



Sage 100 Contractor 2018 (SQL)

Version 21.3 Release Notes

Canadian and U.S. Editions

March 2019

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April 2019 – Update 3 (Build 21.3.58)

This update includes several program fixes implemented since Update 2, released in February 2019.

Note: You must upgrade your database in Database Administration after installing this update.

Fixes in this Update

In both the Canadian and U.S. editions:

- Combined Accounts Receivable and Service Receivable Aging reports now print the correct subtotals when you select the **Sort By Client/Job** option.
- Emailing **3-4-23 Client Statements** using the Outlook button no longer sends multiple email messages to the same client.

API for Third-Party Developer Products

We have fixed the following issues in the API:

- When you use the API to save a PO where the **PO#** starts with an alpha character, the API no longer changes the number to the next numeric PO#.
- You no longer receive a constraint violation error when you use the API to submit a **ChangeOrderAddRq** or a **ChangeOrderModRq** where the **BudgetSubChangeDetailAdd** or **BudgetSubChangeDetailMod** contains a **SubcontractOrderNumber** with a leading alpha character.

We changed the validation of **SubcontractOrderNumber** to accept a leading character in the field.

- In the U.S. Edition, invoices that reference a subcontract that includes a line for use tax (where the **SubcontractLineRefNumber** is "USETAX") are now validated correctly.

The **SubcontractLineRefNumber** in the XSD for the U.S. edition now has a minimum length that accommodates the "USETAX" entry.

- The API no longer rejects invoices that are posting to dedicated **Equipment Assets**, **Equipment Depreciation**, and **Equipment Loans** accounts.

February 2019 – Update 2 (Build 21.3.53)

This update includes a program fix implemented since update 1, released in January 2019.

Fixes in this Update

In both the Canadian and U.S. editions:

- We fixed an issue that could arise with a third-party product that uses the Sage 100 Contractor API to modify subcontracts where the subcontract lines reference an existing change order. In the **6-7-1 Subcontracts** window, the **New Subcontract**, **Remaining**, and **Change** amounts are now calculated correctly.

January 2019 – Update 1 (Build 21.3.52)

This section describes tax changes included in this January update. It also includes program fixes implemented since the year-end update released in December 2018.

U.S. Payroll Tax Tables

Payroll tax tables have changed for the following jurisdictions in this update:

- Alabama
- Colorado
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- New Jersey
- North Dakota
- Rhode Island
- Vermont

Fixes in this Update

We have fixed the following issues in both the Canadian and U.S. editions:

- Service Invoice Profitability reports **11-01-02-61**, **62**, **71**, and **72** calculate properly again, even if some calculated fields include quotation marks.
- When emailing reports using Outlook, you can attach the report directly to an Outlook message, as you could in earlier versions of Sage 100 Contractor. In the report printing screen, on the **Options** menu, select **Use basic Outlook integration** if you want to skip the intermediate screen where you would otherwise select and name attachments.

- The **5-1-5-21 Worker's Comp** report reports the **Wages** and **Subject Wages** amounts correctly for salaried employees.
- You can again run custom reports that you created from the **5-2-8-41** and **5-2-8-42 Timecard Journal** reports without receiving an "Index was out of range" error message.

Fixes for the Canadian Edition

The following issue was fixed specifically for the Canadian edition:

- In the **5-2-1 Employees** window, you no longer receive an error message when you use the **[Enter]** key to move out of a Status field on the Direct Deposit tab.

U.S. Payroll Tax Tables—December 2018

Federal Payroll Tax Changes

Federal payroll tax tables have been updated for 2019.

For details, visit the IRS website at <https://www.irs.gov>.

State and Other Government-Mandated Payroll Tax Changes

Payroll tax tables changed for the following jurisdictions for 2019:

- California
- Georgia
- Illinois
- Iowa
- Kentucky
- Maine
- Minnesota
- Missouri
- New York
- Yonkers
- North Carolina
- Ohio
- Oregon
- South Carolina

New Paid Family and Medical Leave for Washington State

Beginning in 2019, if you are an employer in Washington State, you need to set up two or three new payroll calculations for 2019, as follows:

- The employer's contribution to medical leave.

You are required to pay medical premiums if you employ more than 50 people.

- Either a combined calculation for the employee's portion of family and medical leave, or separate calculations for each of these deductions.

You are required to collect these premiums regardless of the number of people you employ.

For help on setting up these calculations, see the help topic Washington State Medical and Family Leave Premium Contributions.

For detailed information on these provisions and any premium ceilings, see the Washington State Employment Security Department Web page at page at <https://paidleave.wa.gov>.

Canadian Payroll Tax Tables—December 2018

This section highlights federal, provincial, and Quebec tax changes.

For more information about these changes, and for information on Employment Insurance, see the Canada Revenue Agency website.

Federal Payroll Tax Changes

Changes to Canadian payroll taxes for 2019 include the following :

- Income tax thresholds and many personal amounts changed.
- EI maximum annual insurable earnings and the EI premium rate changed.
- CPP maximum pensionable earnings changed.
- CPP contributions will increase equally for both employer and employee beginning in January 2019.

For information about this change, visit [Canada Revenue Agency](#).

- The Canada Employment credit amount changed for 2019.

Quebec Payroll Tax Changes

Changes to Quebec payroll taxes for 2019 include the following:

- The indexation rate used to calculate the value of personal tax credits changed.

Important! To apply the indexation factor for the new year, you must update the Quebec Personal Tax Credits for Quebec employees on the **Options** menu in the **5-2-1 Employees** window .

- The QPP maximum contribution amount changed.
- QPP contributions will increase equally for both employer and employee beginning in January 2019.

For information about this change, visit [Retraite Quebec](#).

- The QPIP maximum insurable earnings changed.

