

Administrator's Guide

Axiom Contract Management

Version 2021.1

The logo for AXIOM, featuring the word "AXIOM" in a bold, white, sans-serif font. The text is enclosed within a thin, light blue rectangular border that is slightly offset from the text, creating a subtle frame effect.

AXIOM

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Version: 2021.1

Updated: 12/1/2021

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Welcome to Axiom Contract Management

Syntellis's contract modeling and analytics tool helps organizations better predict and manage payments, and leverage a data-driven approach for improved payer negotiations. With this software, you can estimate net revenue by patient, and better manage contracts, claims, and payments across your organization from both managed care and government payers.

Syntellis's Axiom Contract Management solution helps healthcare organizations:

- Inform payer contract negotiations using empirical and modeled data
- Understand the financial impact of proposed changes to contract terms
- Optimize estimation of net patient revenue across inpatient and outpatient populations

THE COMPONENTS OF CONTRACT MANAGEMENT



What is covered in this document

This guide is for Axiom Contract Management administrators. System administration involves basic configuration and maintenance tasks, some that you perform only once and some that you need to perform regularly. You perform most admin tasks from the Axiom Contract Management Web Client. Any tasks that are performed from the Desktop Client are noted as such.

System administrators model contracts that other users view and use in processing claims and creating and viewing reports.

This guide includes the following administrations features and tasks:

- [Importing data](#) – Building claim formats and other import formats, importing files to the system, and viewing import activity
- [Managing attributes](#) – Creating, editing, enabling /disabling, and deleting attributes
- [Modeling contracts](#)– Including [adding contracts](#) (adding [versions](#), [provisions](#), [attributes](#), [clauses](#) and [terms](#), [thresholds](#) and [limits](#); [attaching files](#) and [importing rates](#); [copying contracts](#); and more)
- [Managing simulations](#) – Creating, editing, and copying simulations; mapping simulations to drill-down reporting
- [Security](#) – Application security roles and their associated access rights

What's new

Welcome to Version 2021.1 of Axiom Contract Management!

Enhancements in this release include:

[Exclude always-payable services from Line Item MPR calculations](#)

Now when modeling professional services contracts, you can add an exclusion to a unit max limit on a Line Item MPR calculation. The exclusion allows the always-payable services to calculate separately from the reduction calculation, while still including them in the unit max limit count.

[January 15, 2021 Quarterly Release](#)

Each quarter, 3M provides an update to the 3M GPS Grouper software integrated into Axiom Contract Management. This update includes grouping, pricing, and regulatory updates to the APC and State-specific eAPG groupers.

Exclude always-payable services from LI MPR calculations on professional claims

▶ Why use this feature

Now when modeling professional services contracts, you can add an exclusion to a Line Item MPR calculation with a max limit. The exclusion allows the always-payable services to calculate separately from the reduction calculation, while still including them in the unit max limit count.

▶ How this feature works

What: Professional services that are always payable are excluded from Line Item MPR calculations when those services are added as exclusions to the clause or term with the Line Item MPR. Additionally, the clause with the always-payable services resides at the top of the clause hierarchy on the provision so that those items are given priority, even if they do not contain the highest reimbursable service amount.

Where: This change applies to professional contracts with Line Item MPR calculation clauses.

Who: Only Axiom Contract Management administrators and users with the ability to create contracts can add exclusions to clauses.

How:

1. Navigate to the Line Item MPR clause/term with the unit max limit.
2. Next, open the Line Item MPR clause **Edit Clause** dialog (or Edit Term if term). In the **Exclusions** tab, click + **Add a New Row**, and then in the new row, enter the code of the service to be excluded. Repeat for any additional codes that need to be excluded.
3. Click **Save**.
4. Ensure that the clause with the always-payable services is at the top of the clause page hierarchy; if it is not, drag that clause row to the top of the table.

▶ Where to find more information

The following topics in the online help have been added or updated with information and instructions for using this feature:

- [Add an exclusion to a unit max limit Line Item MPR calculation](#)
- [About multiple-procedure payment reduction line item calculations](#)
- [Add a unit max limit to a Line Item MPR](#)

3M Jan 15 2021 Quarterly Release

▶ Why use this feature

Each quarter, 3M provides an update to the 3M GPS Grouper software integrated into Axiom Contract Management. This update includes grouping, pricing, and regulatory updates to the APC and State-specific eAPG groupers. These updates are necessary for clients to get the latest software and regulatory changes for accurately grouping and pricing APC and eAPG claims.

▶ How this feature works

On a quarterly basis, 3M releases product Service Packs containing updates to its Group and Price service software. Syntellis maintains Medicare contracts for many clients, and partners with 3M to handle APC and eAPG calculations and to keep current with all regulatory changes that occur.

Where: The Group and Price menu in the Claims tab of Axiom Contract Management, and Group and Price jobs in the Axiom Scheduler.

Who: Axiom Contract Management administrators who create contracts with the CMS Outpatient calculation basis on a clause or term; users with the Scheduler role who are able to run the group and price routine; general users reviewing results and working with applicable claims.

How: The Development team creates the update from the quarterly download. Client Success updates the clients' schedules and customer contracts to the required Medicare changes. The client picks up available schedules for any new contract updates between quarters.

Understanding the Axiom Contract Management system

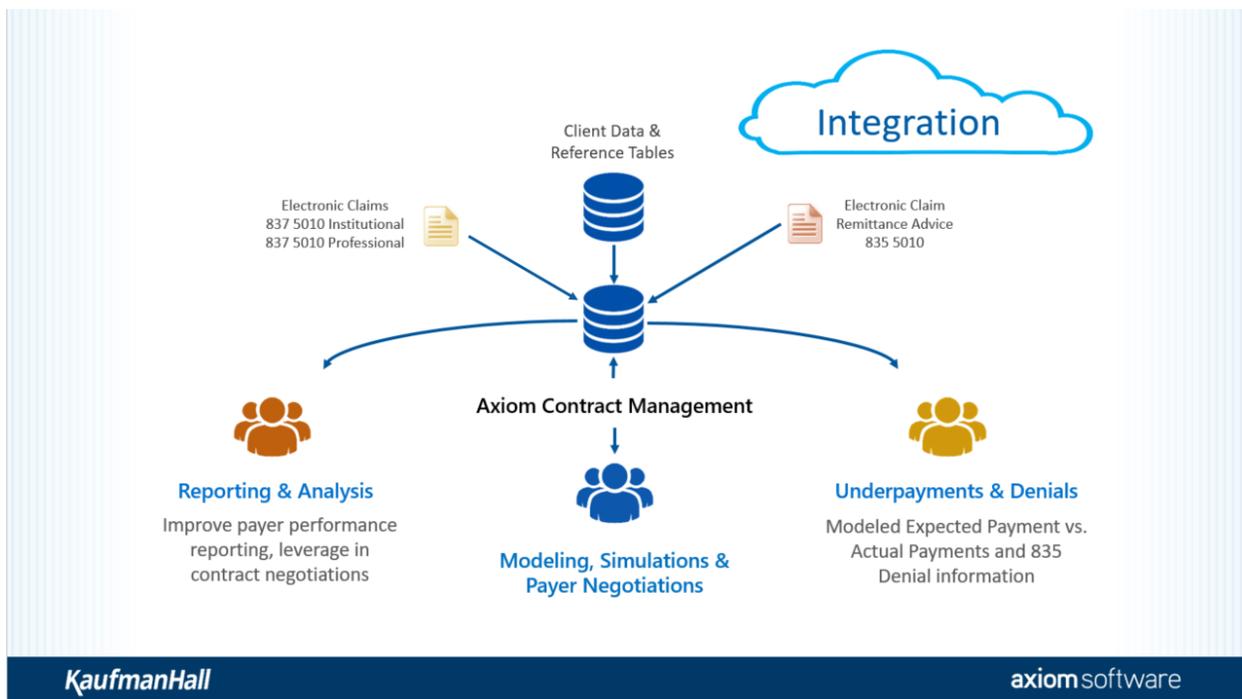
Axiom Contract Management is a web application backed by an SQL database that stores contract terms, patient claims, and payment information. The system uses the contract payment terms and the patient claim information to calculate an expected payment for every claim submitted by the provider.

Understanding the flow of data

From billing to Axiom Contract Management

Axiom Contract Management requires many pieces of data to function properly. It is important to understand the entire process of how data comes into, and moves through, the system.

As shown in the following diagram, when billable procedures are performed at a hospital, services data is entered directly into the hospital's information systems (HIS). Patient Accounting generates claim data from this information and sends a bill in the form of an 837i 5010 for institutional claims, and as an 837p 5010 for professional claims, to the payer.



As these claims are sent out each day, a copy also goes to the Axiom Contract Management system.

NOTE: These claims should be collected after they have been sent through a claim scrubber so that they reflect exactly what the payer receives.

After import to Axiom Contract Management, claims are matched to the associated payer contracts modeled in the system. These contracts can be very sophisticated and may contain combinations of services being paid at fee schedules, per diem payments, lesser of terms, thresholds, stop losses, and various other reimbursement methodologies. Ultimately, an expected payment is generated for each claim that has a matching contract.

In addition, 835 remittance responses, along with posted payments and payer adjustments, flow into Axiom Contract Management on a daily basis. With these five pieces of information (i.e., contract terms, claim data, payments, adjustments, and remittance responses), the expected payment/contractual generated by Axiom Contract Management allows you to identify which claims have or have not been paid correctly.

Managing data

This section provides information about importing data to Axiom Contract Management and integrating data from the Contract Management system with other Axiom systems, as those integrations become available in future releases.

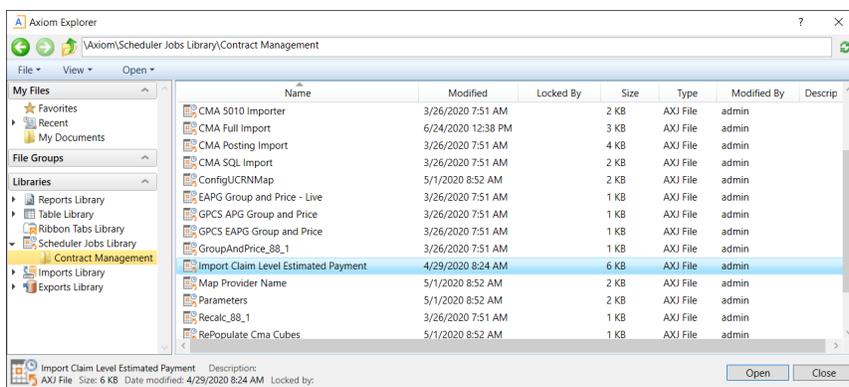
About accessing data in the Axiom Desktop Client

Key Axiom Contract Management assets are available in the Axiom platform so that Axiom Contract Management system administrators can pull and synchronize key contract, claim, and calculated claim-level estimated payment details for use in the Desktop Client. This integration allows users to take advantage of Axiom tools like the Axiom Scheduler Jobs Library and Axiom Reports.

During Contract Management installation, data is pulled from Axiom Contract Management and stored in the following Axiom tables in the Table Library:

- CM Claim level estimated payment
- CM ClaimNumbers
- CM ContractDetails
- CM Last Import

In addition to the tables, an Axiom job, called Import Claim Level Estimated Payment, is created in the Axiom Scheduler Library under Contract Management. This job helps share data from Axiom DSS with Axiom Contract Management.



When this job runs, it retrieves all of the contract detail, claim-level expected payments, and claim detail, and uses it to update the four CM tables and keep the data in sync. Whenever users import new claims, modify claims, calculate a payer, and so on, this job captures these changes when it runs. Generally, this job would be set to run with the full nightly import (CMA Full Import job).

Importing data to Axiom Contract Management

Axiom Contract Management imports data in different formats depending on the type of data file the system is attempting to access. Generally, data provided for import into the system can be categorized into four types:

- **Claims data** – Claim files, both institutional and professional.
- **Financial data** – Payments and adjustments, both institutional and professional.
- **Additional data** – Primary Insurance Plan Codes, claim number mapping files, user-defined field data, Professional Primary Insurance Plan Codes, and other contract terms.
- **Remittance data** – Institutional and Professional 835 files.

Claims and Financial data files must meet certain requirements before importing to Axiom Contract Management, and they must also be in specific formats. Additional data and Remittance data files also have format requirements. For details, see [Client file specifications](#) and [Understanding data formats](#).

Currently, flat text files (Financial data and Additional data) can be imported using the Kreg Unified Importer or the Axiom ETL Importer.

NOTE: The Kreg Unified Importer will eventually be phased out.

In general, the import process consists of the following main steps, depending on which importer you use.

If using the Kreg Unified Importer...	If using the Axiom ETL Importer...
<ol style="list-style-type: none">1. Build fixed-width import format files (for payments and adjustments).2. Create an import batch. (See also: About import batches)3. Add files to the Import Task List.	<ol style="list-style-type: none">1. Set up Axiom ETL import for flat files.2. Ensure files are in the correct format.3. Drop the files in the appropriate folders that were set up in step 1, where they will be picked up by the importer during the nightly import.
<ol style="list-style-type: none">4. Files are auto-imported to the system during the nightly import. An Import Summary Report is created after each successful nightly import. You can also view import activity in Axiom Contract Management.	

Understanding data formats

All formats are built during system implementation; however, the system administrator is responsible for ensuring that any format changes are reflected in Axiom Contract Management for importing to continue smoothly.

IMPORTANT: If you do not maintain data formats in the system, you run the risk of inaccuracies in your database.

▶ About formatting claim files for import

NOTE: UB and 1500 files are no longer accepted as import file types.

The Axiom Contract Management claim dataset is populated mainly by 837i and 837p files, which are typically provided to the server on a scheduled basis for import and recalculation. These files must adhere strictly to the 5010 standards and should be the “scrubbed” claims from the claims clearinghouse.

▶ About formatting financial data files for import

Financial information such as payments and adjustments are imported using a format as well; however, these file types are inherently different from the 837i/837p 5010 claim files. Typically, they are provided to the Axiom Contract Management server as flat ASCII text files. Users with a Support license can [build fixed-width import formats](#) if using the Kreg Unified Importer. For more information, see [Importing data to Axiom Contract Management](#).

Client file specifications

Client files imported to Axiom Contract Management must meet the specifications detailed in the following tables for each file type.

▶ Claim data

Institutional claims 837i (required)	Description
Format	837i files must adhere strictly to the 5010 standards. All claims must be “scrubbed.” Scrubbed claims typically come from a claims clearinghouse (E-Premis, Emdeon, WebMD, CareMedic, etc.).

Institutional claims 837i (required)	Description
Frequency	Daily. Claim files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\837i5010.
Naming convention	Institutional files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDD837i.txt).

Professional claims 837p (optional)	Description
Format	837p files must adhere strictly to the 5010 format standards.
Frequency	Daily. Claim files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\837p5010.
Naming convention	Professional files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDD837p.txt).

► Financial data

Institutional Payments (required)	Description
Format	Flat ASCII text file or Pipe () Delimited. Payments should be positive values, reversals would be negative values.

Institutional Payments (required)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Posting Date • Payment Amount <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number • Payer Code • Payment Date • Posting Code/Transaction Code
Filter	All records <i>excluding</i> payments received for professional services (services billed on 837p).
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's actual posted payments. The folder should be named \\servername\KHData\Hospital\Pay.
Naming convention	Institutional Payment files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDPayI.txt).

Institutional Adjustments (required)	Description
Format	Flat ASCII text file or Pipe () Delimited. Adjustments should be positive values, reversals should be negative values.

Institutional Adjustments (required)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Posting Date • Adjustment Amount <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number • Payer Code • Payment Date • Posting Code/Transaction Code
Filter	Adjustment Postings. All records <i>excluding</i> adjustments received for professional services (services billed on 837p).
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's postings. The folder should be named \\servername\KHData\Hospital\Adj.
Naming convention	Institutional Contractual (adjustment) files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDAdjI.txt).

Professional Payments (optional)	Description
Format	Flat ASCII text file or Pipe () Delimited. Payments should be positive values, reversals would be negative values.

Professional Payments (optional)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Posting Date • Payment Amount <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number • Payer Code • Payment Date • Posting Code/Transaction Code
Filter	All records <i>excluding</i> payments received for institutional services (services billed on 837i).
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's postings. The folder should be named \\servername\KHData\Hospital\Payp.
Naming convention	Professional Payment files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDPayP.txt).

Professional Adjustments (optional)	Description
Format	Flat ASCII text file or Pipe () Delimited. Adjustments should be positive values, reversals should be negative values.

Professional Adjustments (optional)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Posting Date • Adjustment Amount <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number • Payer Code • Payment Date • Posting Code/Transaction Code
Filter	Adjustment Postings. All records <i>excluding</i> adjustments received for institutional services (services billed on 837i).
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's postings. The folder should be named \\servername\KHData\Hospital\AdjP.
Naming convention	Professional Contractual (adjustment) files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (Example: YYYYMMDDAdjP.txt).

