtain task IDs for. For example, to get a listing of System Manager tasks, change the WHERE line as follows:

WHERE p.PrimaryMenuID = 'Standard' AND m.ModuleID = 'SM'

This query will return all tasks with program names that start with the module abbreviation (such as an Inventory Management query that returns IMZMR001). The query does not return tasks added to one module that are based on a program for another module. For example, the Common Information module uses IMZMR001 for Maintain Non-Inventory items, but IMZMR001 does not appear in a Common Information query.

```

Query - cai500287.Dec27_app.admin - Untitled1*
SELECT DISTINCT f.Caption AS 'Menu Item',
CASE TaskInterfaceType WHEN 5 THEN CONVERT(CHAR(255),TaskOleProgID) ELSE CONVERT(C
END AS 'Program Name',
t.TaskID AS 'Task ID'
FROM tsmPrimaryMenuItem f JOIN tsmPrimaryMenu p ON f.PrimaryMenuKey = p.PrimaryMen
ON f.TaskID = t.TaskID
JOIN tsmModuleDef m ON t.ModuleNo = m.ModuleNo
WHERE p.PrimaryMenuID = 'Standard' AND m.ModuleID = 'SM'

```

Menu Item	Program Name	Task ID
1	Assisted Company Setup	SMPHASEL
2	Assisted Company Setup List	SMZLA001
3	Change Business Date(s)	SMZNG001
4	Company List	SMZRC001
5	Company Profile	SMZRJ001
6	Company User Group Permissions	SMZRM001
7	Deferred Printing	SMZTH001
8	Maintain Companies	SMZNC001
9	Maintain Lookup Views	SMLOOKUP
10	Maintain Lookups	SMLOOKUP
11	Maintain Report Format	SMZMK001
12	Maintain Security Groups	SMZMB001
13	Maintain Site	SMZNE001
14	Maintain Users	SMZMA001
15	Maintenance Audit Log	SMZRL001
16	Purge Activity Log	SMZTF001
17	Security Group List	SMZRB001

Query batch completed. Server: admin (51) MAS_app 0:00:04 23 rows Ln 8, Col 56

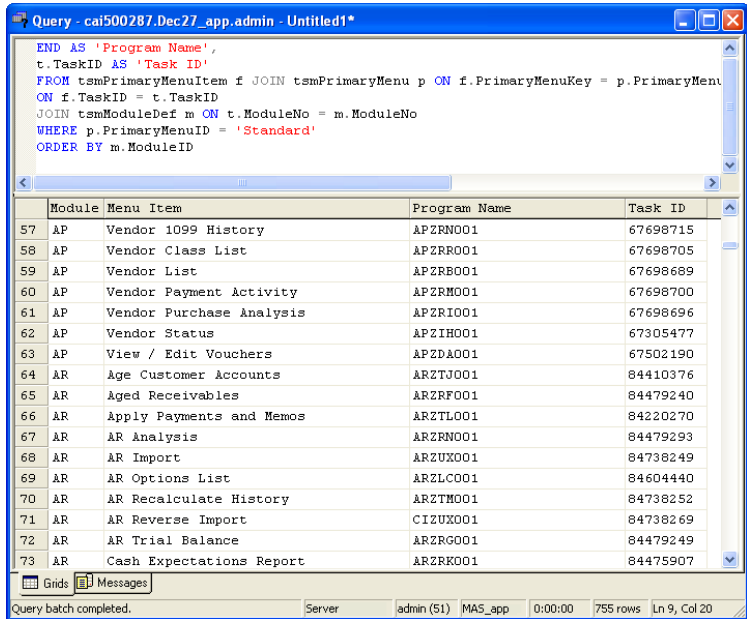
Listing all tasks in order of module

The following query lists all tasks in order of module and includes long task names. The query lists tasks assigned to a module that come from other modules, such as IMZMR001 for the Maintain Non-Inventory Item task in the Common Information module.

```

SELECT DISTINCT m.ModuleID AS 'Module', f.Caption AS
'Menu Item',
CASE TaskInterfaceType WHEN 5 THEN
CONVERT(CHAR(255),TaskOleProgID) ELSE
CONVERT(CHAR(255),
UPPER(SUBSTRING(t.TaskOleProgID,1,8)))
END AS 'Program Name',
t.TaskID AS 'Task ID'
FROM tsmPrimaryMenuItem f JOIN tsmPrimaryMenu p
ON f.PrimaryMenuKey = p.PrimaryMenuKey JOIN
tsmTask t
ON f.TaskID = t.TaskID
JOIN tsmModuleDef m ON t.ModuleNo = m.ModuleNo
WHERE p.PrimaryMenuID = 'Standard'
ORDER BY m.ModuleID