Other Provincial and Territorial Payroll Tax Changes

The following provinces and territories mandated payroll tax changes, effective January 1, 2019:

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nunavut
- Ontario
- Quebec
- Yukon

For detailed information on personal amounts, see the TD1 form for each province or territory.

Fixes in Version 21.3

Fixes in both editions

Version 21.3 includes the following software fixes in both the U.S. and Canadian editions:

- Editing a client record in the **3-6 Clients** window no longer removes a location assigned to a work order in the **11-2 Work Order** window.

Previously, when you displayed a record in the **11-2 Work Order** window, then used the shortcut to open and save the client record in the **3-6 Clients** window, the Location field was blanked out when you returned to the **11-2 Work Order** window.

- Job-related vendor certificates no longer prevent the program from displaying warnings for non-job-related certificates.
- If you use the **Separate Reports by Job** option when you run the **5-1-5-21 Worker's Comp Report** for a salaried employee who has both job and non-job wages, the report page for job zero shows wages only for the non-job lines on the timecard.
- Users assigned to job security can now print the **6-1-4-51 Job Billing Summary** report without receiving an error.

Fixes for the Canadian Edition

The following issues were fixed specifically for the Canadian edition:

- The **2-11 GST/HST Filing** reports include GST or HST amounts from recurring transactions. The Quebec 2-11-31 and 2-11-32 reports include QST as required.
- The **2-11-31 Quebec GST Filing** report now reflects recoverable input tax credits associated with GST and QST paid.

Fixes for the U.S. Edition

The following issues were fixed specifically for the U.S. Edition of Sage 100 Contractor:

- The **5-1-6-51 Alaska Certified Payroll** report now includes an **Exclude employee address information** check box. Selecting this option prevents all address information (both the Alaska

domicile address and the employee's standard address) from printing on the report.

Do you have a product idea you want to share with us?

We want to hear it!

To suggest a product enhancement when you're working with Sage 100 Contractor:

1. On the Sage 100 Contractor desktop, click the **Home & Resources** tab > **Submit Product Idea**.
2. Log in to the Sage 100 Contractor Ideas site (or sign up).
3. Describe your idea.
4. (optional) Browse through others' suggestions, and vote for the ones you love!

Or visit (missing or bad snippet) any time you're online!

Delete this text and replace it with your own content.

Upgrading from a version earlier than v21?

New Entitlement Server

For version 21, Sage moved its Entitlement server (used to allocate license uses based on the license you have purchased) to a new, more secure server.

After installing this version of Sage 100 Contractor, you will need to open the License Manager and enter your **Sage Client ID** and **Registration Name** even if you have been using an earlier version of Sage 100 Contractor.

Important! You must enter your Client ID and Registration Name *exactly* as they appear for your account in the Customer Portal.

Tip: Before you install version 21, open **License Administration**, copy the **Sage client ID** and **Registration name** from the **License information** tab, and then paste them into a text document. After installing version 21, copy the **Sage client ID** and **Registration name** from the text document into the version 21 License Administration window.

Upgrading from version 19.8?

New Microsoft SQL Server Platform

Although Sage 100 Contractor 2018 has the same look, feel, and functionality that you are familiar with, its new SQL database structure affords much tighter security and an up-to-date technology on which to build future releases. It also provides several other notable enhancements, including:

- **A new, separate Database Administration tool.** You don't have to be an expert user of Microsoft SQL Server to take advantage of its robust features! We designed Database Administration to optimize your data for Sage 100 Contractor, for example, by keeping related data in expected locations and creating backups automatically before performing certain critical processes. Many of its features are not available through SQL Server Management Studio.

Significantly, Database Administration includes a migration utility that we have designed and tested extensively to help ensure a smooth and painless transition to SQL Server.

We have relocated many administrative utilities and functions from the main Sage 100 Contractor program to this new tool. However, we have boosted their capabilities considerably, and now provide easily scheduled maintenance and backup functions to help you to keep your Sage 100 Contractor companies in good order.

In addition, Database Administration offers several powerful, new capabilities that enable you to maintain tight security and exert fine control over user and program access to your SQL Server instance.

For a comprehensive list of the utilities you will find in Database Administration, see [Database Administration for Sage 100 Contractor](#), later in this document.

Note: Database Administration comes with its own help system and a new [Database and Company Administration Guide](#) to acquaint you with its features and to guide you in its use.

- **New views for creating reports with third-party report writers.** Because the new views point to the database tables, rather than pointing your reports directly to the tables, we encourage you to use them when creating custom reports using third-party tools, such as Crystal Reports.

For example, in earlier versions, you would point directly to `actpay.vndnme` to include Accounts Payable vendor names in custom reports. In the version 21.3 company database, this information resides in `dbo.actpay.vndnme`. However, we recommend that rather than pointing directly to the

table name, you point to the field in the new view: Reports_v1.actpay.vndnme. Report views are located in the Views folder in your company database.

Tip: A compelling reason to use these views is that they may not be affected by many types of changes to the underlying tables, so future database changes will not necessarily "break" your custom reports.

Software and hardware required to support Microsoft SQL Server

Version 21.3 requires an instance of Microsoft SQL Server. You can download and use Microsoft SQL Express at no charge, or you can use the full version of Microsoft SQL Server. You can even start using Microsoft SQL Express, and upgrade to the full version of Microsoft SQL Server later, if necessary.

When you first open the new Database Administration tool, the program tries to configure an instance of Microsoft SQL Server with optimal settings for Sage 100 Contractor for you. If you do not already have an instance of Microsoft SQL Server, you can let the Database Administration tool download, install, and configure Microsoft SQL Express for you.

Refer to Knowledgebase article 90782 (available at [available at \(missing or bad snippet\)](#).) for detailed information about supported operating systems and software, and for minimum hardware requirements.