► Additional data

Institutional Primary Insurance Plan Code (required)	Description
Format	Flat ASCII text file or Pipe () Delimited.

Institutional Primary Insurance Plan Code (required)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Primary Insurance Plan Code <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim number
Filter	<ul style="list-style-type: none"> • Primary Insurance Only • Date criteria based on 6 - 12 month sliding window (today <i>minus</i> 6 months)
Frequency	Daily. To be dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\Ins.
Naming convention	Files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (Example: YYYYMMDDPlanI.txt).

Institutional Primary Insurance DRG Code (required)	Description
Format	Flat ASCII text file or Pipe () Delimited. DRG codes should be zero filled to 3 characters. For example, DRG 57 should be 057.

Institutional Primary Insurance DRG Code (required)	Description
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Primary Insurance DRG Code <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number
Filter	<ul style="list-style-type: none"> • <i>Exclude</i> Professional Accounts • Primary Insurance Only • Date criteria based on 6 - 12 month sliding window (today <i>minus</i> 6 months)
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\DRG.
Naming convention	Files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDdrg.txt).

Claim Number Mapping File (optional)	Description
Format	Flat ASCII text file or Pipe () Delimited.
Requested fields	<p>This file is needed if the claim number on the claim does not match the posting files from the hospital system.</p> <p>Required:</p> <ul style="list-style-type: none"> • Account # • UCRN/Claim Number
Filter	Date criteria based on 6 month sliding window (today <i>minus</i> 6 months).

Claim Number Mapping File (optional)	Description
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\Map.
Naming convention	Files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDUCRN.txt).

User Defined Fields (optional)	Description
Format	Flat ASCII text file or Pipe () Delimited.
Requested fields	Required: <ul style="list-style-type: none"> Account # User Defined Field (UDF)
Filter	Date criteria based on 6 - 12 month sliding window (today minus 6 months)
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. Each user defined field feed needs a unique folder. These folders should be named \\servername\KHData\Hospital\UDF# where # is the number of the UDF.
Naming convention	Files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDudf1.txt).

Professional Primary Insurance Plan Code (optional)	Description
Format	Flat ASCII text file or Pipe () Delimited.
Requested fields	<p>Required:</p> <ul style="list-style-type: none"> • Account # • Primary Insurance Plan Code <p>Optional:</p> <ul style="list-style-type: none"> • UCRN/Claim Number
Filter	<ul style="list-style-type: none"> • <i>Exclude</i> Institutional Accounts • Primary payor only
Frequency	Daily. Files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\InsP.
Naming convention	Files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDDPlanP.txt).

► Remittance data

Institutional and Professional 835 (optional)	Description
Format	835 files must adhere strictly to the 5010 standards. These files should come from the payer and not be edited.
Frequency	Daily. 835 files are dropped to predetermined import folder locations on the Axiom Contract Management server on a daily basis for the previous day's billing cycle. The folder should be named \\servername\KHData\Hospital\8355010.

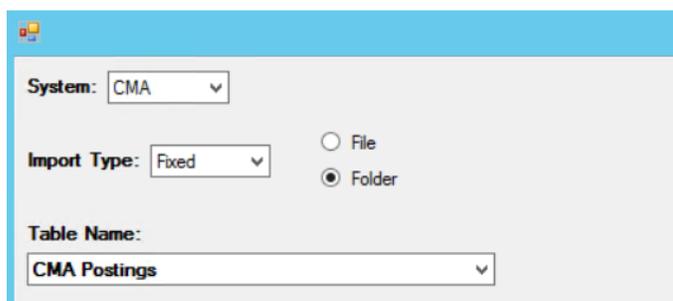
Institutional and Professional 835 (optional)	Description
Naming convention	Institutional files must be unique text files and must not have any spaces or special characters in the name. Syntellis requires that each file have a unique name concatenated with a date stamp for the day it was created (example: YYYYMMDD835.txt).

Build a fixed-width import format

Fixed-width import formats are generally used for importing payments and adjustments data to Axiom Contract Management in fixed-width ASCII text files. To get the information from these downloads into the system, you need to build a format for them. Their formats are different from a claim format in that the data is provided in fixed columns instead of floating fields like on a claim file.

To create a file format:

1. Run **UnifiedImport.exe**.
2. From the menu bar, select **Import Setup > Spec Imports**.
3. In the **System** drop-down, select **CMA**.
4. From the **Import Type** drop-down, select **Fixed**.
5. Select **Folder Based Import**.
6. From the **Table Name** drop-down, select the name of the Import Table. In the following example, a format is being defined to import to the CMA Postings table.



Axiom Contract Management Flat File Tables are categorized as follows:

- **CMA Postings** – Payments, Adjustments
- **CMA Library Tables** – Library APC, DRG, etc.

- **Additional Data Upload** – DRG, User-Defined Data, Payer Code, etc.

By selecting CMA as the System, and in this example, CMA Postings, you are setting up the system to create a CMA Postings format.

7. Select the Import Folder Location. You need to select a sample file to build flat file formats. Click the ellipsis button next to **Import Folder** and select the folder where your sample file is located.

IMPORTANT: This sample must be free of print characters, headers and footers, and must reside in a subfolder with the file path: \\YOURSERVERNAME\Data\Import.

8. Create a new format: Click **New** to open the format building window with the sample data for selection, as shown in the following example.

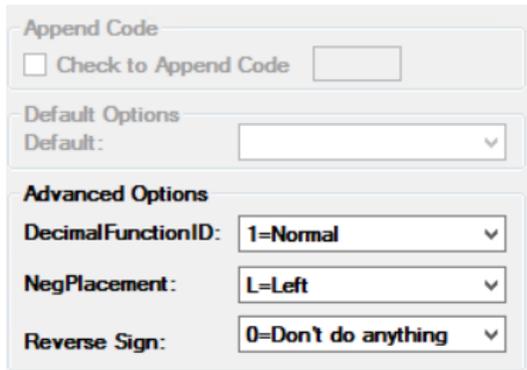
9. In the fields at the top of the window, enter a format name and description.
10. On the lower left, in the **Fields** box, select the field to specify, and then select the data location in the **Field Selection** box.
11. Click **Accept** to save the values to the database.

NOTE: Fields in **bold** are considered required fields and must be specified. Fields in *italics* have already been specified.

12. After completing the format for your flat file, click **Save**.

► **Advanced flat file import options**

When building an Axiom Contract Management Postings format, set up Advanced Options for the following fields:



Amount Field

- **Decimal Settings** – Use this option to set whether the amount field in your file uses a space decimal, implied decimal, or normal decimal. Depending on the way the amount field is provided, you must select the appropriate DecimalFunctionID. Following are examples of each:

Space Decimal: 100 00 → 100.00

Implied Decimal: 10000 → 100.00

Normal Decimal: 100.00 → 100.00

- **Negative placement** – In some cases, negative signs (-) are attached to the front of the amount, and in others, they are attached at the end.

IMPORTANT: For the amount to populate correctly, payments and adjustments must be positive values. Negative values are acceptable, but they will appear as a credit on any accounts.

- **Reverse sign** – For the amount to populate correctly, payments and adjustments must be positive values. Negative values are acceptable, but they will appear as a credit on any accounts.
- **Post Category** – Adjustment vs. Payment
- **Post Prof Indicator** – Professional vs. Institutional

About import batches

Import batches are groups of tasks that tell Axiom Contract Management where to look for files, and once found, which formats to apply to them. After you have the file to import, the next step in importing data to the system using the Kreg Unified Importer (KUI) is [creating import batches](#). When using the KUI, you must create an import batch to get data into the system.

You need to create batches for claim files and any flat files that you want to import.

The setup for importing data is folder-based: a format is joined with a folder location, and upon import, any file residing in that folder is brought in using the set format code.

IMPORTANT: All import folders must be subfolders of \\YOURSERVERNAME\Data\Import, and must not have any spaces in the folder or file name.

After importation, the file is date-time stamped and moved into a mirrored IMPORTED folder for later reference if needed.

Create an import batch

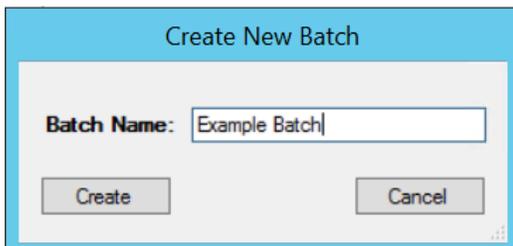
NOTE: This topic applies to the Kreg Unified Importer.

Before creating an import batch, you need to understand the following different types of batches used in Axiom Contract Management:

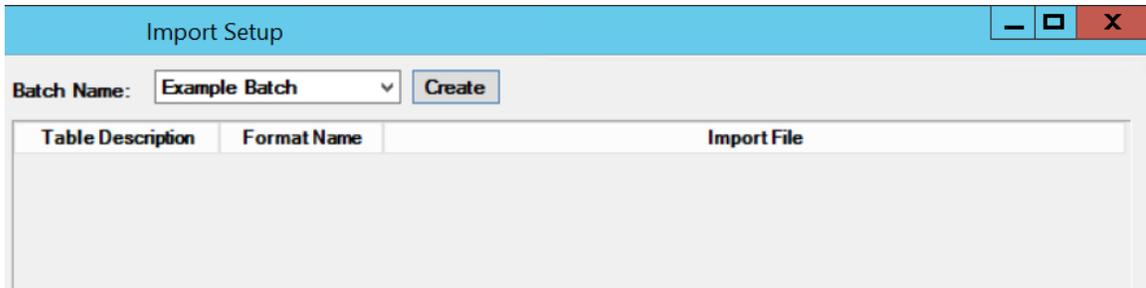
- Claims should import from the 837i or 837p 5010 format files (claims are imported using the 5010
- Flat-file import – Folder and File based

To create an import batch:

1. Select the import type. An import batch can be created for each of the import types. Select the appropriate import type from the drop-down menu.
2. Name and create your batch. Click **Create** to create a blank batch for the import type selected in step 1.

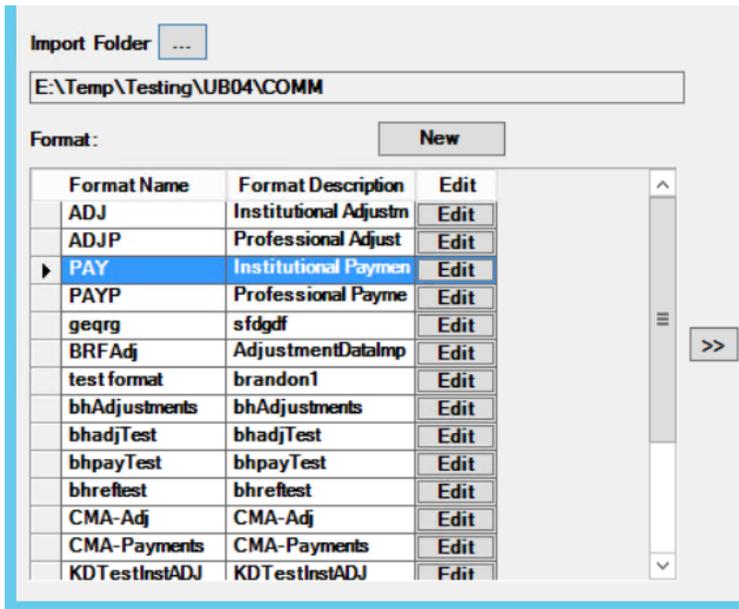


The image shows a screenshot of a software dialog box titled "Create New Batch". Inside the dialog, there is a text input field labeled "Batch Name:" with the text "Example Batch" entered. Below the input field, there are two buttons: "Create" and "Cancel". The dialog box has a light blue border and a white background.



3. Select files/folders to import and the target table to import to. On the left side of the screen, from Table Name drop-down, select the target table.
4. Click the ellipsis button next to **Import Folder** and then select the import folder or file location.
5. In the **Format** box, select the format to apply to the folder.

NOTE: Only one format can be applied to a folder.



6. Add your item to the batch. Click the right arrows button to add your item to the batch selected in the drop-down on the right side of the window. To remove an item from the list, select it and press the Delete key.

IMPORTANT: Do NOT click the Delete *button*. Clicking the Delete button will not remove an item from the list, but instead will delete your whole batch.

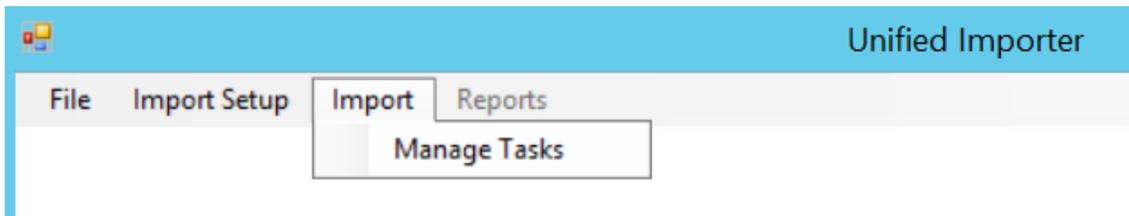
7. Next, [add the import batch to the Import Task List](#).

Add import batches to the Import Task List

After creating import batches, to process them during the import, you must add them to the Import Task List import queue. Simply creating the batches does not cause the files and folders in those batches to import automatically.

To add or remove items from the Import Task List:

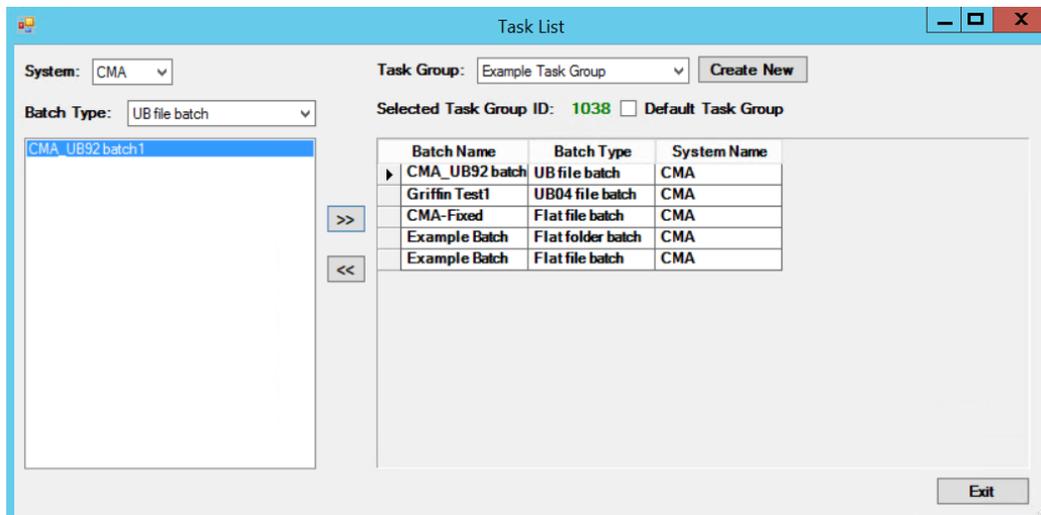
1. In the Unified Importer, from the menu bar, select **Import > Manage Tasks**.



2. Create and define a Task Group:

- a. At the top right, click the **Create New** button.
- b. From the **Batch Types** drop-down, select the batch type, and then click the arrow buttons to add the batch types to the Task Group on the right.

In the example below, the Task Group “Example Task Group” is defined with a number of batch imports of various types. These will all run when the Task Group is called by the import process.



Set up Axiom ETL import for flat files

Use these instructions to set up folder and file options for importing flat files using the Axiom ETL importer. These instructions are for system implementers setting up new systems and for support technicians setting up import folders for additional flat file types.

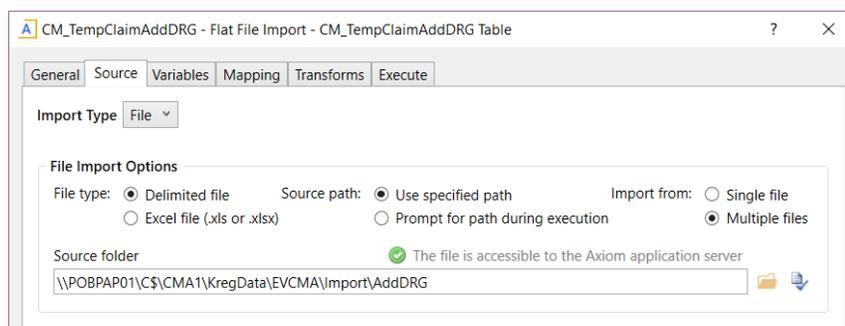
IMPORTANT: When copying an existing flat import file, you must add an underscore (`_`) and a number or other character to the end of the copied file name: a copy of a file named `CM_TempXXX` would be named `CM_TempXXX_y`; so a copy of the file `CM_TempClaimAddDRG` could be named `CM_TempClaimAddDRG_2`.