```



Best Practices for SQL Server Maintenance



This appendix explains best practices for SQL Server maintenance in Sage 500 ERP. Successful management of your SQL environment is vital to the success of Sage 500 ERP. Sage recommends the following best practices, arranged by frequency.

Note: The tasks described in this section require expertise in SQL Server and database administration. It is recommended that you also have T-SQL (Transact-SQL) knowledge.

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Best Practices to Perform Once

Description

Perform the following tasks once for SQL server maintenance.

- Set up a test environment (ideally, a separate physical machine from production).
- Disaster recovery strategy
 - ▶ Develop a disaster recovery strategy.
 - ▶ Test the disaster recovery strategy.
 - ▶ Document this strategy and place it in an obvious, accessible location. Write the document in a step-by-step format so that anyone can follow it.
- Set up a help desk system where users can go.
- Be sure that you are using the features you have enabled, especially if they have a performance impact (for example, application auditing or preload lookups).
- Create a strategy to allow or deny ad-hoc queries from other applications. For example, determining whether to use Application DB roles in Sage 500 ERP.
- Define your maintenance window.
 - ▶ Document the maintenance window and all the jobs that run within it.
 - ▶ Document the purpose of each custom job.
- Create SQL Operators and define alerts to notify by text or phone of emergency situations (for example, database is down or bottleneck occurrences).
- Consider creating event log notifications.
- Determine the possibility to off load reporting to a dedicated report server. If you plan to use a report server, train users to run reports on the report server.

Daily Best Practices

Description

Perform the following tasks daily for SQL server maintenance.

- Check the following SQL jobs in Sage 500 ERP installs:
 - ▶ QtyOn job
 - ▶ Registration job
 - ▶ Maintenance job
 - ▶ These jobs should be checked to make sure they have been set to active, are running, and have not failed.
- Monitor SQL performance by using Performance Monitor (perfmon) to gather information about possible resource bottlenecks (for example, memory, CPU, or disk).
- Check hardware for any potential problems.
- Perform backups.
 - ▶ Verify the previous night's backup by restoring.
- Check event logs.
- Check SQL Server logs.

Weekly Best Practices

Description

Perform the following tasks weekly for SQL server maintenance.

- Use a performance metric tool such as Quest PA or Microsoft Dashboard to determine long running queries, missing indexes, indexes that can be dropped, and so on.
- Observe how users look up information and how they process tasks. This identifies tasks a user does that are incorrect or unnecessary, and identifies a need for new indexes.
- Trend uptime and downtime statistics.
 - ▶ Trend performance metrics.

Monthly Best Practices

Description

Perform the following tasks monthly for SQL server maintenance.

- Monitor database growth in mas500app, tempdb, and the transaction log.
- Monitor table growth. If tables are growing and they are heavily used, consider moving them to their own drive array. You will need to have a plan for database and user growth.
- Check for fragmentation on machines periodically.
- Check tciDbAcuityLog entries.
 - ▶ Check timQtyOnOrderVarianceLog.

Miscellaneous Best Practices

Description

Perform the following tasks as needed for SQL server maintenance.

- Keep a log of customizations, their purpose, and contact information for third-party customizations.
- Test the disaster recovery strategy at least once or twice a year.
- Be sure that new code (for example, reports) that is written by anybody other than Sage, is not deployed to production without first being performance profiled.
- Create a formal process that requires steps for deployment before being introduced into the production database.
- Consider implementing change management control.
 - ▶ Review proposed reports, views, and queries for inefficient code before deployment to production.
 - ▶ Verify the potential performance impact.

Upgrading from SQL Server version 2008 R2 SP3 or 2012



This appendix explains how to upgrade from SQL Server 2008 R2 SP3 or SQL Server 2012 to SQL Server 2014 Express. If you are upgrading from an edition other than SQL Server 2008 R2 SP3, refer to the Microsoft Web site for instructions.