Database Administration for Sage 100 Contractor

The new Database Administration tool is intended for designated system administrators and company administrators. You use it to set up and maintain your company databases, and to select advanced settings to manage communications with and access to your Microsoft SQL Server instance from other programs.

If you have used earlier versions of Sage 100 Contractor, several of these tasks will be familiar to you. For example, Database Administration includes utilities for creating and deleting a company, backing up and restoring company files, and archiving company data that you used in previous Sage 100 Contractor versions.

Important! We highly recommend that you use Database Administration, rather than SQL Management Studio®, to perform the database administration tasks listed below, even if you are an experienced SQL Server user. Besides handling all the database tasks that you are likely to perform in a typical Sage 100 Contractor system, Database Administration was designed to optimize your data for Sage 100 Contractor, for example, by keeping related data in expected locations and creating backups automatically before performing certain critical processes. In the rare event that you need to use SQL Management Studio® to perform a task that is not provided in Database Administration, you should contact Customer Support for assistance.

Database Administration includes the following database and company management utilities:

- **Create Company Based on Existing** and **Create Company** create new Microsoft SQL Server databases.
- **Rename Company** and **Delete Company** are convenient utilities when working with existing companies.
- **Deploy Sample Company** helps you install and refresh the sample data that comes with Sage 100 Contractor.
- **Tune Up Company Databases** performs various maintenance tasks to keep your database functioning efficiently.
- **Back Up Company Databases** enables you to back up your data "on demand," whenever needed.
- **Restore Company from Backup** restores a selected backed-up copy of your database.
- **Upgrade Company Databases** enables you to upgrade your databases smoothly from an earlier version of Sage 100 Contractor (SQL).
- **Archive Company Data** utilities enable you to archive data for your oldest fiscal year and your Payroll data.
- **Migrate Company Data** and **Migrate Custom Reports** transfers your version 19.8 company data and custom reports to a new location for Microsoft SQL Server. Migrated files are located in shared folders under \\ServerName\CompanyName, organized using a folder structure similar to earlier versions.
- **Schedule Nightly Maintenance** utilities enable you to schedule backup and maintenance operations for times when other users are not logged into the system. You can also select the number of consecutive backups to keep.
- **Company Admins/SQL Logins** utilities enable you to set up or delete logins to the SQL Server database, and to designate a user as a company administrator for a specified Sage 100 Contractor company.
- **Server Management** tools enable you to control the SQL Server instances you use with Sage 100 Contractor easily and efficiently. You can create a new instance on your computer, move companies to the new instance, and remove an instance you no longer need.
- **Advanced Settings** lets you specify how long to keep history about database changes for each company, including details about changed records, such as the date and user ID of the employee made the change. Details older than the retention period you specify are cleared during nightly maintenance. (This history is maintained in separate audit tables, which you can query using SQL Server Management Studio.)
- The **Toolbox** provides a variety of troubleshooting tools to help you track changes in your database, and to diagnose and fix certain types of problems.
- **Advanced SQL Server Settings** includes convenient, sophisticated access and memory management controls for your SQL database.

For detailed information about these utilities and how to use them, see the Database Administration help or refer to the [Database and Company Administration Guide](#).

Additional Changes for SQL Server

In addition to the new SQL database platform and the Database Administration tool, you should note the following important differences from earlier versions:

- Because each user must now identify themselves to SQL Server using a unique SQL login, there is no longer a single Supervisor user. Instead, you designate as Company Administrators users who require elevated privileges in Sage 100 Contractor.

Tip: You can copy supervisor preferences used in version 19.8 to individual users in the version 21.3 User List window.

- When starting Sage 100 Contractor, you first log in to an instance of SQL Server using a new **Connect to SQL Server** window, and then you select your company and type of access from the **Company List** window.

If you need to change the type of access after logging into the company, you can return to the **Company List** window using the **Change Company/Access** link on the Sage 100 Contractor desktop.

Note: If you want to log in as a different user, you must close Sage 100 Contractor completely first, and then log in using a different user name.

- You no longer need to reindex your data after upgrading. Now, you use the Database Administration tool migrate your data from version 19.8 and to update it in future.
- Version 21.3 and subsequent releases are installed to a different location than version 19.8 and earlier versions.

Having separate installation locations enables you to run version 21.3 and version 19.8 on the same computer while you migrate your data to the new version.

- You need to install the License Administration application and activate the software on the same computer as your version 19.8 license server, choosing the option to use the computer as the license server for version 21.3. After installing Sage 100 Contractor on other networked workstations, point to this machine as the license server.

For more information, see the [Installation and License Administration Guide](#).

Notice about Supported Windows Operating Systems

Sage 100 Contractor 2018 supports Windows Server 2008 R2, and later versions of Windows. However, it does not support Windows Server 2008 and Small Business Server 2008 because they do not support .NET 4.6.1, which this version of Sage 100 Contractor requires.

For current information about supported operating systems, Internet browsers, and other software, and about system requirements for servers and client workstations, refer to our Knowledgebase article ID 90782, available at <https://support.na.sage.com/selfservice/viewdocument.do?externalId=90782>.

Installing Sage 100 Contractor 2018

Installing Sage 100 Contractor 2018 and upgrading your data involves a few more steps than in previous editions because you must install two additional components. You need to:

- Install the Database Administration tool on the machine you will use as your server.
- Create a SQL Server instance for Sage 100 Contractor. This process is simplified if you use the option to download Microsoft SQL Server and create an instance automatically when you first open

For detailed instructions on installing Sage 100 Contractor 2018, see "Chapter 3: Sage 100 Contractor Installation," in:

- The *Sage 100 Contractor Installation and License Administration Guide* (U.S. Edition)
- The *Sage 100 Contractor Installation and License Administration Guide* (Canadian Edition)

Printable checklists help you get started

Two printable checklists are available to help you get started using Sage 100 Contractor 2018. Download them from our website, print them, and then check off each step on the printed list as you complete the necessary tasks.