To set up import file and folder options:

1. In the Axiom Windows Client, from the **Axiom** ribbon tab, click **Imports > Contract Management > [desired flat file import type] > Edit**.
2. In the **Flat File Import** dialog, click the **Source** tab.
3. For **Import Type**, select **File**.
4. In **File Import Options**, select the following:
 - a. For **File type**, select **Delimited file**.
 - b. For **Source path**, select **Use specified path**.
 - c. In the **Source folder** field, enter the path to the folder in which the client will place files. This is also the folder from which the importer picks up the files.

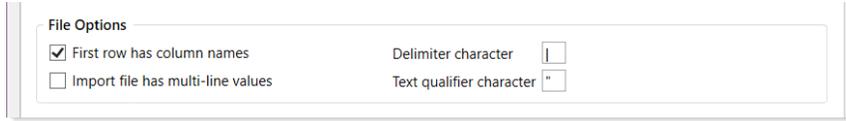
NOTE: This path is provided by the client. For requirements, see [Client file specifications](#).

- d. For **Import from**, select **Multiple files**.



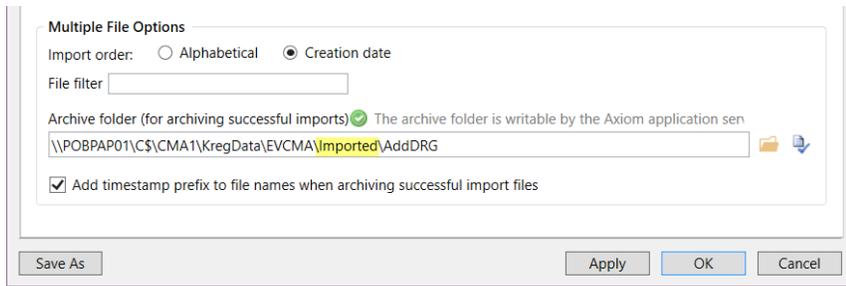
5. In the **File Options** section, select the following:
 - a. If the first row of data in your file has column headers, select the option **First row has column names**.

- b. For **Delimiter character**, select the pipe delimiter (|).
- c. For **Text qualifier character**, the default is quote marks. If your file uses a different qualifier character, enter it in this field.



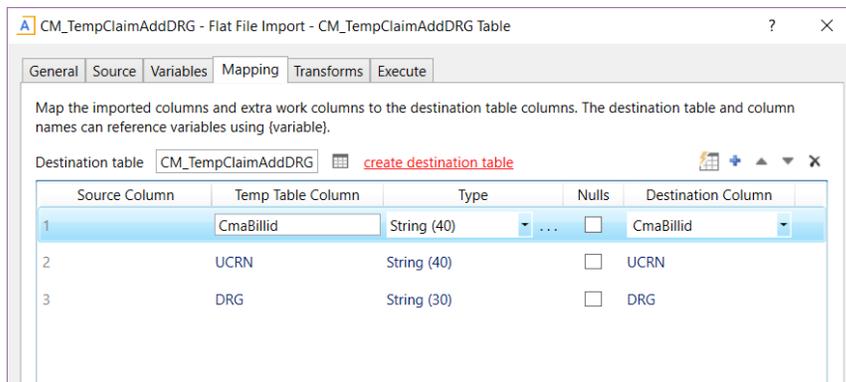
6. In the **Multiple File Options** section, select the following:

- a. For **Import order**, select **Creation date**.
- b. For **Archive folder**, this is the same path as the Source folder except that instead of a folder named "Import" the folder is named "Imported," as shown in the following example.



- c. Ensure that the option **Add timestamp prefix to file names when archiving successful import files** is selected.

7. If the client is using column header names in the file, click the **Mapping** tab and then verify that the information displayed in the **Temp Table Column** and **Destination Column** is correct.

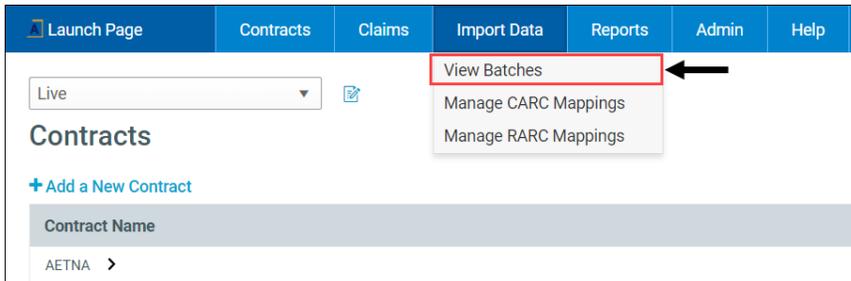


- 8. If the information is not correct, select the line in the column and then type the correct heading.
- 9. Click **Apply** and then click **OK**.

View import activity

To view your import activity:

1. Log in to the Axiom Contract Management Web Client.
2. In the main menu header, click **Import Data** and select **View Batches**.



The Manage Import Batches page opens.

The screenshot shows the Manage Import Batches page. The page has a header with navigation tabs: Launch Page, Contracts, Claims, Import Data, Reports, Admin, Help. Below the header, there are filters for 'Select Import Type: Claims' and 'Import Date: Start: 1/2/2019 End: 9/30/2019'. The main content is a table with the following columns: Import Date, Type, Batch #, Claims Submitted, # Rejected, # Accepted, # Exceptions, # Calculated, Total Charges, and Notes. The table contains 15 rows of data.

Import Date	Type	Batch #	Claims Submitted	# Rejected	# Accepted	# Exceptions	# Calculated	Total Charges	Notes
09/03/2019	837I	2796	9	0	9	0	0	\$6,180.18	837I
09/03/2019	837I	2795	9	0	9	0	0	\$6,180.18	837I
08/30/2019	837I	2794	9	0	9	0	0	\$6,180.18	837I
08/30/2019	837I	2793	9	0	9	0	0	\$6,180.18	837I
08/27/2019	837I	2792	9	0	9	0	0	\$6,180.18	837I
08/27/2019	837I	2791	9	0	9	0	0	\$6,180.18	837I
08/26/2019	837I	2790	9	0	9	0	0	\$6,180.18	837I
08/26/2019	837I	2789	9	0	9	0	0	\$6,180.18	837I
08/26/2019	837I	2788	9	0	9	0	0	\$6,180.18	837I
08/22/2019	837P	7061	0	0	0	0	0	\$0.00	Incorrect Type - Not Imported
08/22/2019	837P	7060	0	0	0	0	0	\$0.00	Incorrect Type - Not Imported
08/22/2019	837P	7059	1	0	1	0	0	\$766.50	837P
08/22/2019	837P	7058	1	0	1	0	0	\$145.50	837P

Manage Import Batches page example

On the Manage Import Batches page, you can view all data entered in the system, organized by batch (1 file = 1 batch). This is useful when looking at the View a Claim Summary tab, where the batch number is provided and you want to locate more information about that batch.

Each claim batch has the following information columns:

- Import Date
- Type (type of claim)
- Batch #
- Claims Submitted (number of claims)

- # Rejected
- # Accepted
- # Exceptions
- # Calculated
- Total Charges
- Notes – This column contains notes about the imported file; for example, if a file was not imported because it is a duplicate, that is noted here.

3. To view batch information for Postings and other file imports, from the **Select Import Type** dropdown, select **Flat File Imports**.

Flat file imports include payments and adjustments, as well as any additional data files you submit, such as DRG or plan code files.

Some information is not available if the batch was imported as part of a historical data import.

TIP: In every view, the bottom left corner contains page navigation options. Click the arrows to move to the next/previous page:



IMPORTANT: Do NOT delete batches unless instructed to do so by a member of the CMA Support Team. If the batch information is deleted, it cannot be recreated.

About the Import Summary Report

All data entering the system runs through Syntellis’s auto-importer, which generally runs four to seven days per week. It usually runs late at night or early in the morning so that it does not interfere with work being done by users. When the import completes, if successful, you will receive an email confirming the import and detailing the contents. The following is a list of terms and fields, with accompanying definitions, found on the report.

▶ Import Summary Report definitions – CLAIMFILES

Field	Definition
Batch Number	System # assigned to each import file.
Import File Name	Name and import location of file.

Field	Definition
# of Claims Read into Temp	In Axiom Contract Management, all claims are loaded to a temporary staging area before being transferred into the Live environment. This allows us to run validation processes on the data to ensure the data is correct. This number should tie to the number of billed claims in the import file.
# of Late Charge Records	Details how many late charges were in the import file.
# of Claims Rejected to Bad	In cases where bad data is provided, the system removes the records associated to the bad claim and moves them into a separate area. For details, see About problem file processing . You can run the Bad Records report to check why any claims were moved there. Reasons vary as to why a claim would be moved to bad, but most of the time it is related to missing required data elements (e.g., account #), a number that has a character in it and the system cannot convert it correctly, or a bad date that does not convert. You should rarely see anything detailed in this field. If you do, run the Rejected Records report (available in Reports > Reports) or contact info@syntellis.com .
Valid Claim Total Charges	Provides the total charges of the claims that were successfully imported to the Live environment.
# Claims Transferred to Live	This field indicates how many of the temp records were imported to the Live environment. It should be in line with the # of claims read into temp column (unless records were moved to bad).

Field	Definition
# Claim Exceptions	<p>In some cases, imported claims are marked as exceptions. Following are reasons for exception records:</p> <ul style="list-style-type: none"> • Trying to insert a series bill over an existing non-series bill claim • Trying to insert a late charge onto a series bill • Trying to insert a void over a series • Trying to insert a non-series bill over an existing series bill • Invalid Medicare Part B Type of Bill • Trying to insert a zero payment bill into the system • Trying to insert over higher charge claim • Voided Claim • Invalid Late Charge Bill (Incompatible Bill was imported after this record) <p>The second sheet of the import summary report details all the exceptions from the import, including the Bill ID (Patient Account Number) linked to the claim in the system. In addition to Bill ID, the supplementary details include: Batch Number, Import File Name, Exception Reason, Bill Code, # of Claims, and Total Charges.</p>
# of Claims Grouped	Axiom Contract Management groups all outpatient claims into their corresponding APCs based on the date of the episode of care and its corresponding version of the Medicare APC schedule.
# of Claims Priced	Any Medicare-based outpatient claim will price against the 3M pricer if factors have been provided to Syntellis and a corresponding calculation schedule has been built and assigned to the contract provision. Please email your factors to info@syntellis.com.
# of Claims Calculated	This field indicates the number of claims that found a contract and calculated accordingly.

► Import Summary Report definitions – POSTINGS

Field	Definition
Batch Number	System assigned # to each import file.
Import File Name	Name and import location of file.

Field	Definition
# of Postings Read into Temp	In Axiom Contract Management, all claims are loaded into a temporary staging area before they get transferred into the Live environment. This allows us to run validation processes on the data to ensure the data is correct. This # should tie to the # of posting records in the import file.
# of Postings Rejected to Bad	In cases where the data is bad, the system removes the records associated with the bad claim and moves them to a separate area for review by support staff. Reasons vary as to why a posting would be moved to bad, but most of the time it is related to a missing required field value, a number that has a character in it and the system cannot convert it, or a bad date that does not convert. You should rarely see anything detailed in this field. If you do, please contact support@KaufmanHall.com.
# of BillIDs Imported	Provides the number of unique account numbers in the posting file being imported.
# of Matching BillIDs	Provides the number of matching billIDs found in the Live environment for the postings being imported.
Total Valid Postings Amount	Provides a summary of the valid posting records being imported. NOTE: If any records are rejected to bad, their amounts are not reflected in the Total Valid Postings Amount.

About problem file processing

When claims and remits are read into the system during the Axiom Contract Management Full Import job, occasionally problem files occur. Problem files include duplicate files, files with invalid formats, and files that cannot be read because of structural or other issues.

The system handles them as described in the following sections.

► Duplicate files

The system:

- Date-time stamps and copies the file to a Duplicate file folder under the EVCMA folder location from which the file is read. If the Duplicate folder does not exist, the system creates it.
- Logs the attempt as a duplicate.
- Inserts the file entry into the TempImportBatches table without a file hash and with a status of Duplicate.

- Updates the import report to show that the file is a duplicate and was skipped.
- Within the system under Import Data, in the Manage Import Batches table, the Notes column lists the file as Duplicate - Not Imported.

▶ Invalid format files

The system:

- Date-time stamps and copies the file to an Invalid file folder under the EVCMA folder location from which the file is read. If the folder does not exist, the system creates it.
- Logs the attempt as an invalid format file
- Inserts the file entry into the TempImportBatches table without a file hash and with a status of Invalid Format
- Updates the import report to show that the file is an Invalid Format and was skipped
- Within the system under Import Data, in the Manage Import Batches table, the Notes column lists the file as Invalid Type - Not Imported

▶ Unreadable files

The system:

- Date-time stamps and copies the file to an Unreadable folder under the EVCMA folder location from which the file is read. If the Unreadable folder does not exist, the system creates it.
- Logs the attempt as an unreadable file
- Inserts the file entry into the TempImportBatches table without a file hash and with a status of Unreadable
- Updates the import report to show that the file is Unreadable and was skipped
- Within the system under Import Data, in the Manage Import Batches table, the Notes column lists the file as Unreadable - Not Imported

View SQL importer log

The SQL importer log available to administrators provides better visibility into the nightly import process. The SQL importer log records details about the last import that took place, including any errors, in an easy-to-view format. Administrators can use this log as a diagnostic tool when errors occur because it is more descriptive than the Axiom log.

The log records the following:

- SQL Import run ID number
- Task group ID
- Message – A brief description of the activity during each phase of the process
- Log Date/Time

- Exception – Error and associated information
- Error – Error flag True or False; True indicates an error

To view the SQL Importer log:

In the main menu header, click **Admin > SQL Importer log**.

SQLImp...	TaskGr...	Message	Log Date/Time	Exception	Error
316	0	Beginning SQL Importer Job	2020-12-16 2:34 PM		False
316	0	No files or folders are configured for TaskGroupID 0	2020-12-16 2:34 PM		True
316	0	Completed SQL Importer Job	2020-12-16 2:34 PM		False

Managing attributes

Attributes are custom tags that allow you to extend contract data models. Attributes allow you to add information to a contract that exists on the physical contract but for which there may not be room in the modeled version.

- Attributes can be applied to claim and line-level reporting to enhance understanding of contracts and calculation performance.
- Attributes provide a way for you to define, organize, and categorize all levels of a contract model.
- Attributes enhance the reporting and analysis of contract calculations.

Only users who have permissions to model contracts can add attributes to contracts.

As a system administrator, you create and manage system attributes on the Attributes page, accessible from the Admin menu on the main toolbar.

Attribute Name	Attribute Description	Attribute Data Type	Attribute Type	Enabled
Delete Text	Delete Text Test	Text	Provision	<input checked="" type="checkbox"/>
FinClass	FinClass	Library	Contract	<input checked="" type="checkbox"/>
Hierarchy Ranking	Hierarchy Ranking	Integer	Clause	<input checked="" type="checkbox"/>
Integer	Integer Test	Integer	Contract	<input checked="" type="checkbox"/>
Medicare Part A	Medicare Part A versions	Text	Version	<input checked="" type="checkbox"/>
Medicare part B	Provision with Medicare Part B	Text	Provision	<input checked="" type="checkbox"/>
Money	Money format	Money	Contract	<input checked="" type="checkbox"/>
Percent	Percent format	Percent	Contract	<input checked="" type="checkbox"/>
Percent of copay	Percentage of copay	Percent	Version	<input checked="" type="checkbox"/>
Percent of Medicare	Adjustment from percent of Medicare	Percent	Version	<input checked="" type="checkbox"/>
Plan Copay	Dollar amount copay per visit	Money	Provision	<input checked="" type="checkbox"/>
Price Transparency Include	Include this contract in price transparency	Library	Contract	<input checked="" type="checkbox"/>

Overview of Attributes page

Creating attributes

Attributes available to you depend on the contract level you are at when you add the attribute. If you are adding an attribute at the contract level, the only attributes available to select will be contract type attributes. This means that when you create attributes, think about what kind of data the attribute

should hold, and at what level of the contract the attribute should be applied.

Only system administrators can create attributes.

► Create an attribute

Use these instructions to create attributes that do not contain libraries (i.e., a selection list).

To create a non-Library data type attribute:

1. In the main menu header, click **Admin > Manage Attributes**.
2. On the **Attributes** page, on the upper right, click **Create New Record**.
3. On the **Create New Attribute** page, in the **Attribute Name** field, type a name for the attribute.
4. In the **Attribute Description** field, type a description for the attribute.
5. From the **Attribute Data Type** drop-down, select one of the following:

NOTE: You cannot change an attribute's Data Type after saving the attribute.