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Upgrading from 2008 R2 SP3 or 2012

Procedure

To upgrade from SQL Server 2008 R2 SP3 or 2012 to SQL Server Express 2014

- 1 On the server where SQL Server 2008 R2 SP3 is installed, right-click the SQL Server 2014 setup.exe file and click Run as administrator.
- 2 In the SQL Server Installation Center window, click the Installation option.
- 3 Click “Upgrade from SQL server 2005, SQL server 2008, SQL server 2008 R2 or SQL server 2012”.
- 4 Double-click the setup.exe file to start the installation.
- 5 Proceed through the wizard to complete the installation.
 - In the Upgrade Rules window, if any errors appear, correct them before proceeding.
 - In the Install Rules window, if any errors appear, correct them before proceeding.
- 6 When the installation is complete, start SQL Server 2014.
- 7 Verify that version 2014 is installed by executing the following query:
select @@version

Error Messages



This appendix explains errors messages that might appear and recommends solutions for solving them.

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Setup and Configuration Errors

Description

This section describes messages that appear as a result of setup and configuration errors. Check the system and Sage 500 ERP configuration to verify everything is correct.

Messages

An error occurred while trying to start Sage 500 ERP. Check the tracker log file for details regarding the problem.

This problem may be caused by a problem with the client workstation. To verify that the problem is only with a specific client system, try logging on to Sage 500 ERP from another system. If you can log on successfully, try the following on the defective client system:

- Run the Client Configuration Utility to verify the ODBC setup.
- Verify that the client can connect to the SQL Server. Use ISQL, Enterprise Manager, or SQL Server Management Studio to check server communication.
- Verify that the Sage 500 ERP installation did not encounter any errors.
- Run a disk diagnostic tool such as Scandisk to verify that there are no drive errors.

If you cannot log on to Sage 500 ERP from any client system, there might be a problem with the databases. Do the following:

- View the generated log file located in C:\Program Files\Sage Software\Sage 500 ERP Client\SM*date*.tracklog (where *date* is the current date) in Notepad or any text editor. This file lists information about the error.
- Run database consistency check commands (DBCC) to check the databases. If there are no database errors, refer the problem to your system administrator who can contact your Sage business partner (reseller) or Sage Customer Support for further assistance.

Unable to load <path>sotainst.dll

Verify the SQL Server and communications components have properly installed. ODBC access should be available to the SQL Server where Sage 500 ERP is located.

Unable to register sotaview.dll

Install Crystal Reports, and then reinstall Sage 500 ERP.

Registration Errors

Description

The following messages provide information about the registration status. For instructions about registration, see *Registering the Software* on page 90.

Messages

Your Sage 500 ERP is not registered or the registration has expired. You have xx day(s) to register Sage 500 ERP. After the expiration date, you will not be able to access application tasks.

This message appears during the grace period. For information, see *Registration Grace Period* on page 18. When you register the software, the message stops appearing until the registration expires and a new grace period begins.

Your Sage 500 ERP is not registered or the registration has expired. Please use SM Maintain Site to register the software. If you need assistance, please contact your Sage business partner or Sage Customer Support.

The 45-day grace period has expired. You do not have access to the system until you register the software.

Your Sage 500 ERP installation is not registered to use the *name* module. Unable to start the task.

The indicated module is not registered, and the 45-day grace period has expired. You must register the module to use it.

You have reached your Sage 500 ERP license limit of xx concurrent users. Please either close one of the Sage 500 ERP instances currently running on another workstation or purchase more Sage 500 ERP licenses.

You have exceeded the maximum number of concurrent users granted by your license. Another user needs to log off before that user can log on.

Your business date cannot exceed your registration expiration date plus 45 days.

You cannot set the business date, either from the software or in the back end, past the grace period on a system that is unregistered or has an expired registration. Change to a business date within the grace period or register the software.

Your Sage 500 ERP license allows you to run on SQL Server edition SQL Desktop or SQL Standard only. Please contact your Sage business partner or Sage Customer Support to resolve.

The version of SQL Server you are using with Sage 500 ERP is unregistered. Register SQL Server before using it with Sage 500 ERP.

The server side registration component is missing. Please resolve this by installing the Sage 500 ERP database utility on the server.