- Use the [Quick Start Checklist](#) to help you stay on track when you set up your company or migrate your company from version 19.8. It provides an overview of all the important steps you should complete to install version 21.3
- Use the ["Going Live" Checklist](#) when you are ready to start using Sage 100 Contractor 2018 in a production environment (rather than a test environment). It lists all the important steps you should complete to "go live" with Sage 100 Contractor 2018.

Summary of Enhancements in Earlier Versions of Sage 100 Contractor (SQL)

Earlier versions of Sage 100 Contractor (SQL) provided a wide variety of new features, including many enhancements that our customers have requested.

The following table is a list of the most significant features introduced in earlier versions, details of which you can read about in the Release Notes for the respective version.

Enhancements by version	U.S. Only	Canada Only	API
Version 21.2 enhancements			
(For details, see the v21.2 Release Notes)			
Ability to merge client records			
Ability to merge vendor records			
Ability to include a record's attachments when you email forms			
Ability to email statements to jobs and clients			
Ability to record external vendor payments			
Ability to specify a secondary backup location			
Ability to track vendor certificates by job			
More ways to list vendor invoices to pay			
Version 21.1 enhancements			
(For details, see the v21.1 Release Notes)			
Bank feeds			
Ability to email direct deposit stubs at a later date			
Enhanced cost type validation			
Enhanced Search (Find) in the 9-5 Jobs window			
Ability to move company to a new drive			
Ability to view an employee's pay raise history			
Ability to create timecards for individuals in Daily Payroll			
Ability to create payroll records for salaried employees			
Ability to restrict exclusive access for specific non-administrative users			
Version 20.7 enhancements			
(For details, see the v20.7 Release Notes)			
Ability to print a new 5-1-8-86 Vacation Hours Earned and Used Report	X		
Version 20.6 enhancements			
(For details, see the v20.6 Release Notes)			
New Server Management Tools			

Enhancements by version	U.S. Only	Canada Only	API
Ability to set records "Inactive"			
More efficient login			
Ability to replace Cost Codes, Vendors, Tasks, or Inventory Locations in a takeoff			
New Combined Accounts Receivable and Service Receivables aging reports			
Ability to print Accounts Receivable Aging Reports by Invoice Date			
Ability to print Accounts Payable Aging Reports by Invoice Date			
Ability to print Service Invoice Aging Reports by Invoice Date			
New banking categories you can assign to bank-related journal transactions			
Improved vacation tracking	X		
Version 20.5 enhancements			
(For details, see the v20.5 Release Notes)			
Ability to use new custom fields in most windows			
Ability to tag rows for followup in the 9 -5 Takeoffs grid			
Audit Information is available in Advanced Company Settings			
Numeric fields provide automatic calculation			
Easier access to user subfolders in workgroups			
Ability to correct the period of a posted payroll transaction			
Ability to skip automatic calculation during takeoff			
Ability to filter cost codes by Job and Phase in lookup windows			
Ability to filter unassigned work orders on the Dispatch Board			
A new option for saving and selecting company-specific custom reports and forms			
Ability to use a new standard calendar to select dates			
Support for Microsoft SQL Server 2016 and Windows 2016 Server			
Ability to copy user process maps			
Ability to use high contrast display settings for Windows 10			
Ability to print a new Payroll Check Register 5 -1 -2 -31 by check date 3 -7 Progress Billing and 12 -2 Inventory Allocation allow 5,000 rows			
Tax and Workers' Comp rates in 4 -4 and 4 -2 use 4 decimal places	X		
Workers' Comp Reports 21, 86, and 96 show Overtime Hours	X		
Version 20.4 enhancements			
(For details, see the v20.4 Release Notes)			

Enhancements by version	U.S. Only	Canada Only	API
Ability to copy external files to other users			
New option to approve the removal of employee records			
Version 20.3 enhancements			
(For details, see the v20.3 Release Notes)			
Ability to view change history in records			
New option for closing purchase orders automatically			
Support for Paya Exchange Desktop 2.0			
Support for customized tables and views			
Ability to use a new window to add client service locations quickly			
Effective rate shown for Sales Tax Districts (U.S. only)	X		
API supports adding and removing attachments			X
API enforces locks			X
Schema change for Global Variables			X
Version 20.2 enhancements			
(For details, see the v20.2 Release Notes)			
Simplified schedules lookup			
QueryJobCost (API Enhancement)			X
SetExclusive (API Enhancement)			X
Version 20.1 enhancements			
(For details, see the v20.1 Release Notes)			
More versatile lookup windows			
Unique Payroll record numbers			

Notes for Third-Party Developers

API Support for Adding and Removing Attachments

The API supports adding and removing attachments on all Sage 100 Contractor forms that support attachments and have API support for **Add**, **Modify**, and **Delete**.

As with the existing API for Work Orders, these changes do not include support for:

- Changing the description on attachments
- Web links

Other API Enhancements

The Sage 100 Contractor API now:

- Supports custom fields, enabling third-party products to add custom fields and to add data to custom fields through the API.
- Blocks the use of Inactive records in new records and prevents changing an existing record to use an Inactive-related field. (The returned error code is 14057.)

Migrating your company data from version 19.8

Important! You must be using Sage 100 Contractor version 19.8 to migrate your company to version 21.3. If you are using an earlier version of Sage 100 Contractor, you must first upgrade your company data to version 19.8.

You use the migration utility in the new Database Administration tool to automatically migrate and upgrade your data to version 21.3, including all company data in folders and subfolders of ...\\MB7\[CompanyName].