- **Integer** – Creates a field that accepts a number
 - **Money** – Creates a field that accepts dollar and cent amounts
 - **Decimal** – Creates a field that accepts decimal values
 - **Percent** – Creates a numerical field that accepts percentages
 - **Text** – Creates a text field for the user to enter text
 - **Library** – Creates a list from which a user can select values. To create this type of attribute, see [Create a Library attribute](#).
6. From the **Attribute Type** drop-down, select which part of a contract the attribute should be applied to:

NOTE: You cannot change an attribute's Type after saving the attribute.

- Contract
 - Version
 - Provision
 - Clause/Term
7. (Optional) By default, the attribute is enabled. To disable this attribute after creation, clear the **Enabled** check box.
 8. If you selected the **Library** attribute data type, click **Save**. When the page refreshes, click the **Edit Library** button to the right of the grayed out **Attribute Data Type** field.
 9. Do one of the following:
 - To save but remain on this page, click **Save**.

- To save and exit this page, click **Save and Close**.
- To save and create another attribute, click **Save and New**.

▶ Create a Library attribute

Library data type attributes allow you to create a list users can select from when applying the attribute.

To create a Library data type attribute:

1. In the main menu header, click **Admin > Manage Attributes**.
2. On the **Attributes** page, in the upper right, click **Create New Record**.
3. On the **Create New Attribute** page, in the **Attribute name** field, type a name for the attribute.
4. In the **Attribute Description** field, type a description for the attribute.
5. From the **Attribute Data Type** drop-down, select **Library**.
6. From the **Attribute Type** drop-down, select the contract part the attribute should be applied to.

NOTE: You cannot change an attribute's Type after saving the attribute.

7. (Optional) By default, the attribute is enabled. To disable this attribute after creation, clear the **Enabled** check box.
8. Click **Save**.

The page refreshes to display the **Edit Attribute** page with your new attribute in the dialog.

9. Click the **Library** button.
10. In the **Edit Library** dialog, click **+Add new record**.
11. In the **Library Value** field, enter the first item for the pick list in the field provided, then click **Save**. The item is added to the list, and the Save and Cancel buttons are replaced by an Edit and Delete button set.
12. Repeat step 11 until all the items in the pick list are added.
13. Click the **X** in the upper right corner to close the dialog.
14. On the **Edit Attribute** page, click **Save and Close** to save and exit the page, or click **Save and New** to save and then create another attribute.

Edit or delete an attribute

Only System administrators can edit or delete attributes.

Editing includes:

- Changing attribute names and values,
- Disabling or enabling attributes
- Deleting attributes

NOTE: You cannot change an attribute's Data Type or Type. However, you can edit pick list entries for Library data type attributes.

To edit an attribute:

1. In the main menu header, click **Admin > Manage Attributes**.
2. On the **Attributes** page, to edit an attribute, click the **Edit** icon () at the end of the attribute's row and then do any of the following:
 - To disable the attribute so that it cannot be used, clear the **Enabled** check box.
 - To change the name, in the **Attribute Name** field, edit the name.
 - To change the description, in the **Attribute Description** field, edit the description.
 - To change the pick list selections for a Library data type attribute:
 - a. To the right of the **Attribute Data Type** field, click the **Library** button.
 - b. To edit an entry, click the **Edit** button for the entry, make desired changes, and then click **Update**.
 - c. To add a new entry, click **Add new record**, and then enter a value, then click **Save**.
 - d. To delete an entry, click the **Delete** button for the entry, and then click **Delete** in the confirmation dialog.

NOTE: If the library entry you are deleting is currently in use by a contract level, a warning displays informing you that you need to remove that entry from all contracts to which it is applied before you can delete it.

- e. Close the **Edit Library** dialog.
3. Click **Close**.

To delete an attribute:

NOTE: The recommended best practice is to disable an attribute rather than deleting it.

1. Verify that the **Enabled** column displays an empty circle icon: (). If it does not, then click the **Edit** button and clear the **Enabled** check box, then save the attribute.
2. Verify that the attribute is not currently attached to any contract level.
3. At the end of the attribute's row, click the **Delete** icon ()
4. In the **Delete** confirmation dialog, click **Delete**.
5. Click **Save**.

Managing insurance plan codes

As an administrator, you can manage insurance plan codes in your Axiom Contract Management systems. Managing codes include creating new codes, searching for existing codes, and adding codes to contracts.

Insurance plan codes are assigned to contract versions to determine which payers and procedures on incoming claims apply to that version. New codes coming in on claims are automatically added to the OrgCode PayerCode library. However, the new code will not cause the claim to trigger a contract until the code is added to a contract version. As an administrator, you can assign a new insurance plan code to a contract as soon as you become aware of it so that incoming claims calculate upon import instead of waiting until the new payer code is assigned. Then, when the new code imports from a claim or an AddPayer file, it is recognized as existing and not duplicated.

On the Insurance Plan Codes page, you can do the following:

- [Add a new insurance plan code to the system](#)
- [Search for existing insurance plan codes](#) using a variety of criteria

Create an insurance plan code

Use these instructions to add a new insurance plan code to your system if you know the payer code and the associated organization.

To create a new insurance plan code:

1. In the main menu header, click **Admin > Manage Insurance Plan Codes**.

The screenshot shows the Axiom Contract Management interface. The top navigation bar includes 'Launch Page', 'Contracts', 'Claims', 'Import Data', 'Reports', 'Admin', 'Help', and 'Logout'. The 'Admin' menu is open, and 'Manage Insurance Plan Codes' is highlighted with a red box. Below the menu, the 'Contracts' section is visible, showing a table with columns for 'Contract Name', 'Latest E', and 'Attributes'. The table lists two contracts: 'AETNA' and 'ANTHEM OHAS'.

Contract Name	Latest E	Attributes
AETNA >	12/31/20	✓
ANTHEM OHAS >	12/31/2026	○

2. On the **Insurance Plan Codes** page, in the upper right, click **Create New Payer Code**.

3. On the **Create New Payer Code** page, from the **Organization** drop-down, select the applicable organization.
4. In the **Payer Code** field, enter the code for the payer.
5. In the **Payer Description** field, type a description for the payer.

6. Do one of the following:
 - To save and close the page, click **Save and Close**.
 - To save the new code and continue working on the page, click **Save**.

NOTE: If you see a red line across the bottom of the page when you save, it means that payer code is already in use in the system. You will need to use a different payer code.

The new code is now available for [assigning to a version](#).

NOTE: Currently there is no delete function for removing an insurance plan code from the system. If you create a code in error, assign it to a dummy contract to remove it from the available code listing.

Search for an existing insurance plan code

If you do not see the insurance plan code you want to use in a selection menu, you can search for the code to see if it exists. You can search on the following main parameters:

- Org code
- Organization
- Payer code
- Payer description

To search for an insurance plan code:

1. Navigate to the Insurance Plan Codes page:

- From the **Admin** menu, select **Manage Insurance Plan Codes**.
 - From the **Edit Version** window, in the **Insurance Plan codes** tab, click the Search icon (🔍).
2. On the **Insurance Plan Codes** page, in the header of the column to search on, click the filter icon (⌵) at the right end of the column.
 3. In the filter dialog, select the criteria to search on, and then click **Filter**.

The list is filtered to items that fit your search parameters.

4. If your search returned no results, try broadening the search criteria; for example, instead of “Is equal to” try selecting “contains.”
5. To clear the search, click the filter icon again, and in the search dialog, click **Clear**.
6. If you have verified that the insurance plan code is not in the system, you can [add it](#) if you have administrative rights.

Map provider names to Org codes

Contract Management administrators can manage provider name mappings to organizational codes using the Provider Org Code Mapping feature.

When a claim enters the system, the provider name on it is checked against the existing list of names. If the name is different in any way from the names already in the list (for example, spelling or word order), it is added to the list. Administrators can then map the new provider names or the name variances to the correct Org codes.

By default, new provider names come in with the default code. You can select the desired name from the Org Code drop-down or, if needed, you can create a new Org code.

When a unique provider name enters the system from a claim, it is listed here

Select the desired Org Code to map the provider name to

Provider Name	Org Code
A	01 - KREG MEDICAL CTR ORG1
AAA AMBULANCE SERVICE	bla bla - 123 bla bla
Associates in Medicine	01 - KREG MEDICAL CTR ORG1
BEN KILDARE SERVICE	01 - KREG MEDICAL CTR ORG1
CHRIS GOOD HEALTH HOSPITAL - Dikemb	01 - KREG MEDICAL CTR ORG1
EMERGENCY PHYSICIANS GROUP	01 - KREG MEDICAL CTR ORG1
GOOD HEALTH HOSPITAL	01 - KREG MEDICAL CTR ORG1
GREENE	03 - CHRIS TEST ORG
HALL OF FAME MEMORIAL HOSPITAL	01 - KREG MEDICAL CTR ORG1
HAPPY DOCTORS GROUP PRACTICE	JONES HOSPITAL - JONES HOSPITAL

1 - 10 of 57 items

Add New Org Code

Org Code* Description* Save

Use this section to add new Org Codes to the selection lists

To map a provider name to an Org code:

1. In the main menu header, from the **Admin** menu, select **Provider Org Code Mapping**.
2. Locate the provider name in the list on the left. Names are listed in alphabetical order.
3. In the **Org Code** column, from the Org code drop-down for the corresponding provider name, select the desired Org code. The change is saved automatically. If the needed Org code does not exist, you can add it using the following instructions.
4. To propagate the provider name and Org code association to existing claims, [recalculate the claims](#).

To add a new Org code:

1. In the main menu header, from the **Admin** menu, select **Provider Org Code Mapping**.
2. In the **Add New Org Code** section, in the **Org Code** field, type the number to associate with the Org code.
3. In the **Description** field, type the Org code description.
4. Click **Save**.

Modeling contracts

Axiom Contract Management stores contract terms, patient claims, and payment information. The system uses the contract payment terms and the patient claim information to calculate an expected payment for every claim submitted by the provider. After the claim is paid by the primary payer, it can be compared to the expected payment and/or the expected contractual to see if the claim was reimbursed according to the agreed upon contract terms.

Navigating in contracts

Contract pages in Axiom Contract Management are laid out in a simulation-to-term hierarchy, with the simulation name at the highest level, and terms (unless the final clause has no terms) at the most granular:

- Simulation >
 - Contract >
 - Versions >
 - Provisions >
 - Clauses >
 - Terms

Drill through each level to reach the one below it. As you move through the contract levels, breadcrumbs display at the top of the page.

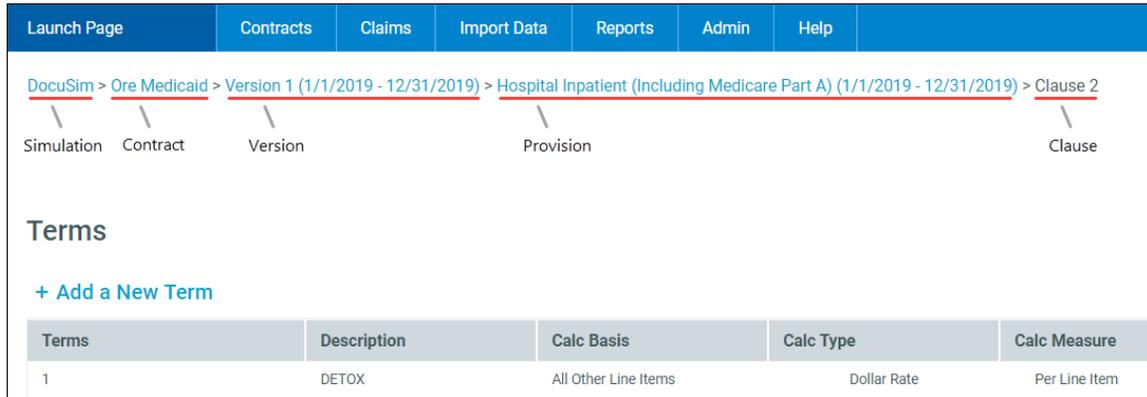
To navigate to different contract levels:

- To navigate to versions, from the **Contracts** page, for the desired contract, hover your cursor in the contract row, and then click **Go to Versions**.



- To navigate to provisions, from the **Versions** page, for the desired version, click **Go to Provisions**.
- To navigate to clauses, from the **Provisions** page, for the desired provision, click **Go to Clauses**.
- To navigate to terms, from the **Clauses** page, for the desired clause, click **Go to Terms**.

- On the Terms page, or any page in between, you can backtrack to previous pages using the linked breadcrumbs at the top of the page. Click the link to go back to the desired page.



When you backtrack, the page you backtracked from is removed from the breadcrumb trail.

Searching lists and filtering contract columns

Along with improved navigation, the updated UI for contract pages and dialogs provides new sort and filter functionality for contract table grids, and search functionality for some dialog fields.

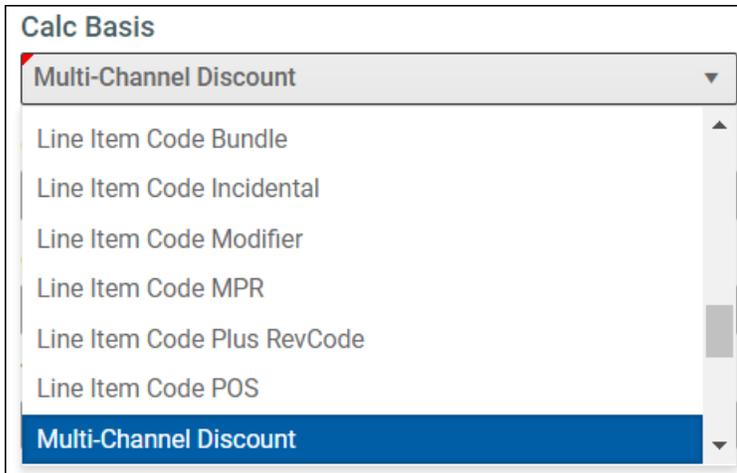
Many contract grid columns can be sorted and filtered. In most contract dialogs, if a drop-down field has a long list of entries, you can search the list.

To sort and filter table columns:

1. To sort a column, click the header. A sort up (↑) or sort down arrow (↓) displays in the column header if the column can be sorted.
2. To filter a column:
 - a. In the column header, click the filter icon (🔍).
 - b. In the filter dialog, from the first drop-down, select the parameter to use, and then type the word into the field provided. If desired, add another filter parameter.
 - c. Click **Filter**. The list filters to display results that meet the filter parameters.
 - d. To clear the filter, click the icon again and then, in the filter dialog, click **Clear**.

To search a long list of entries in a dialog drop-down field:

1. Click the drop-down, and then start typing a search word or letter.
2. The list changes to begin with the search word or letter. A small red triangle displays at the upper left corner of the field to show that the entry has changed. Select the desired option from the list.



Contract data requirements

For expected payments to be modeled accurately, the contract terms must be entered correctly in Axiom Contract Management. To accomplish this, you need a thorough understanding of the contract language and terms as well as access to electronic fee schedules, and any other data relevant to building a model of the signed contract. For Medicare-based contracts, you need hospital-specific factors provided to the hospital by either the Fiscal Intermediary (FI) or by CMS directly. Often this requires direct contact with the payer representative.

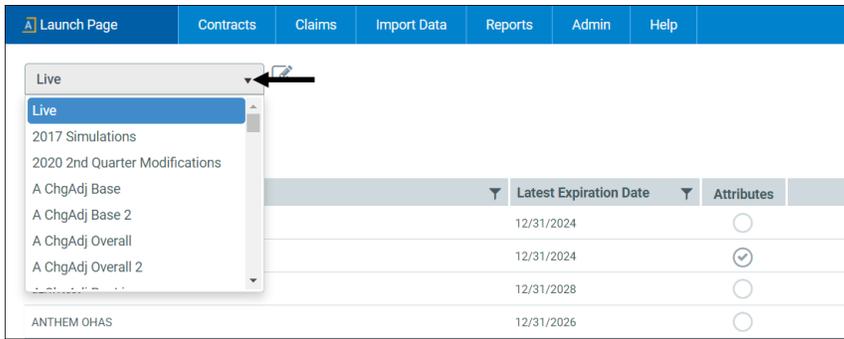
You then need to interpret these terms into Axiom Contract Management, with the understanding that Axiom Contract Management uses specific logic to calculate a claim. This logic is discussed in the rest of this section on building contracts.

Filter contracts on the Contracts page

You can filter the list of contracts on the main Contracts page by contract name or by the latest expiration date.