The database installation is incomplete. Use the Custom installation of the Database Utilities and install the License Server Component. Then, try the registration again. For information about installing the Database Utilities, see *Installing the Database Utilities* on page 28.

Your Site Information in the Registration Message does not match the data in your current configuration. To resolve, verify the Customer Number, SM Serial Number, and SM Unlocking Key and reregister.

This is caused by either of the following:

- You copied a registration message from a different site into a copy of Sage 500 ERP. Submit a registration request from this site.
- SQL Server Scheduler is not set up correctly. Verify that it is set up correctly before attempting automatic registration.

The URL to Sage 500 ERP Registration Web Service site is missing. Please contact your Sage business partner or Sage Customer Support to resolve.

The URL was deleted from the database when modifications were made on the back end. Contact your Sage business partner or Sage Customer Support for instructions on correcting the deletion.

The requested site is not known by Enterprise Registration Web Services. Please contact your Sage business partner or Sage Customer Support to resolve.

Verify that you have entered the customer number, System Manager serial number, and System Manager unlocking key correctly. If you have entered them correctly but still get this error, contact Sage for assistance.

The requested site is not active in Enterprise Registration Web Services. Please contact your Sage business partner or Sage Customer Support to resolve.

Contact Sage for assistance.

Site information (UserCustomerNo, SMSerialNo or SMUnlockKey) is missing. Please use SM Maintain Site to enter the proper values.

The system attempted to send your registration automatically through SQL Server Agent, but you have not entered the registration information. Enter your customer number, System Manager serial number, and System Manager unlocking key in Maintain Site before attempting to sending the registration information.

The Internet connection is not set up on your Sage 500 ERP database server. Please contact your system administrator to resolve.

The system attempted to send registration information when the Internet connection was down. Verify that your Internet connection is up before sending the registration information. If you have a dial-up connection or trouble with your Internet connection, consider using manual registration.

Your database server cannot connect to Enterprise Registration Web Services through the internet. Please contact your Sage business partner or Sage Customer Support to resolve.

The system was unable to connect with the Enterprise Registration Web Services database because of a problem at Sage or in the Internet connection. Try registering the software again later.

System Configuration Errors

Description The following messages refer to errors with Sage 500 ERP configuration. Check security settings and installation to resolve these problems.

Message **Security group must be different than the default security group.**

In Maintain Users, the default security group must be different than the groups entered into the Company/Group table.

Unable to start the selected task. The task is either not active or not installed on your machine.

Verify the programs for the module you are attempting to access have been installed at the client machine. If necessary, reinstall the client software.

Sage 500 ERP does not support this client's current regional setting.

The client system is set to a regional setting different from the Sage 500 ERP databases. By default, Sage 500 ERP databases are set to English (United States), code 1033. It is recommended that client systems use this locale.

If you need the client workstations to be of a different locale, change the locale of the Sage 500 ERP to one of the following. Only these English-language locales are supported.

Locale	Code
English (Australian)	3081
English (Belize)	10249
English (Canadian)	4105
English (Caribbean)	9225

Locale	Code
English (Ireland)	6153
English (Jamaica)	8201
English (New Zealand)	5129
English (South Africa)	7177
English (Trinidad)	11273
English (United Kingdom)	2057
English (United States)	1033

To change the locale, run the following SQL command in Query Analyzer:

```
spChangeLocaleID 'SageAppDB', CurrentLocale, NewLocale
```

Where *SageAppDB* is the application database, *CurrentLocale* is the current locale code (default 1033), and *NewLocale* is the code of the locale to which you want to use. The single quotes around the application database name are required.

For example, to change MAS500_app to English (Australia), execute the following command:

```
spChangeLocaleID 'MAS500_iapp', 1033, 3081
```

After you have changed the database locale, all of the client systems must be changed to match the locale.

Additional Error Messages

Description

In addition to error messages from Sage 500 ERP, you might see error messages from other software applications that work in conjunction with Sage 500 ERP. The following is a list of other areas or software applications that might display error messages while you are using Sage 500 ERP:

- Microsoft Windows
- Microsoft SQL Server
- Microsoft Visual Basic
- Microsoft Office
- Crystal Reports for Sage 500 ERP
- Any ODBC software applications

See the documentation or the product's support Web site for information about resolving the error.

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