Migrated files are located in shared folders under \\ServerName\CompanyName. These subfolders are organized using a similar folder structure as in earlier versions, and include:

- Aatrix Forms
- Attachments
- Direct Deposit
- Images
- Reports

The Direct Deposit and Reports folders are available as soon as you open the company in Sage 100 Contractor. The remaining folders are created as needed.

Note: For detailed, step-by-step instructions on migration, see the *Database and Company Administration Guide* or the Database Administration help.

Preparing for migration in version 19.8

Migration should proceed smoothly in most cases. However, you should audit your accounting data and your company payroll in version 19.8, and then fix any errors, before attempting migration to version 21.3.

Use the following audit tools to prepare your data in version 19.8:

- 1-6 Period and Fiscal Year Management > Audit Books
- 5-3-7 Payroll Audit
- 6-6-3 Purchase Order Audit
- 6-7-4 Subcontract Audit
- 12-5 Inventory Audit

Note: If your data includes serious audit errors, you may need assistance from your business partner or consultant to prepare your database for migration.

Migrating reports

The new Database Administration tool also includes a utility to migrate and upgrade Sage 100 Contractor reports and reports written with the Sage 100 Contractor report designer.

In version 21.3, shared custom reports and form designs are located in these folders:

- \\ServerName\Sage100Contractor\Custom Reports
- \\ServerName\Sage100Contractor\Report Forms

Private custom reports and form designs are located in Sage 100 Contractor User Data folders associated with each user name, as follows:

- \\ServerName\Sage100Contractor\User Data\username\Custom Reports
- \\ServerName\Sage100Contractor\User Data\username\Report Forms

Updating custom reports

You also need to update custom reports created with third-party software, such as Crystal Reports, so they map to the new database.

We recommend that you use the new report views that come with version 21.3 to create or update reports. The new views were created for your convenience, so that future database changes will not necessarily break your custom reports.

After migrating your company data

After migrating your data, you will likely need to perform the following additional steps to prepare your company for use in Sage 100 Contractor:

Important! Use Database Administration, not SQL Server Management Studio, for all these tasks.

- **Add company administrators.** There is no longer a generic "supervisor" user as there was in earlier

versions. All users must sign into the company using their personal IDs, and only users designated as company administrators have heightened privileges previously associated with the "supervisor" role. You can designate one user as a company administrator during migration, but you can add others later.

- **Add SQL logins for new users.** If you have new users that did not exist in your version 19.8 company, add them as users to the SQL database.

You must also add them as users and assign security in Sage 100 Contractor.

- **Designate an additional SQL Server administrator.** Only a user with system administrator privileges for the SQL instance can administer users for SQL Server or assign the system administrator role to another user. Therefore, it is vital at all times that more than one user has a system administrator role. If the principal system administrator should suddenly fall ill, or leave your company, or otherwise be unable to perform their duties, another person with administrative access to the SQL Server database must be able to take over that role.

Note: The person who installs Sage 100 Contractor is automatically assigned a 'sysadmin' role in SQL Server. When they designate a SQL Server administrator in Database Administration, that person is also assigned the 'sysadmin' role in SQL Server.

- **Switch your Sage Construction Anywhere to version 21.3.** If you have been using Sage Construction Anywhere with Sage 100 Contractor version 19.8 and want to use it with version 21.3, you will need to switch the connection to version 21.3. For help on switching the connection, see the instructions in the *Installation and License Administration Guide*.
- **Migrate your Sage ACT! settings to version 21.3.** If you have been using Sage ACT! with Sage 100 Contractor version 19.8 and want to use it with version 21.3, you need to change your ACT! settings to point to your new version 21.3 company database. For help on migrating your ACT! settings to version 21.3, see the instructions in the *Installation and License Administration Guide*.
- **Migrate each user's scheduled reports from version 19.8.** See the instructions in the *Installation and License Administration Guide*.
- **Migrate each user's alerts from version 19.8.** See the instructions in the *Installation and License Administration Guide*.

Changes to converted data

During migration, the program may encounter problems that might prevent it from writing a particular record to the new SQL Server database.

If the problem is one that the migration program can fix, it repairs the record, and then writes the updated record to the SQL Server database. (For a list of the types of errors that can be fixed during migration, see the *Database and Company Administration Guide*.)

Note: Not all errors can be fixed during migration. In these cases, the record is not written to the new database.

The migration log file

The program keeps a log of all changed records and records that were not migrated because of an unresolvable error, unless the record was invalid in version 19.8. (Invalid records are neither migrated nor logged.)

After migration, you should check the log file to see what changes were made to your data during conversion, or whether any records were not migrated to the new SQL database.

The **_SQL_MIGRATION_LOG.TXT** file is located in the source company's main folder (for example, C:\MB7\Sample Company). A supplemental file, **_SQL_MIGRATION_LOG_VERBOSE.TXT**, includes more detailed information about each error found.

Using Sage 100 Contractor Intelligence Reporting with Sage 100 Contractor 2018

Sage 100 Contractor Intelligence Reporting versions 20.2 and 19.7 are not designed to work side-by-side.

If you used Sage Intelligence Reporting with Sage 100 Contractor version 19.8 or earlier, follow the steps in [Knowledgebase article 75640](#) when upgrading to version 21.3.

Known Issues and Comments

The following sections describe known issues and problems in Sage 100 Contractor Version 21.3.

General

Compliance and Payroll Checks

Important! The sample check forms that come with Sage 100 Contractor may not be fully compliant with all federal, state, and local laws, and other requirements that can differ from one jurisdiction to another. It is your responsibility to familiarize yourself with all applicable laws and requirements, and to modify check forms as needed to ensure compliance. For information about customizing check forms, see [13-5 Form/Report Page Design](#) in the Sage 100 Contractor help, or contact your Sage business partner for assistance.