To filter contracts:

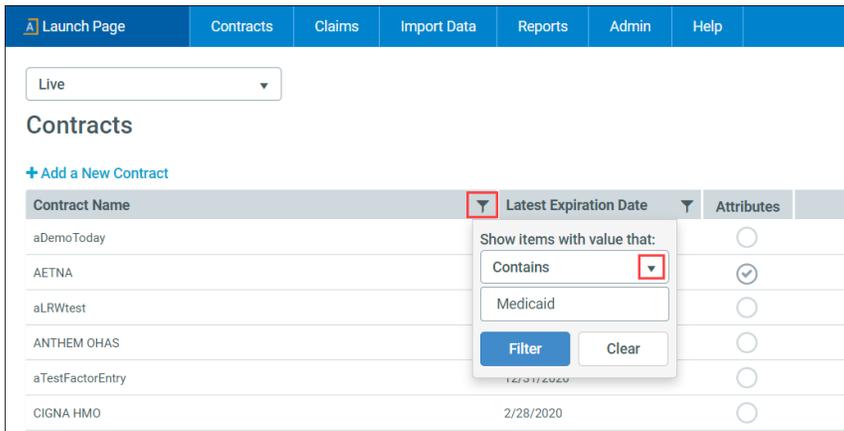
1. If the desired simulation is not currently selected, select it from the simulation drop-down:



- In the **Contract Name** column header on the right, click the Filter icon (▼).

NOTE: To filter by expiration date, click the filter icon in the **Latest Expiration Data** column header.

- In the filter dialog, from the drop-down, select the desired filter criteria. The default criteria is "Contains."
- In the input field, type the item on which to search. For example, if you selected Contains as the criteria, type the word or phrase contained in the contract name you are searching for.
- Click **Filter**.



The filtered list displays contract names based on the criteria you specified.

- To clear the filter, click the Filter icon again, and then click **Clear**.

Add a new contract

The following instructions are for creating a new contract from scratch.

To add a contract:

1. On the **Contracts** page, verify that you are in the correct simulation. If you are not, then from the simulation drop-down, select the desired simulation.
2. Under the **Contracts** page title, click **Add a New Contract**.

NOTE: The Add a New Contract option is displayed only if you have administrative access.

3. In the **Add a New Contract** dialog, in the **Contract Name** field, type a name for the contract (e.g., Medicare Blue Cross). Do not use special characters.
4. Click **Save**.

NOTE: You do not need to enter the latest expiration date because that is defined by the versions built under the contract.

5. (Optional) If desired, [add an attribute](#) to the contract.
6. Next, [add a version](#) to the contract.

Edit or delete a contract

Use these instructions to change contract settings at the contract level. You can make the following changes:

- Change a contract name
- Change attribute values
- Delete a contract

To edit a contract:

1. Navigate to the contract.
2. At the end of the contract row, click the Edit icon ().
3. In the **Edit Contract** dialog, do any of the following:
 - To change the contract name, in the **Settings** tab, in the **Contract Name** field, type the new name.
 - To change the contract's attribute values, in the **Attributes** tab, make the desired changes to the listed attributes. For more information, see [Edit or remove an attribute from a contract](#).
 - To import attributes, see [Import an attribute to a contract](#).
4. Click **Save**.

To delete a contract:

1. Verify that the contract and its versions are not being used or do not need to be retained as records; for example, if you created a duplicate contract by mistake and want to delete it.
2. At the end of the contract's row, click the Delete icon (🗑️).
3. In the confirmation dialog, click **Delete**.

Assign an insurance plan code to a version

For a claim to calculate on a contract, Axiom Contract Management must know which payers calculate against the version. Use these instructions to assign an insurance plan code to a contract version or to change the assigned code.

1. [Navigate to the contract version](#).
2. At the end of the version row, hover your cursor and then click the Edit icon (✎).
3. In the **Edit Version** dialog, click the **Insurance Plan Codes** tab.
4. Do one of the following:
 - [Import insurance plan codes from another version](#).
 - Continue to step 5 to add codes from the list of unassigned codes.
5. In the **Unassigned** list, select the insurance plan codes (org code - payer code combinations) to add to the version by clicking the Assign icon (📌) on the right end of the row, as shown in the following example.

The screenshot shows a dialog titled "Unassigned Import" with a "Viewing:" dropdown set to "01 - KREG MEDICAL CTR ORG1". It contains a table with the following data:

Organization	Payer Code	Payer Description	
01 - KREG MEDICAL CTR ORG1	05535	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	1	1	
01 - KREG MEDICAL CTR ORG1	10234	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	12345	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	123456	testing2	
01 - KREG MEDICAL CTR ORG1	1569	NO DESCRIPTION	

At the bottom right of the dialog, there are "Save" and "Cancel" buttons. The "Save" button is highlighted with a red box and an arrow pointing to it from the left.

- If there are multiple organizations, then before selecting codes, click the **Viewing** drop-down and select the organization from which to select codes.

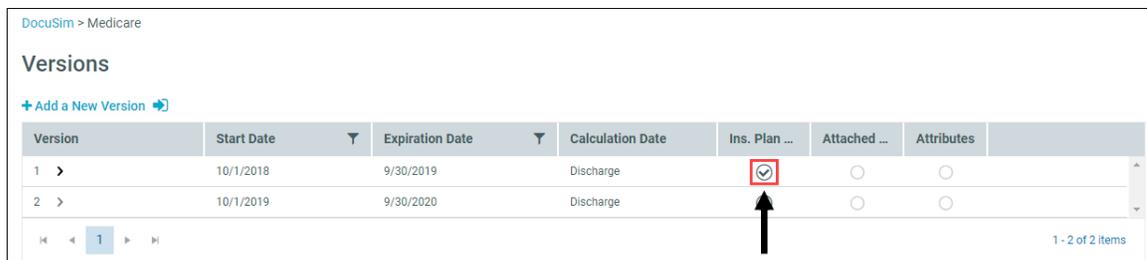
NOTE: You can assign codes from multiple organizations, but the list is filtered by organization. Before saving, change the organization to add more codes.

- If you cannot locate the desired insurance plan code, search for it in the system: at the top right of the **Edit Version** dialog, click the search icon, as shown in the following example, and then [search for the desired code](#).



NOTE: Administrators can add new insurance plan codes to the system. For more information, see [Managing insurance plan codes](#).

6. When finished adding codes, click **Save**.



Checked circle indicates this version has assigned insurance plan codes

7. If you are building a contract, the next step is to [add a provision](#).

Copying contracts

After a set of contracts is built into Axiom Contract Management, you can use the contract parts as the basis for new contracts. You have a number of options when copying contracts:

- [Copy a version to the same or different contract](#)
- [Copy a version to a different contract](#) (using the import version feature)
- [Copy a version from a file](#) (using the import file feature)

- [Copy a provision to the same version](#)
- [Copy a provision to a different version in the same or different contract](#)
- [Copy a clause or a term](#)

Modeling versions

A version is a defined time frame during which the contract as a whole is valid and the terms are consistent. It can represent the fiscal year, the calendar year, or some other defined period. In the Axiom Contract Management contract hierarchy, versions reside directly under contracts but above provisions.

Add a version

After creating a contract, the next step is adding a version. Instead of names, versions are identified by their active period, which is the time frame defined by their start and expiration dates. Versions are assigned numbers that correlate to the version's original start and expiration date period. Generally, the older a version, the lower the number used to identify it. So, for example, version 1 would be older than version 2, and so on.

Use these instructions to add a new version to a contract. You can also copy a version by [importing it from another contract](#), or you can [import a version from an external file](#).

To add a new version:

1. On the **Contracts** page, hover your cursor over the desired contract row to view the **Go to Versions** link, then click the link.

TIP: If the list of contracts is long, find the desired contract by [filtering the list](#).

2. On the **Versions** page, click **Add a New Version**.
3. In the **Add a New Version** dialog, in the **Start Date** field, type in the date or click the calendar icon () and select the date on which the version takes affect.

► About Start Date / Expiration Date

In Axiom Contract Management, a version represents a defined time frame for the contract. The time frame used can be from the time period on a certain contract where the terms remain consistent. It can represent the fiscal year, or it can represent the calendar year. To minimize the number of contracts built, we recommend that you build versions defined by contract periods where terms remain unaltered.

4. In the **Expiration Date** field, type in the date or click the calendar icon () and select the date on which the version's active period ends.

5. In the **Calculation Date** field, select the calculation date for the version—either the date of discharge or the date of admission.

▶ **About Contract Calculation Date**

You have two options when calculating claims: you can choose to calculate them by the date they were admitted (Admit), or by the discharge date (Discharge).

The one you use depends on the payer, which you should confirm with them. The default is by discharge date.

6. Click **Save**.
7. (Optional) If desired, [add an attribute to the version](#).
8. (Optional) If desired, [attach a document to the version](#).
9. Next, [assign an insurance plan code to the version](#).
10. [Add a provision to the version](#).

Assign an insurance plan code to a version

For a claim to calculate on a contract, Axiom Contract Management must know which payers calculate against the version. Use these instructions to assign an insurance plan code to a contract version or to change the assigned code.

1. [Navigate to the contract version](#).
2. At the end of the version row, hover your cursor and then click the Edit icon (.
3. In the **Edit Version** dialog, click the **Insurance Plan Codes** tab.
4. Do one of the following:
 - [Import insurance plan codes from another version](#).
 - Continue to step 5 to add codes from the list of unassigned codes.
5. In the **Unassigned** list, select the insurance plan codes (org code - payer code combinations) to add to the version by clicking the Assign icon () on the right end of the row, as shown in the following example.

Unassigned Import Viewing: 01 - KREG MEDICAL CTR ORG1

Organization	Payer Code	Payer Description	
01 - KREG MEDICAL CTR ORG1	05535	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	1	1	
01 - KREG MEDICAL CTR ORG1	10234	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	12345	NO DESCRIPTION	
01 - KREG MEDICAL CTR ORG1	123456	testing2	
01 - KREG MEDICAL CTR ORG1	1569	NO DESCRIPTION	

1 - 25 of 67 items

Save Cancel

- If there are multiple organizations, then before selecting codes, click the **Viewing** drop-down and select the organization from which to select codes.

NOTE: You can assign codes from multiple organizations, but the list is filtered by organization. Before saving, change the organization to add more codes.

- If you cannot locate the desired insurance plan code, search for it in the system: at the top right of the **Edit Version** dialog, click the search icon, as shown in the following example, and then [search for the desired code](#).

Edit Version x

Version 1 | Insurance Plan Codes

Settings **Insurance Plan Codes** Attributes Documents

Assigned

Organization	Payer Code	Payer Description	
01 - KREG MEDICAL CTR ORG1	00123	NO DESCRIPTION	

NOTE: Administrators can add new insurance plan codes to the system. For more information, see [Managing insurance plan codes](#).

6. When finished adding codes, click **Save**.

DocuSim > Medicare

Versions

[+ Add a New Version](#)

Version	Start Date	Expiration Date	Calculation Date	Ins. Plan ...	Attached ...	Attributes
1 >	10/1/2018	9/30/2019	Discharge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 >	10/1/2019	9/30/2020	Discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 - 2 of 2 items

Checked circle indicates this version has assigned insurance plan codes

7. If you are building a contract, the next step is to [add a provision](#).

Import insurance plan codes to a version

When creating or editing a contract version, you can import insurance plan codes from another version. The import feature imports copies of the insurance plan codes.

To import insurance plan codes to a version:

1. [Navigate to the version to which you want to add codes](#).
2. At the end of the version row, hover your cursor and click the Edit icon (.
3. In the **Edit Version** dialog, click the **Insurance Plan Codes** tab.
4. In the lower half of the dialog, click the **Import** tab.
5. In the list of contracts, locate and expand the version that has the codes you want. To import a code, click the arrow icon at the end of the code row, as shown in the following example:

Unassigned **Import**

Contract Name				
Version	Start Date	Expiration Date	Calculation Date	
+ 1	2008-07-01T00:00:00	2010-01-31T00:00:00	1	
- 2	2010-02-01T00:00:00	2011-01-31T00:00:00	1	
Organization	Payer C...	Payer Description		
01 - KREG MEDICAL CTR ORG1	CI017	NO DESCRIPTION		

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[Save](#) [Cancel](#)

The code is copied to the Assigned section of the dialog.

6. Click **Save**

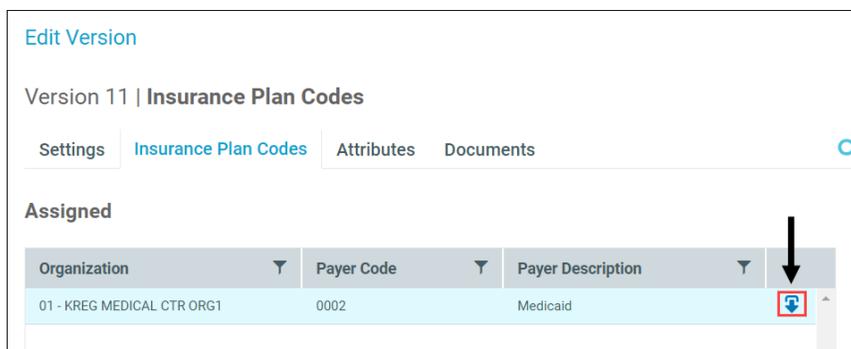
NOTE: If you copy a code you do not want, before saving, you can remove it by clicking Remove icon (✕). To remove after saving, from the **Assigned** section, click the Unassign icon (↴) for that code.

Remove an insurance plan code from a version

Use these instructions to remove an assigned insurance plan code from a contract version.

To remove an insurance plan code:

1. [Navigate to the contract version](#).
2. At the end of the version row, click the Edit icon (✎).
3. In the **Edit Version** dialog, click the **Insurance Plan Codes** tab.
4. In the **Assigned** section of the dialog, for the code to remove, at the end of the code row, click the Unassign icon (↴).



5. Click **Save**.

Edit or delete a version

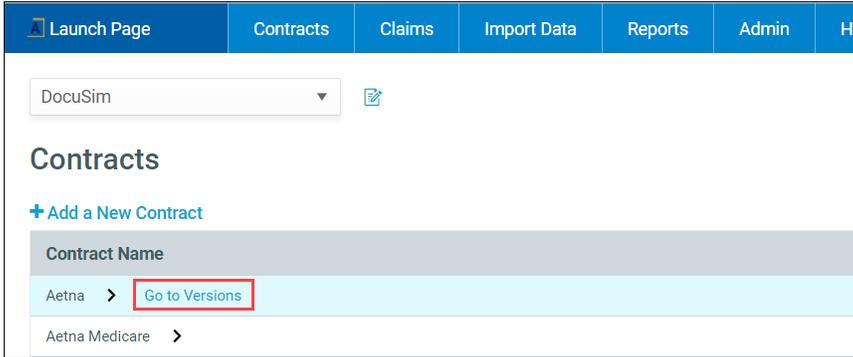
After copying or importing a version from another contract, you may want to make some changes to it. You can do the following:

- Change the start/expiration dates
- Change the calculation basis
- Add or remove insurance plan codes
- Add or remove attributes or change attribute values
- Add documents or remove attached documents

You can also delete a version if it is not in use and does not contain historical data that needs to be preserved.

To edit a version:

1. Navigate to the contract and then click **Go to Versions**.



2. At the end of the desired version row, click the Edit icon ().
3. In the **Edit Version** dialog, do any of the following as needed:
 - To change the **Start Date** or **Expiration Date**, in the **Settings** tab, type in the dates, or click the Calendar icon () and select the desired dates.

NOTE: You cannot change the dates to any time period that would cause an overlap with another version on the contract. Also, if any provisions are attached to this version, you cannot change the version time frame to be inside of the provision time frames.

- To change whether the calculation is based on the discharge or admit date, in the **Settings** tab, in the **Calculation Date** field, select the desired option.
 - **Add** or **remove** an assigned insurance plan code.
 - **Add, edit, or remove** attributes.
 - **Attach** or **remove** a document.
4. Click **Save**.

To delete a version:

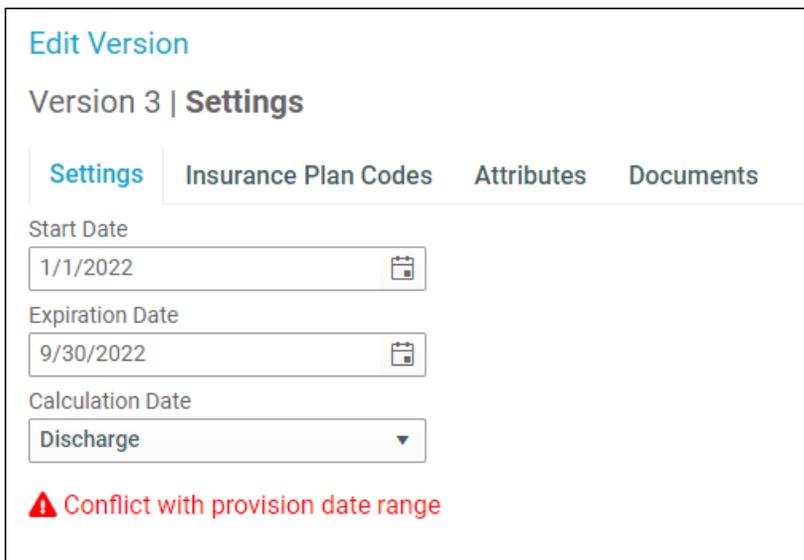
1. [Navigate to the version](#).
2. Verify that the version and its provision, clauses, terms, etc., are not in use and do not contain data that needs to be preserved as records.
3. At the end of the version row, click the Delete icon (.
4. In the conformation dialog, click **Delete**.