Internet access required for Sage 100 Contractor

Sage 100 Contractor features, such as printing or e-filing tax forms, submitting enhancement requests, accessing Help, or downloading periodic product or tax updates all require Internet access.

To take advantage of these features, ensure that any workstation or server that Sage 100 Contractor is installed on has access to the Internet.

During installation of Sage 100 Contractor, the computer serving as the Sage license server must be able to connect to the Internet to obtain licenses. Once installation is complete, you can check out license uses for each computer where Sage 100 Contractor is installed, then disconnect the Sage license server from the Internet.

Note: A static Internet connection using a compatible web browser is required for Sage Construction Anywhere. For current information on supported browsers, supported Sage 100 Contractor versions, and other system requirements, see the Sage Construction Anywhere help at http://help.sageconstructionanywhere.com/sage100contractor/help/Default.htm#01_Setup/System_requirements.htm.

Configuring anti-virus software and third-party firewalls

During installation of the Sage 100 Contractor Hosting Framework, the Windows Firewall is configured automatically to allow the Sage 100 Contractor Hosting Framework to act as a TCP server. If you use some other firewall, however, you may need to manually adjust some settings in the firewall in order to ensure proper operation.

You can use the following basic procedure to manually configure the Windows Firewall to allow the Sage 100 Contractor Hosting Framework to communicate with other computers. Use it as the basis for manually configuring other third-party firewall products.

To configure the Windows Firewall:

1. For Windows Server 2008, click **Start > Control Panel > Security**.
For Windows 7, click **Start > Control Panel > System and Security**.
For Windows 8.1 and Windows 10, click **Start > All apps > Control Panel > System and Security**.
2. Open **Windows Firewall**, and then select **Allow a program or feature through Windows Firewall**.
3. Select Sage 100 Contractor **Hosting Framework** on the list, if it is not selected..

Note: By default, the exception is set to allow access by any computer on the network. You can refine this setting by selecting the **Change Scope** button. Be aware that restricting the scope incorrectly can cause the computer to be unable to connect with some or all of the other machines on the network.

Files to exclude when manually configuring your firewall for Windows 8.1 Professional 32-bit

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\Program Files\Sage\Sage 100 Contractor
- C:\ProgramData\Aatrix Software
- C:\Program Files\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Files to exclude when manually configuring your firewall for Windows 8.1 Professional 64-bit

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Aatrix Software

- C:\ProgramData\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Files to exclude when manually configuring your firewall for Windows 7 Professional 32-bit

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\Program Files\Sage\Sage 100 Contractor
- C:\ProgramData\Aatrix Software
- C:\Program Files\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Files to exclude when manually configuring your firewall for Windows 7 Professional 64-bit

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Aatrix Software
- C:\ProgramData\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Files to exclude when manually configuring your firewall for Windows 8.1 Professional

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Sage\Sage 100 Contractor
- C:\Program Files (x86)\Aatrix Software
- C:\ProgramData\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Files to exclude when manually configuring your firewall for Windows Server 2008 R2, 2011, 2012

- C:\ProgramData\Sage\Sage 100 Contractor
- C:\ProgramFiles (x86)\Sage\Sage 100 Contractor

- C:\Program Files (x86)\Aatrix Software
- C:\ProgramData\Aatrix Software
- C:\%LocalAppData%\Sage\Sage 100 Contractor
- Network location of Sage 100 Contractor data. (If you install SQL Server Express using Database Administration, this location is C:\Sage100Con\Company\.)

Software and hardware required to support Microsoft SQL Server

Version 21.3 requires an instance of Microsoft SQL Server. You can download and use Microsoft SQL Express at no charge, or you can use the full version of Microsoft SQL Server. You can even start using Microsoft SQL Express, and upgrade to the full version of Microsoft SQL Server later, if necessary.

When you first open the new Database Administration tool, the program tries to configure an instance of Microsoft SQL Server with optimal settings for Sage 100 Contractor for you. If you do not already have an instance of Microsoft SQL Server, you can let the Database Administration tool download, install, and configure Microsoft SQL Express for you.

Refer to Knowledgebase article 90782 for detailed information about supported operating systems and software, and for minimum hardware requirements.

Installation of Microsoft SQL Server on a domain controller is not recommended

Microsoft recommends against installing SQL Server on a domain controller, and does not support SQL Server on a read-only domain controller should you encounter any problems with this configuration.

Because you must install Database Administration on the same machine as SQL Server, you should not install Database Administration on a domain controller. To guard against inadvertent installation on a domain controller and the potential for irrecoverable data losses, you will receive a warning if you attempt to install Database Administration on a machine used as a domain controller .

For more information, see the Microsoft Knowledgebase article <https://support.microsoft.com/en-us/kb/2032911>.

About .NET Framework

.NET 4.6.1 Framework is required

If Microsoft .NET 4.6.1 Framework is not already installed, it will be installed automatically when you install Sage 100 Contractor. Installation of .NET 4.6.1 Framework alone may take up to 20 minutes per computer.

Make sure that both your client and server computers meet the minimum requirements for installing both Sage 100 Contractor software and .NET 4.6.1 Framework.

Note: If Sage 100 Contractor requires an installation of .NET 4.6.1 Framework, the Sage 100 Contractor installation process may continue automatically after the .NET Framework installation is completed. If you are prompted to restart your computer after the .NET Framework installation, you must do so to continue the Sage 100 Contractor installation.

.NET 3.5 is also required

In some situations, you may need to turn on .NET 3.5 manually by selecting the .NET 3.5 check box in the Windows Features dialog box. For more information, see Knowledgebase article ID 68381, available at <https://support.na.sage.com/selfservice/viewdocument.do?externalId=68381>.

Windows Small Business Server 2011 is not supported

Microsoft Small Business Server 2011 does not support .NET Framework 4.6.7, which Sage 100 Contractor (SQL) requires. Unfortunately, this means that Sage 100 Contractor (SQL) cannot support Small Business Server 2011.

Turning on Microsoft .NET 3.5

Microsoft .NET 3.5 must be available and enabled prior to installing Sage 100 Contractor on a Windows Server 2008 R2 machine. Server 2008 R2 comes with .NET 3.5 loaded but not installed, so Sage 100 Contractor does not install it automatically.

If you attempt to install Sage 100 Contractor without .NET 3.5 installed, you receive the following message during the licensing install: "Sage.CRE.HostingFramework.Service v3.2 has stopped working." When you click **[OK]**, the installation continues, but the services have not been installed so Sage 100 Contractor cannot open. The Sage.CRE.HostingFramework Service will not install unless .NET 3.5 has been installed. If you receive the above message during installation, install .NET Framework 3.5., and then reinstall Sage 100 Contractor.

The following instructions are for Windows Server 2008 R2.

To verify that .NET 3.5 is installed on Windows Server 2008 R2:

1. Click the **Start** button in the lower left corner of the display.
2. Highlight **Administrative Tools** and select **Server Manager**.
3. In the **Server Manager** interface, click **Features** to display all the installed Features in the right-hand pane. Verify that .NET Framework 3.5.1 is listed.

To enable .NET 3.5 on Windows Server 2008 R2:

1. In the **Server Manager** interface, select **Add Features** to display a list of possible features.
2. In the **Select Features** interface, expand **.NET Framework 3.5.1 Features**.

3. Once you expand **.NET Framework 3.5.1 Features**, you will see two check boxes. Check the box next to .NET Framework 3.5.1 and click **Next**.
4. In the **Confirm Installation Selections** interface, review the selections and then click **[Install]**.
5. Allow the installation process to complete and then click **[Close]**.

Note: Enabling .NET Framework 3.5.1 may require a reboot.

About network configuration and TCP Remoting Channel

Sage 100 Contractor uses the TCP Remoting Channel, a Microsoft .NET Framework component, to enable communication among computers on a network. By default, Sage 100 Contractor uses the TCP starting port 48760. Certain configurations can potentially disable the communication:

- You must enable file sharing on your computers. To enable file sharing, follow the instructions in the Windows Help.
- TCP communication requires the selection of port numbers that are not in use by other processes on the local computer.
- Software firewalls running on the local computer can be configured to block processes from opening TCP ports, which will prevent communication through the TCP Remoting Channel.

Sage Advisor Update

Important! Sage Advisor Update is not available until further notice.

You can download Version 21.3 from the Knowledgebase using the link provided in the Software Notice that announced the product download.

PCI DSS Compliance

PCI DSS stands for Payment Card Industry Data Security Standard. It was developed by the major credit card companies as a guideline to help organizations that process card payments to prevent credit card fraud, cracking, and other security weaknesses and threats.

A company processing, storing, or transmitting payment card data must be PCI-compliant or risk losing its ability to process credit card payments and being audited and/or fined. (For more information about PCI standards, see <https://www.pcisecuritystandards.org/>.)

Sage 100 Contractor payment processing works exclusively with Paya to enable merchants to seamlessly process check and credit card transactions directly in Sage 100 Contractor. The payment processing program uses Paya Exchange, a secure payment-processing application, to connect to Paya and process check and credit card transactions.

Integrating your financial and operations system with Paya lets you process check and credit card transactions without storing your customers' sensitive card information in your database. Paya Exchange transmits check and credit card details through a secure connection to Paya, where they are stored in a PCI-compliant vault, protecting you from exposure to non-compliance penalties and credit card fraud.

Caution! To avoid non-compliance with PCI standards, do not store credit card information in Sage 100 Contractor. Such storage creates unnecessary risk for your business and your customers.

Using Sage 100 Contractor Intelligence Reporting with Sage 100 Contractor 2018

Sage 100 Contractor Intelligence Reporting versions 20.2 and 19.7 are not designed to work side-by-side.

If you used Sage Intelligence Reporting with Sage 100 Contractor version 19.8 or earlier, follow the steps in [Knowledgebase article 75640](#) when upgrading to version 21.3.

Tax Forms and eFiling by Aatrix configuration requirements

Tax Forms and eFiling by Aatrix requires an Internet connection for two reasons:

- For updating forms and executable files.
- For electronic filing (eFiling) of the forms.

If you experience an Internet connection problem, it may be due to problems communicating through an Internet firewall. Firewalls need to have access allowed through specific ports:

- The Tax Forms and eFiling Updater uses standard SSL/HTTP port 80 to access the site <http://updates.aatrix.com>.
- The eFiling component uses secure HTTPS on port 443 to access the site <https://efile.aatrix.com>.

By allowing access to aatrix.com, you allow both updates and eFiling. Occasionally, restrictions are tighter and only allow access to these ports by specific programs. Tax Forms and eFiling uses the following programs to access the Internet.

For updating using http on port 80 to <http://updates.aatrix.com>:

- aatrixforms.exe
- updater.exe
- updater2.exe

For eFiling using secure http on port 443 to <https://efile.aatrix.com>:

- builder.exe
- viewer.exe

Use Adobe Reader Version 8.1.3 or later for faxing

Customers have reported problems faxing from Sage 100 Contractor with versions of Adobe Reader earlier than 8.1.3. Adobe Reader Version 8.1.3 and later support faxing from Windows and from Sage 100 Contractor.

Important! To fax from Sage 100 Contractor, the Windows Fax Service component must be installed with your Windows operating system. For more information about installing the Windows Fax Service component, see the Sage 100 Contractor Help topic, "Installing the Windows Fax Service component."