Copy a version

Use these instructions to copy a version to the same contract. To copy a version to a different contract, use the [Import Version](#) feature.

To copy a version:

1. [Navigate to the version to be copied.](#)
2. At the end of the version row, hover your cursor and click the Clone icon ()
3. In the **Clone Version** dialog, on the **Settings** tab, note that the Start Date and the Expiration Date have been set one year ahead of the Start and Expiration dates of the most recent previous version in the version list (not necessarily the one you copied). You can change these dates from the Edit Version dialog if needed; however, if the changed dates conflict with any provisions that were copied over with the version, a conflict message displays in the dialog, as shown in the following example:



Edit Version

Version 3 | **Settings**

Settings Insurance Plan Codes Attributes Documents

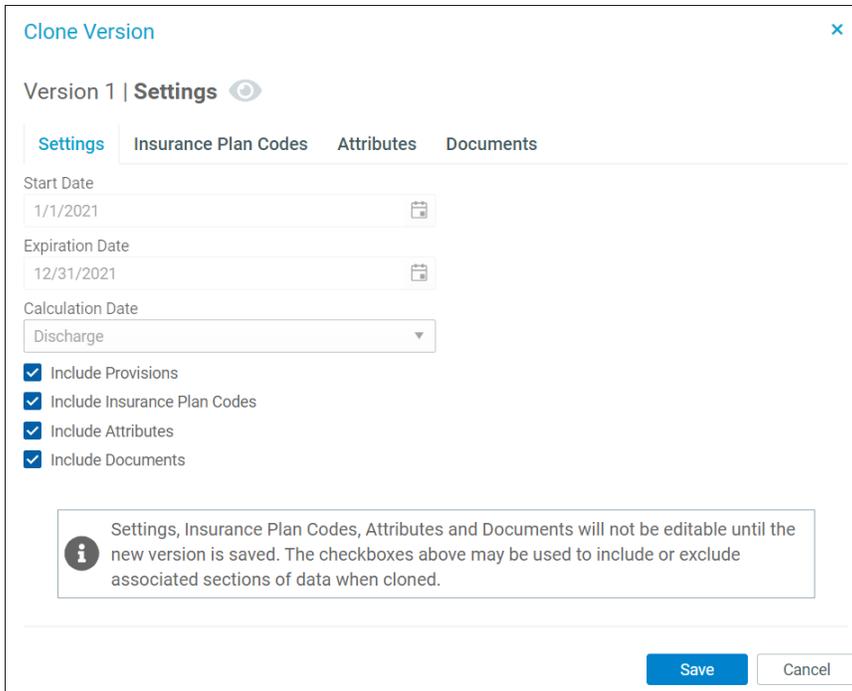
Start Date
1/1/2022

Expiration Date
9/30/2022

Calculation Date
Discharge

⚠ Conflict with provision date range

4. By default, any provisions, insurance plan codes, attributes, and attached documents are included in the copy. However, if you do not want to copy everything, clear the check boxes for the items that you do not want included in the copy.



NOTE: You cannot make changes to the other tabs in the Clone Version dialog. Save the version and then make changes in the Edit Version dialog.

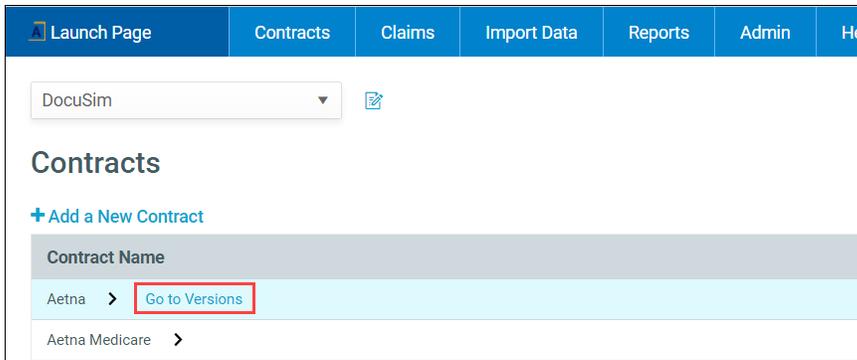
5. Click **Save**.
6. (Optional) [Edit the version](#).

Import a version from a contract

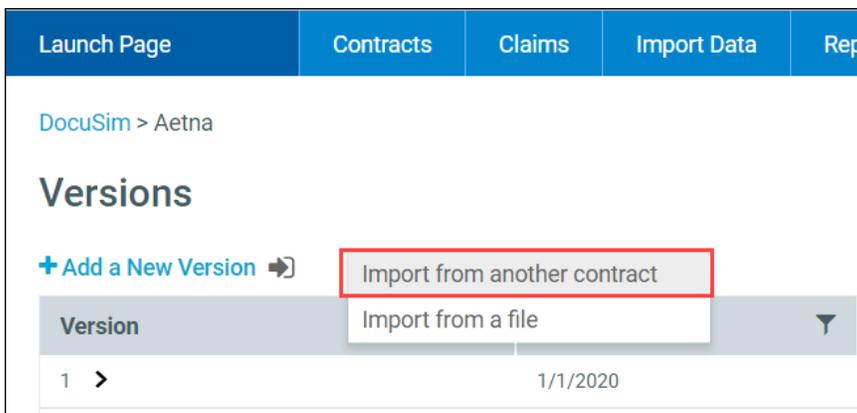
Use these instructions to import a copy of a version from another contract. You can also [import a version from a file](#).

To import a version from one contract to another:

1. [Navigate to the contract needing the version](#).
2. In the contract row, click **Go to Versions**.



3. On the **Versions** page, click the Import Version icon (➡) and select **Import from another contract**.



4. In the **Import a New Version** dialog, if you need to switch to a different simulation, then from the **Simulation** drop-down, select the simulation.
5. In the **Select a version to import** section, expand the listed contract that contains the desired version to copy, and then click the version row. The row does not stay selected, but the name of the selected row displays at the bottom left of the dialog.
6. By default, the check boxes to include any provisions, insurance plan codes, attributes, or documents attached to the version, are selected. Clear the check boxes for those items that you do not want to include.

Import A New Version ✕

New Version | Import from Contract

Select a version to import Simulation: Live

Contract Name			
+ ORG1 - MedCost			
- ORG1 - Medicaid			
Version	Start Date	Expiration Date	Calculation Date
1	10/01/2008	09/30/2009	Discharge
3	10/01/2010	09/30/2011	Discharge
4	10/01/2011	09/30/2012	Discharge
5	10/01/2012	09/30/2013	Discharge
6	10/01/2013	09/30/2014	Discharge
7	10/01/2014	09/30/2015	Discharge
8	10/01/2015	09/30/2016	Discharge
9	10/01/2016	09/30/2017	Discharge
+ ORG1 - Medicaid SNF			
+ ORG1 - Medicare			
+ ORG1 - Medicare Contract			

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include Provisions
 include Insurance Plan Codes
 include Attributes
 include Documents

Selected: ORG1 - Medicaid Version 8

Import
Cancel

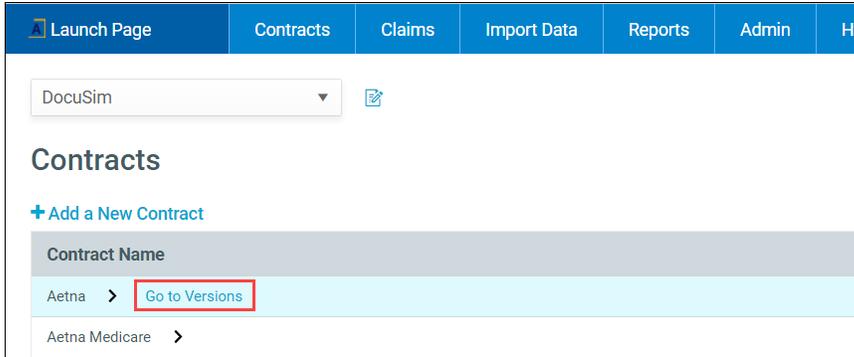
7. Click **Import**.
8. (Optional) If desired, [add an attribute to the version](#).
9. (Optional) If desired, [attach a document to the version](#).
10. If needed, [assign an insurance plan code to the version](#).

Import a version from a file

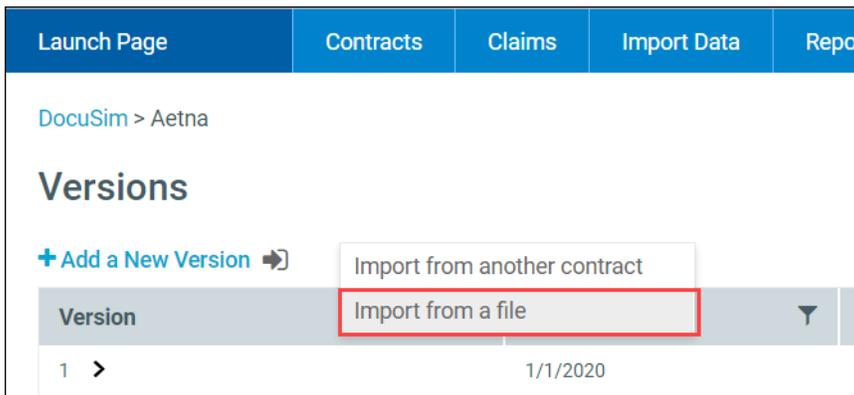
Use these instructions to import a copy of a version from a file. You can also [import a copy of a version from another contract](#).

To import a version from a file:

1. Navigate to the contract that needs the version.
2. In the contract row, click **Go to Versions**.



3. On the **Versions** page, click the **Import Version** icon (➡) and select **Import from a file**.



4. In the **Import a New Version** dialog, in the **Select a version file to import** list, do any of the following:
 - To view the version file before importing it, click the **Download** icon (⬇️) for the version, and then click the downloaded file to view it. (The file downloads in .xml format.)
 - To select a version file, click it.
 - If the version file you want is not listed, upload the file:
 - a. In the **Upload a file to the list** section, do one of the following:
 - Drag and drop a version .xml file to the gray area marked **Drop files here to upload**.
 - Click **Select files** and select a file to upload.
 - b. Click **Upload**.



- c. Locate the uploaded file in the list and select it.
5. Click **Import**.
6. If desired, [edit the version](#).

Export a version

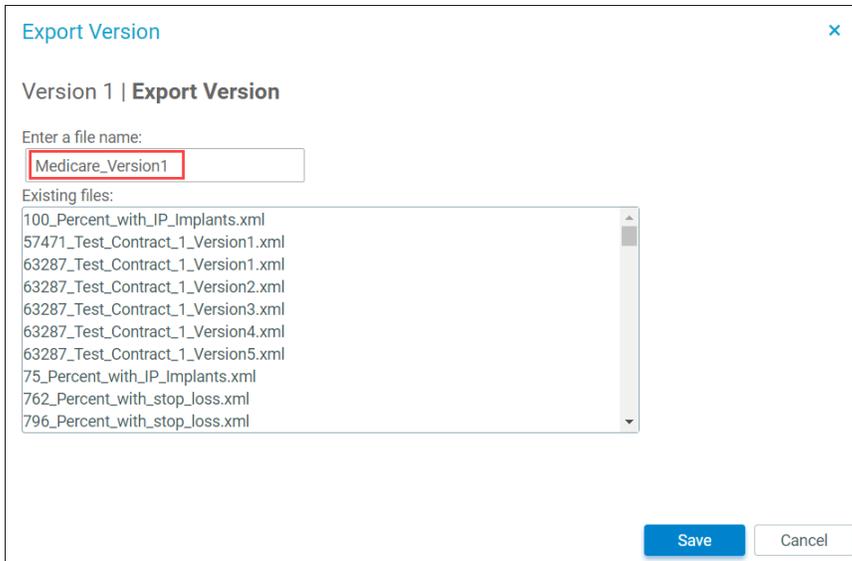
Export a version when you want to create an importable file of the version or if you want to create a backup.

IMPORTANT: Export/Import Provisions is not a preferred tool to copy contracts into Live. It should be done as a time-saving safety net in case a contract is irreversibly altered incorrectly.

We recommend that you maintain your own contract backups in case of an irreversible error. You can create backups using the Export Version feature.

To export a version:

1. On the **Contracts** page, navigate to the desired contract version.
2. At the end of the version row, click the Export icon (📄➔).
3. In the **Export Version** dialog, type a name for the exported version file or leave the default.



4. Click **Export**.

The exported version file will be available in the Import Version dialog when you select to [import a version from a file](#).

Attaching supporting documents to a contract

NOTE: This topic applies to supporting documents attached to versions. Other file types such as rate files, fee schedules, [translation tables](#), thresholds, and adjustments are added to contracts at the clause or term level. For information on managing these files, see [Using Rates](#).

When modeling contracts, you may need to attach documents to support the contract. You attach these kinds of files to contracts at the version level. You can attach files such as images, PDFs, Excel worksheets, or any other document supporting the contract. Users can download, open and view the documents as long as they have access rights to do so. Keep in mind that to view attached files, users must also have an application installed that can read the file type. Only system administrators can delete documents from contract versions.

Versions with attached files display a circle with check mark icon (☑) in their Attached Docs column.

Upload a document to a contract version

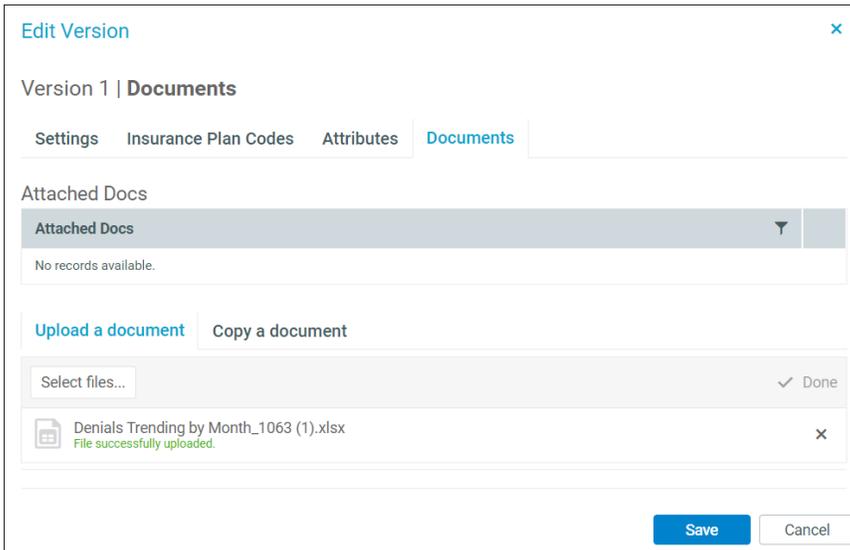
Use this method to attach an external file to a contract version. You can also [import a copy of a document attached to another contract](#).

To attach a file to a contract:

1. Navigate to the desired contract version.
2. At the end of the version row, click the Edit icon:



3. In the **Edit Version** dialog, click the **Documents** tab.
4. In the **Upload a document** tab, do one of the following:
 - Click **Select files**, and then navigate to and select the desired document.
 - Drag and drop a document file into the shaded area that reads “Drop files here to upload.”
5. When you see the document listed in the dialog, click **Attach**.



6. Click **Save**. When you open the Edit Version dialog again, the uploaded document is listed in the Attached Docs section of the Documents tab.

Copy an attached document to another version

Use these instructions to copy a file attached to one version of a contract to another version of the same or different contract.

You can download, open and view the documents as long as you have access rights to do so.