Sage licensing (Sage 100 Contractor Hosting Framework) cannot auto-start on Windows 8.1, Windows 7 Professional, Server 2008, or Server 2008 R2 Standard

The Sage licensing service (Sage 100 Contractor Hosting Framework) cannot auto-start on computers running the Windows 8.1, Windows 7 Professional, Server 2008, or Server 2008 R2 Standard operating systems. If the service stops, the program displays a message advising you to take further action to resolve this issue.

Configuring Windows Regional and Short Date Format

To specify regional formats for Windows:

1. Click the [**Start**] button, point to **Control Panel**, then click **Clock, Language, and Region** .
2. Click **Region and Language**.
3. On the **Formats** tab, select the format for your country.
4. Under **Date and time formats**, from the Short date format drop-down list, select the format used for your country.
5. Click [**OK**].
6. Close the **Clock, Language, and Region** window.

Windows "Sleep Mode" prevents computers from obtaining a license use

If the computer you are using as a license server goes into sleep mode, other computers on the network cannot obtain a license.

To avoid this possibility, set **Sleep Mode** on your license server computer to **Never**.

To set the Sleep Mode to “Never”:

1. In Windows 8.1 Professional, Windows 10, or Server 2012 Standard, click **Start > All apps > Control Panel > System and Security > Power Options**.

In Windows 7, click **Start > Control Panel > System and Security > Power Options**

2. Select **Change when computer sleeps**.
3. From the **Put computer to sleep** list, select **Never**.

Windows 8.1 Professional and Server 2012 Standard Operating Systems

Sage licensing (Sage 100 Contractor Hosting Framework) cannot auto-start on Windows 8.1

The Sage licensing service (Sage 100 Contractor Hosting Framework) cannot auto-start on computers running the Windows 8.1 Professional or Windows 8.1 Enterprise operating systems. If the service stops, the program displays a message advising you to take further action to resolve this issue.

Server 2012 network configuration and TCP Remoting Channel

Sage 100 Contractor uses the TCP Remoting Channel, a Microsoft .NET Framework component to enable communication among computers on a network. File and printer sharing on computers running the Server 2012 operating system must be enabled. To enable file sharing, follow the instructions in the Windows Server 2012 Help.

Windows 7 Professional and Server 2008 R2 Standard Operating Systems

Launching Sage 100 Contractor to run as administrator for scheduling reports

Important! On computers running Windows 7 Professional or Server 2008 R2 Standard, scheduling Sage 100 Contractor reports requires that you “run as administrator” or to “run the program as administrator.”

Microsoft Windows changed security rules in the Windows 7 Professional and Server 2008 R2 Standard operating systems to make your computer more secure. If you are running Sage 100 Contractor as a

typical user, then you have limited privileges in some areas of the program, such as saving a report schedule. To save a report schedule, you must launch Sage 100 Contractor with the command to either **Run as administrator** or **Run this program as an administrator**.

When you select either command, the settings are limited to you personally. Your settings to run Sage 100 Contractor as administrator do not affect the next person who logs on and launches Sage 100 Contractor from this computer. Your settings on this computer can either be temporary or persistent. For example, when you select Run as administrator, you run the program as administrator for that session only. When you select **Run this program as an administrator**, you set program properties to always run the program as administrator when you log on to this computer.

Note: "Run as administrator" and "Run this program as an administrator" are not related to Windows 7 Professional or Server 2008 R2 Standard operating systems user groups but are limited to a specific program you are running.

To set "Run as administrator":

1. On your Windows desktop, right-click the Sage 100 Contractor program icon.
2. From the drop-down menu, to launch the program, click **Run as administrator**.

Note: Selecting **Run as administrator** only runs the current session of running Sage 100 Contractor. The setting does not persist after the session is over.

To set "Run this program as an administrator":

1. On your Windows desktop, right-click the Sage 100 Contractor program icon.
2. From the drop-down menu, click **Properties**.
3. On the Sage 100 Contractor Properties window, click the **Compatibility** tab.
4. Under Privileges Level, select **Run this program as an administrator**.
5. Click **[Apply]**, and then click **[OK]**.

Note: Selecting **Run this program as an administrator** always runs the program with these properties when you launch the program on this computer. The setting persists.

Solution for Windows Server 2008 R2 "Permission Error Opening File"

If you see a permission error message when launching Sage 100 Contractor on a computer running the Windows Server 2008 R2 operating system, follow these instructions:

1. On the Windows desktop, right-click **Start**, and then click **Open Windows Explorer**.
2. On the left side of the window, under **Computer > Local Disk**, right-click the \Sage100Con folder, and then select Properties.
3. On the **Sage100Con Properties** window, click the **Security** tab.
4. From the list under **Group or User Names**, select **USERS**, and then click the **Edit** button.
5. On the **Permissions** window, select **USERS** again, and under **Allow**, select the **Full control** check box.

Selecting **Full control** selects all the check boxes necessary for this solution.

6. On the **Permissions** window, click **[OK]**.
7. On the **Sage100Con Properties** window, click **[OK]**.

Solution for Windows 2008 Server R2 Application Error Message

Under some circumstances, on servers operating Windows 2008 Server R2, you may see the following error message when trying to open a photograph or image file in Sage 100 Contractor:

"No application is associated with the specific file associated with this application."

This error message appears when you attempt to open an image file in Sage 100 Contractor but you have not yet enabled the Desktop Experience feature in Windows 2008 Server R2. If you receive this error message, install Desktop Experience using the Server Manager utility:

1. In Windows 2008 Server R2, select **Start > All Programs > Administrative Tools > Server Manager**.
2. In the **Server Manager** window, click **Features** (left-hand pane).
3. In the **Features** pane, click **Add Features**.
4. Select the Desktop Experience check box.
5. If you are prompted to add additional features, click **[Add Required Features]**.
6. Click **[Next]**.
7. Click **[Install]**.