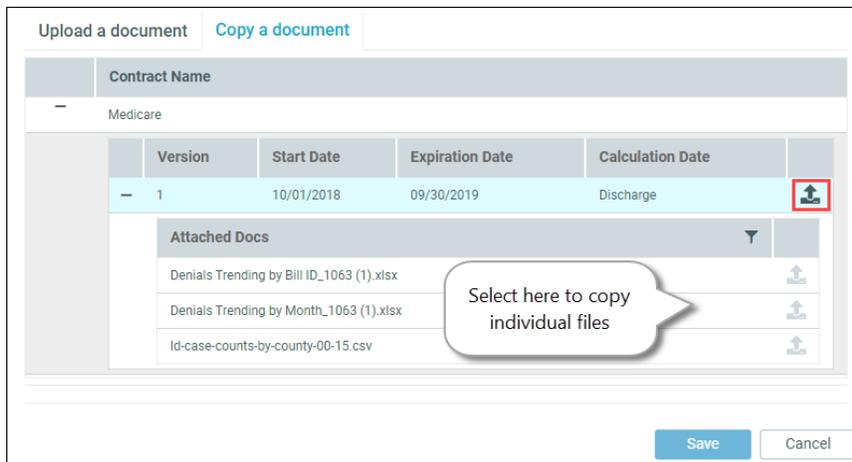
NOTE: To view attached files, you must have an application that can read the file type installed on your computer. Keep this in mind when attaching files.

To copy an attached file from one version to another:

1. Navigate to the contract version to add a file to.
2. At the end of the version row, click the Edit icon:



3. In the **Edit Version** dialog, click the **Documents** tab.
4. In the lower half of the tab, click the **Copy a document** tab.
5. In the list of contracts, expand the desired contract name and version that contains the file to copy.
6. Do one of the following:
 - To copy all documents attached to the source version, click the up arrow icon () at the end of the version row.
 - To copy selected documents attached to the version, click the up arrow icon(s) for the desired document(s).



7. Click **Save**. When you open the Edit Version dialog again, the copied documents are listed in the Attached Docs section.

View a file attached to a version

When calculations are off, or there is a discrepancy in the contract data, it may be helpful to view the actual contract to compare it against the modeled one. If the actual contract is attached to the modeled contract as a file or files, you can view it as long as you have permissions to view attached files.

NOTE: If you do not have the application required for viewing the document installed on your computer, you will not be able to open and view the file.

To view an attached contract file:

1. Navigate to the contract version with the attached document.
2. At the end of the version row, click the Edit icon ()
3. In the **Edit Version** dialog, click the **Documents** tab.
4. In the **Attached documents** section, locate the document to view and then click the download icon () at the end of the row. A copy of the document downloads to the bottom of your screen.
5. Click the document file to open and view the document.

Delete a file attached to a version

System administrators can delete files attached to contract versions.

To delete a file attached to a version:

1. Navigate to the contract version.
2. At the end of the version row, click the Edit icon ()
3. In the **Edit Version** dialog, click the **Documents** tab.
4. In the **Attached Docs** section, for the desired document, click the Delete icon () at the end of the row.

Modeling provisions

A provision defines the type of bill for which services are provided: Inpatient, Outpatient, Skilled Nursing, etc. As a component of the version, multiple provisions may exist within a version to differentiate contract rates for a given timeframe.

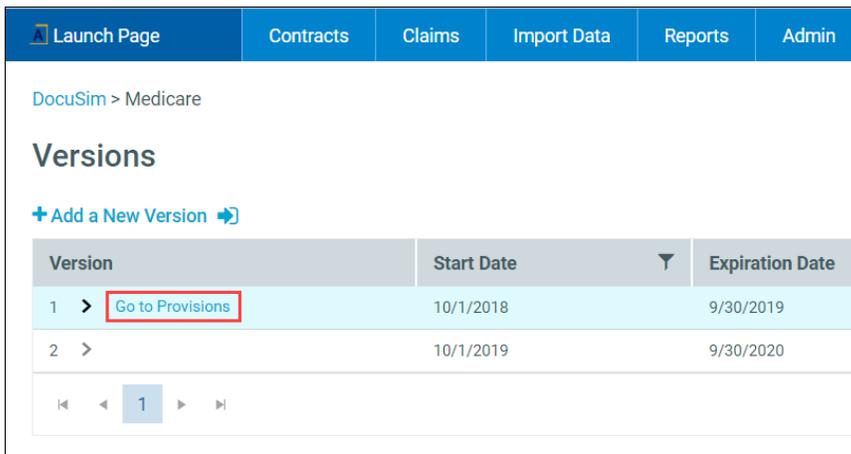
Add a provision

You can add a provision to a contract by creating a new one, by [copying and editing an existing one](#), or by [importing one](#). Use the following instructions to create a new provision.

TIP: Use this option when there is no similar provision to copy or import.

To create a new provision:

1. [Navigate to the desired contract version](#).
2. In the desired version row, click **Go to Provisions**.



Version	Start Date	Expiration Date
1 > Go to Provisions	10/1/2018	9/30/2019
2 >	10/1/2019	9/30/2020

3. On the **Provisions** page above the table of provisions, click **Add a New Provision**.
4. In the **Add a New Provision** dialog, the Start Date and Expiration Date of the provision are automatically set to match that of the version the provision is under. If you need to change the dates, type in new dates or click the calendar icon (📅) and select the dates.
5. Click the **Type of Bill** tab.

Use this tab to select the Type of Bills that should calculate under the provision. For example, if both the inpatient and outpatient contracts pay 75% of charge, you can create one contract provision to handle both bill types. The provision's purpose is to select the bill types that calculate similarly under a specific date range.
6. In the **Available** section of the tab, click the plus icon to the left of the desired Type of Bill to expand its codes, then select the bill codes to apply by clicking the Assign icon (📌) at the end of the row for each desired bill code.



NOTE: You cannot add attributes to the provision until you save it.

7. Click **Save**.
8. (Optional) If desired, [add an attribute](#) to the provision.
9. (Optional) If needed, [add a schedule](#) to the provision.
10. (Optional) If needed, [add a modifier](#) to the provision.
11. (Optional) If needed, [add a global limit](#) to the provision.
12. If needed, [enter provision factors manually](#) or [import factors from a file or other provision](#).
13. Next, [add a clause to the provision](#).

About bill types

The bill type, or Type of Bill (TOB), is a three-digit numeric code on a claim that identifies the specific type of bill being sent to the payer. The first digit represents Type of Facility (Hospital, Skilled Nursing, etc.), the second digit represents the Bill Classification (Inpatient, Outpatient, etc.), and the third digit represents the Frequency (Admit/Discharge, Late Charges, Series, etc.).

The TOB submitted on the claim is important not only for determining the provision on which the claim will calculate, but also for how the claim is handled during import. For every patient account, the importing logic first checks whether the account already exists in the system. If it does, the system applies a series of logical statements and the instance of the claim is brought in as Active, an Exception, or a Voided Record. All claims are brought in as the Active claim if no other instance of the claim exists, and as long as the claim is not a Late Charge (e.g., TOB XX5) or a Voided Record (i.e., TOB XX8).

A Late Charge is always brought into the system as an Exception Record. If an active record exists for that patient account, the late charge is attached to the active claim and the line items from the late charge are appended to the active record. If no active record exists, the late charge claim sits idle as an Exception until an active record is brought in for that particular account number. At that time, it appends to the newly imported active claim.

Series TOBs (e.g., XX2, XX3 and XX4) are handled differently. If a Series Start bill (e.g., XX2) already exists in the system and another is imported, the imported one becomes the new Active claim and the previous instance is considered Replaced. The same applies to a Series End TOB (e.g., XX4). Multiple Series Interim bills can exist on a claim; however, if an XX3 comes in and has the same admit and discharge dates as a previous XX3 as well as the same total charges, it will replace the matching instance.

The standard Admit/Discharge claim (e.g., XX1) always comes in as active, and replaces the existing active record as long as the charges are equal to or greater than the current record. The claim comes in as an Exception if total charges are less than the existing claim. A Replacement claim (e.g., XX7) always replaces the existing active record no matter what the total charges are for the claim, and regardless of whether or not there are late charges appended to the current record.

Replacement and Late Charge claims are not allowed with Series claims. Both come in as Exception records if a series TOB exists on the account. The reverse is true as well: Series claims are not allowed on non-series accounts.

About provision factors

Provision factors are used in various CMS calculations. Certain factors, along with other contract rules related to modifiers, are required for APC and eAPG contracts.

Some of the factors are considered National Factors (e.g., Labor Related Standard Amount, Federal Capital Rate, etc.), which means that they are the same across the nation. Some factors are Hospital Specific and can only be answered by the hospital's Medicare Specialist to whom notices are sent when the factors are changed, or when a new fiscal year begins and all factors have changed. Any field labeled "Release" cannot receive a manual entry; instead, it will be updated when rates are attached to the clause or term.

To use any CMS-related calculation basis (e.g., CMS DRG, CMS Psych, CMS CMG, or Schedules related to CMS), you must complete the factor forms. You can add the following types of provision factors:

- **CMS DRG** – Add hospital and federal values specific to the date of the provision. Used in the calculation of inpatient services that are paid using a code called a DRG.
- **CMS CMG** – Add hospital and federal values specific to the date of the provision. Used in the calculation of inpatient Rehab services.
- **CMS Psych** – Add hospital and federal values specific to the date of the provision. Used in the calculation of inpatient Psych services.

- **Schedules** – Select 3M schedules for outpatient services that are paid with APC or eAPG. These schedules contain the hospital-specific and federal values appropriate for the date range of the provision.
- **Modifiers** – Enter modifier values used in line-level calculations within the provision. Lines with modifier codes are calculated using these values. Four functions are allowed with modifiers: addition, subtraction, multiplication, and division.

For instructions on adding CMS factors to provisions, see the following:

- [Manually enter CMS DRG provision factors](#)
- [Manually enter CMS CMG provision factors](#)
- [Manually enter CMS Psych provision factors](#)
- [Import and export provision factors](#)

Manually enter CMS DRG provision factors

Use these instructions to add CMS DRG provision factors used when calculating Medicare Inpatient services.

To add CMS DRG factors to a provision:

1. [Navigate to the desired provision.](#)
2. On the **Provisions** page, in the **CMS DRG** column for the desired provision, click the Edit icon ().
3. In the **Edit Factors** dialog, in the **Settings** tab, enter amounts in the fields provided, as needed.

NOTE: Fields with names in blue indicate they are required for calculated payment. Fields with names preceded by a red percent sign (%) require you to enter the percentage amounts as decimals.

4. If needed, assign transfer codes:
 - a. Click the **Transfer Codes** tab.
 - b. In the **Available Codes** section, locate the desired code in the list.
 - c. On the right end of the list, click the Assign icon () to move the selected code to the **Assigned Transfer Codes** section.
5. Click **Save**.
6. If needed, [add outlier exclusions](#).

Manually enter CMS CMG provision factors

Use these instructions to add CMS CMG provision factors used when calculating inpatient rehab services.

You can also [import provision factors](#).

To add CMS CMG factors to a provision:

1. [Navigate to the desired provision.](#)
2. On the **Provisions** page, in the **CMS CMG** column for the desired provision, click the Edit icon ().
3. In the **Edit Factors** dialog, in the **Settings** tab, enter amounts in the fields provided, as needed.

NOTE: Fields with names in blue indicate they are required for calculated payment. Fields with names preceded by a red percent sign (%) require you to enter the percentage amounts as decimals.

4. If needed, assign transfer codes:
 - a. Click the **Transfer Codes** tab.
 - b. In the **Available Codes** section, locate the desired code in the list.
 - c. On the right end of the list, click the Assign icon () to move the selected code to the **Assigned Transfer Codes** section.
5. Click **Save**.

Manually enter CMS Psych provision factors

Use these instructions to add CMS Psych provision factors used when calculating Inpatient psych services.

NOTE: Before adding a CMS Psych provision factor, the provision must have a completed CMS DRG with a DRG Release named in the DRG Release field. The DRG Release comes from the DRG Weight file uploaded at the clause/term level.

To add CMS Psych factors to a provision:

1. [Navigate to the desired provision.](#)
2. On the **Provisions** page, in the **CMS Psych** column for the desired provision, click the Edit icon ().
3. In the **Edit Factors** dialog, do one of the following:
 - [Import CMS psych factors from another provision or a file.](#)
 - In the **Settings** tab, enter amounts in the fields provided, as needed.
4. To add ECT codes, do the following:
 - a. Click the **ECT Codes** tab.
 - b. In the **Available Codes** section, to add a code, click the code's up Assign icon (). The code displays in the Assigned ECT Codes section.

5. Click **Save**.

Select outlier exclusions

▶ About modeling changes to the inpatient CMS DRG calculation

To accurately model changes made to the Inpatient CMS DRG calculation, you may need to determine the high-dollar outlier exclusion amount. To exclude high-dollar charges like transplant acquisition charges or coagulation factors from the CMS DRG outlier determination, you can specify the Line Item Codes or Rev Codes associated with these charges to exclude them from the outlier determination within the CMS DRG calculation. Use the Exclusions tab when defining a provision for Medicare and Medicare-like contracts.

After selecting the exclusions, you add a clause or term with the CMS DRG calc basis, and then attach DRGs and other required DRG-related elements. When incoming claims are processed against the CMS DRG calculation, if a claim has any CMS DRG items that match the clause or term on the provision, the system inspects the lines on the claim for the selected exclusion codes. The system totals any claim items that match the exclusion codes and then subtracts this amount from the total charges when determining the outlier portion of the CMS DRG calculation.

To specify outlier exclusions:

1. [Navigate to the desired provision](#).
2. On the **Provisions** page, in the **CMS DRG** column for the desired provision, click the Edit icon ().
3. In the **Edit Factors** dialog, click the **Outlier Exclusions** tab.
4. At the top of the tab, select the exclude option:
 - **Rev Code** – Select exclusion items by revenue code.
 - **Line Item Code** – Select exclusion items by line item code.

Edit Factors ✕

CMS DRG Factors | Outlier Exclusions

Settings Import **Outlier Exclusions** Transfer Codes

Exclude by: Rev Code Line Item Code

Assigned Exclusions

Rev Code	Description
No records available.	

Available Codes

Rev Code	Description	
0021	Reserved	
0022	Health Ins - Snt PPS (RUG)	
0023	Health Ins - Hh PPS (HHRG)	
0024	Health Ins - IRF PPS	
0025	Reserved	
0026	Reserved	

1 - 50 of 1672 items

Save Cancel

- In the lower half of the tab, locate the item(s) to exclude, and then click the Assign icon () to the right of each item to move that item to the top half of the tab.
- Click **Save**.

Import and export provision factors

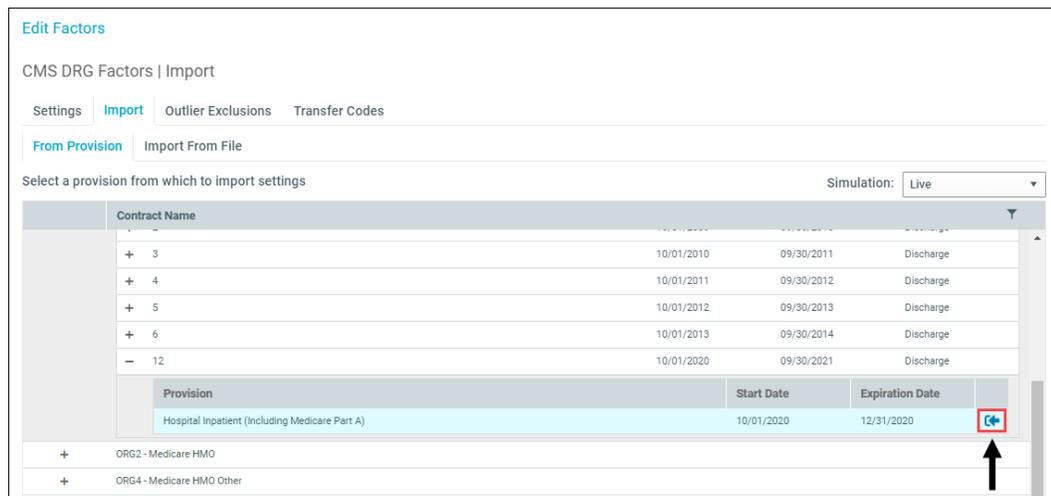
When copying or creating contract provisions, you can import CMS DRG, CMS CMG, or CMS Psych factors from a file or from another provision instead of populating the factors fields manually. Additionally, you can export factors to an Excel file.

▶ Import provision factors from another provision

To import provision factors from another provision:

- [Navigate to the provision needing factors.](#)
- In the factor type column (e.g., DRG, CMG, Psych), click the Edit icon ()
- In the **Edit Factors** dialog, click the **Import** tab.
- In the **Import** tab, do the following:
 - If needed, from the **Simulation** drop-down, select the desired simulation.
 - Expand the contract and version with the desired provision and factors.

- c. In the **Provision** list, for the desired provision, click the import factors icon ()



The Factors dialog opens, displaying the imported factors.

5. In the **Factors** dialog, click **Save**.

▶ Import provision factors from a file

NOTE: Excel files used to import factors need to adhere to a specific format. To ensure your file is formatted correctly, download the template and enter or copy the desired factor information to it, then save and import it using the following instructions.

To import provision factors from a file:

1. [Navigate to the provision needing factors.](#)
2. In the factor type column (e.g., DRG, CMG, Psych), click the Edit icon ()
3. In the **Edit Factors** dialog, click the **Import** tab.
4. In the **Import** tab, do the following:
 - a. Click the **Import From File** tab.

NOTE: The imported factors file must adhere to the factors template.

- b. If needed, on the right side of the dialog just above the Import button, click the download icon () to download the template. Complete the information in the template, then name and save it. Or, you can import factors that you exported from another provision to an Excel file provided the file matches the factors template layout.
- c. On the left of the dialog, do one of the following:

- Click **Select files...** and then select a file or files to import.
- Drag and drop the desired files to the gray area marked **Drop files here to upload**.

d. Click **Save**.

The factors display in the corresponding CMS tabs for the type(s) of factor(s) imported.

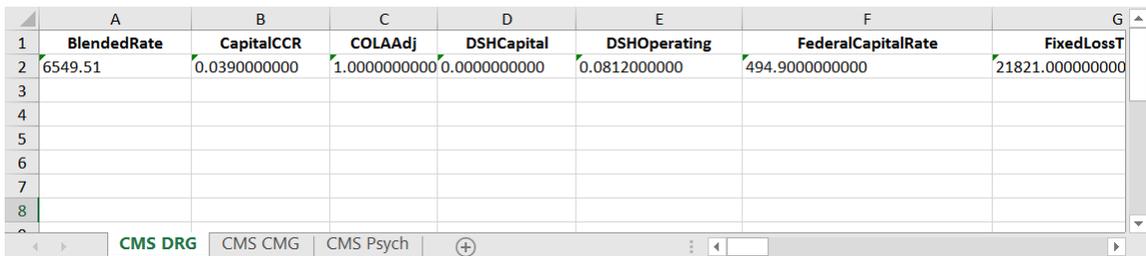
5. In the **Factors** dialog, click **Save**.

► Export provision factors to an Excel file

To export provision factors:

1. Navigate to the provision with the factors to export.
2. In the factor type column (e.g., DRG, CMG, Psych), click the Edit icon ().
3. In the **Factors** dialog, at the bottom, click **Export**.

The data is exported to an Excel file at the bottom of your screen. Data is exported from all three CMS tabs. If no data exists for a particular column, then in the Excel file, that tab displays with headings only but no data. The file is automatically formatted correctly for importing to another provision.



	A	B	C	D	E	F	G
1	BlendedRate	CapitalCCR	COLAAAdj	DSHCapital	DSHOperating	FederalCapitalRate	FixedLossT
2	6549.51	0.0390000000	1.0000000000	0.0000000000	0.0812000000	494.9000000000	21821.0000000000
3							
4							
5							
6							
7							
8							

4. If desired, click the file to open and view it.

Edit or delete provision factors

You can edit provision factors manually in the Factors dialog, or you can [export the factors to a file](#), edit the file, and then [re-import the file](#).

To manually edit provision factors:

1. [Navigate to the desired provision](#).
2. In the factor type column (e.g., DRG, CMG, Psych), click the Edit icon ().
3. In the **Edit Factors** dialog, make changes as needed to the desired fields.
4. Click **Save**.

To delete provision factors:

IMPORTANT: This option deletes all saved settings and any outlier exclusions and transfer codes in addition to the factors.

1. [Navigate to the desired provision.](#)
2. In the factor type column (e.g., DRG, CMG, Psych), click the Edit icon ().
3. In the **Edit Factors** dialog, at the bottom, click Delete.
4. In the confirmation dialog, click **Delete**.

Add a modifier to a provision

Modifiers are used for line-level calculations within a provision. Lines with modifier codes are calculated using modifier values. Four functions are allowed with modifiers: addition, subtraction, multiplication, and division.

Use these instructions to add a modifier to a provision.

To add a modifier to a provision:

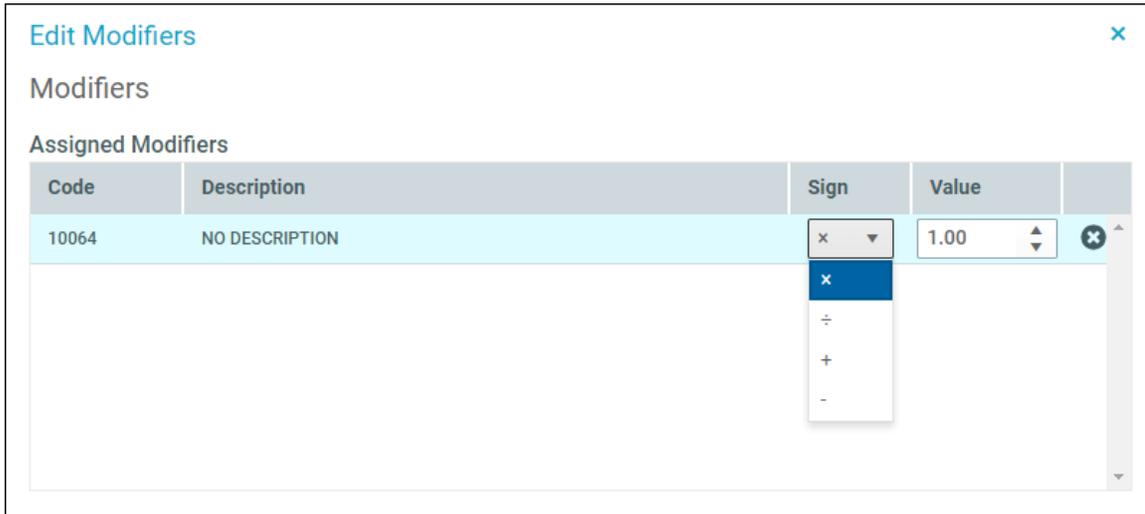
1. [Navigate to the desired provision.](#)
2. In the **Modifiers** column for the provision, click the Edit icon ().
3. In the **Edit Modifiers** dialog, in the **Available Codes** section, locate the desired code and then click the Assign icon () to move it to the **Assigned Modifiers** section.

Available Codes	
Code	Description
10043.47826	NO DESCRIPTION
10064	NO DESCRIPTION
10082.3871	NO DESCRIPTION
10102.75676	NO DESCRIPTION
10125.39623	NO DESCRIPTION
10126.6	NO DESCRIPTION

1 - 25 of 1775 items

Save Cancel

4. In the **Assigned Modifiers** section, in the **Sign** column, select the desired operator from the drop-down.



5. In the **Value** column, use the up and down arrows in the field to set the value.
6. Click **Save**.

Assign a schedule to a provision

Use these instructions to assign a schedule to a contract provision. A schedule is a reference from the 3M Grouper that is used for calculating outpatient APCs and eAPGs for a variety of contracts. Schedules are required when you model contracts having APC or eAPG reimbursement for outpatient services.

To assign a schedule to a provision:

1. [Navigate to the desired provision](#).
2. In the **Schedule** column for the provision, click the Edit icon (✎).
3. In the **Edit Schedule** dialog, from the **Select a Reimbursement Type** drop-down, select the kind of reimbursement the provision uses. This selection determines the schedules available in the next drop-down.
4. From the **Select a Schedule** drop-down, select the desired schedule.
5. Click **Save**.

Copy a provision

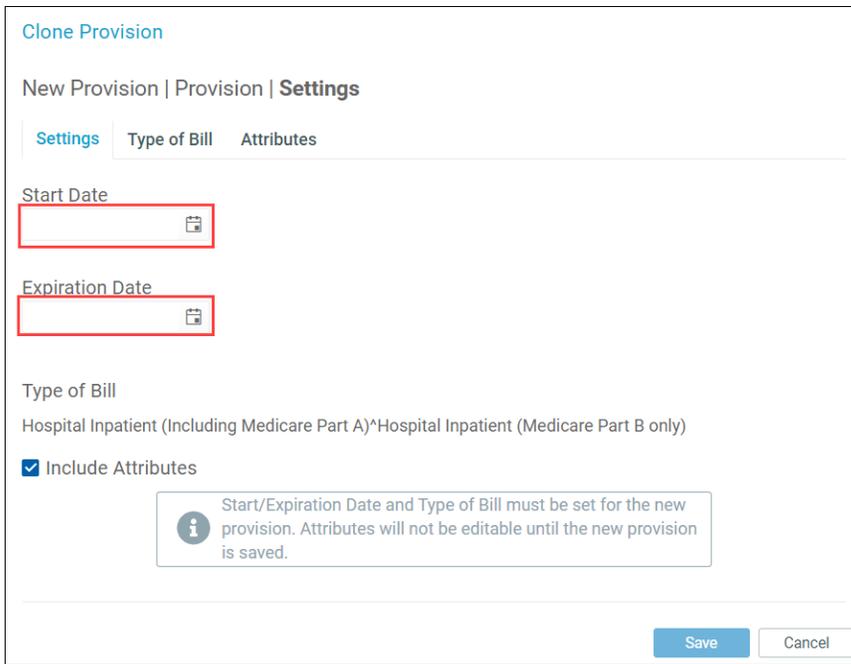
If an existing contract is similar to the one you are working on and needs only slight modifications, you can copy that provision instead of re-building it from scratch, then edit the copy. Use the following instructions to copy a provision within a version. To copy a provision from a different version, use the

Import Provision feature.

To copy a provision within the same version:

1. [Navigate to the provision to be copied.](#)
2. At the end of the provision row, click the Clone icon (.
3. In the **Clone Provision** dialog, in the **Settings** tab, type in dates or click the calendar icons () and select a **Start Date** and **Expiration Date** for the provision.

NOTE: The system will not allow you to select dates that are outside of the associated version's active period. You also cannot create a provision with dates that overlap another provision that has the same bill type.



Clone Provision

New Provision | Provision | **Settings**

Settings | Type of Bill | Attributes

Start Date 

Expiration Date 

Type of Bill
Hospital Inpatient (Including Medicare Part A)*Hospital Inpatient (Medicare Part B only)

Include Attributes

 Start/Expiration Date and Type of Bill must be set for the new provision. Attributes will not be editable until the new provision is saved.

Save Cancel

4. By default, any attributes are included in the copy. However, if you do not want to copy them, clear the **Include Attributes** check box before saving. You can add other attributes after you save the new provision.

NOTE: You cannot add or remove bill types from the Clone Provision dialog. You must save the copy and then make changes through the Edit Provision dialog.

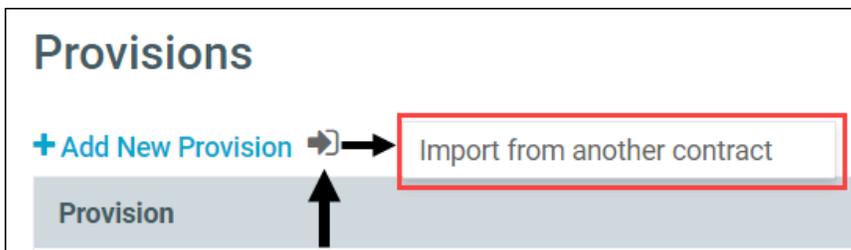
5. Click **Save**.
6. (Optional) [Edit the provision](#) as desired.

Import a provision

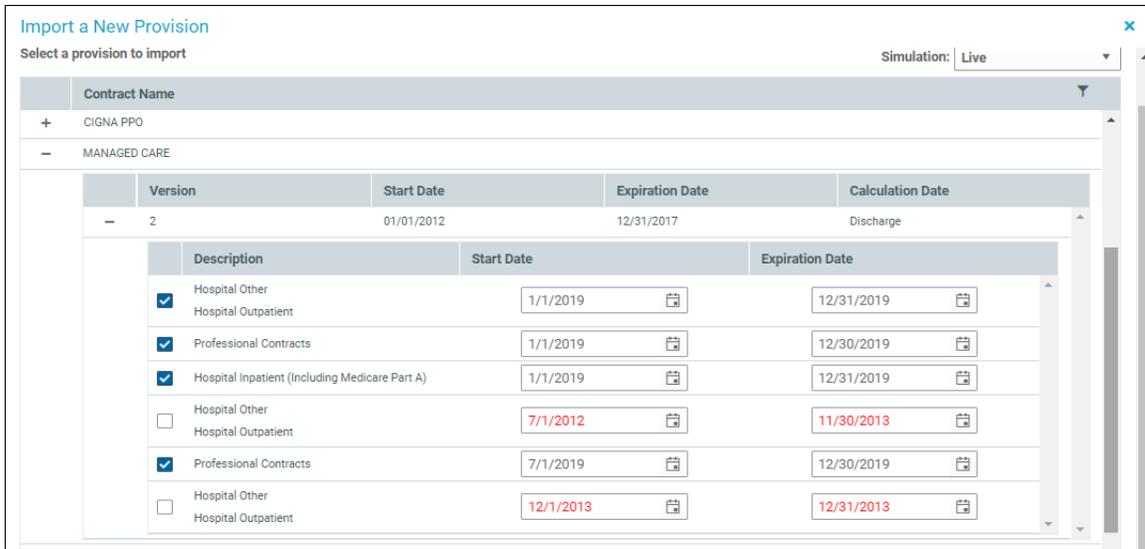
Use these instructions to copy a provision from one contract to another. The Import Provisions feature allows you to bring in provisions from a contract in any simulation.

To import a provision:

1. [Navigate to the desired contract version](#).
2. In the version row after the version number, click **Go to Provisions**.
3. On the **Provisions** page, note the date range of the version displayed at the top of the page. The provision you select to copy must fall within that date range. If it does not, you can change the date range on the copy before importing it.
4. On the **Provisions** page above the table of provisions, place your cursor over the arrow, and then click **Import from another contract**.



5. In the **Import a New Provision** dialog, from the **Simulation** drop-down, select the simulation containing the provision you want to copy.
6. In the **Select a provision to import** list of contracts, expand the desired contract and version to locate the provision to import.
7. If any of the **Start** or **Expiration** dates are red for the provision you want to import, click in the **Start Date** and **Expiration Date** fields and select dates that match the **Start** and **Expiration** dates of the version to which you are importing the provision. When updated successfully, the dates turn black and the provision check boxes are enabled.



8. Select the check box for the desired provision (you can import more than one).
9. (Optional) If applicable, select to import associated attributes or other attachments by selecting the corresponding check box below the list of contracts.
10. Click **Import**.

Edit or delete a provision

After copying a provision, you may want to make some changes to it. You can do the following from the Edit Provision dialog:

- Change the start/expiration dates
- Change the Type of Bill
- Add or remove attributes or change attribute values

You can also delete a provision after verifying that the provision and its clauses/terms, etc., are not in use and do not contain data that need to be preserved as records.

To edit a provision:

1. [Navigate to the desired provision.](#)
2. At the end of the provision row, hover your cursor to view the icons and then click the Edit icon ().
3. In the **Edit Provision** dialog, do any of the following as needed:
 - To change the **Start Date** or **Expiration Date**, in the **Settings** tab, click the Calendar icon () and select the desired date.

NOTE: The system will not allow you to select dates that are outside of the associated version's active period or that overlap with another provision that has the same bill type(s).

- To change the bill codes or type of bill, click the **Type of Bill** tab and do any of the following:
 - To remove a bill code, in the **Assigned** section, click the Remove icon (✕) for the type of bill.
 - To add a bill code, in the lower half of the tab, in the **Available** section, click the plus icon to the left of the desired Type of Bill to expand its codes, and then select the bill code by clicking its Assign icon (➦).
- [Add, edit or remove](#) attributes.

4. Click **Save**.

To delete a provision:

1. [Navigate to the provision to be deleted](#).
2. Verify that the provision and its clauses, terms, etc., are not in use and do not contain data that need to be preserved as records.
3. At the end of the provision row, click the Delete icon (🗑️).
4. In the conformation dialog, review the information and then click **Delete**.

Modeling clauses and terms

Clauses and terms are provision building blocks; they are the vehicle that defines contract terms, rates, and limits. A clause and term are interchangeable in how they calculate; however, a term always resides beneath a clause. The clause is considered the parent of the term. A clause can have no terms or it can have multiple terms. A term always has the one clause under which it resides. The order and the selections made on a clause/term determine how the claims filter through the calculation criteria.

▶ Clause and term order significance

Axiom Contract Management calculates claims in a top-down manner for both clauses and terms. This means that a claim initially tries to match to the first clause listed in the provision. If there is no match, it continues on to the next clause, regardless of whether or not a term exists on clause 1. If, on clause 2, the claim matches the defined criteria, it stops and makes the calculation. Then it continues on to the first term of the clause (if it exists), and then the second term (again, if it exists) before moving on to clause 3, and so on. The only way to stop a claim from moving to the next clause (or term) is to set it as *terminal*. For information on changing the order of a clause or term, see [Edit or delete a clause or term](#).

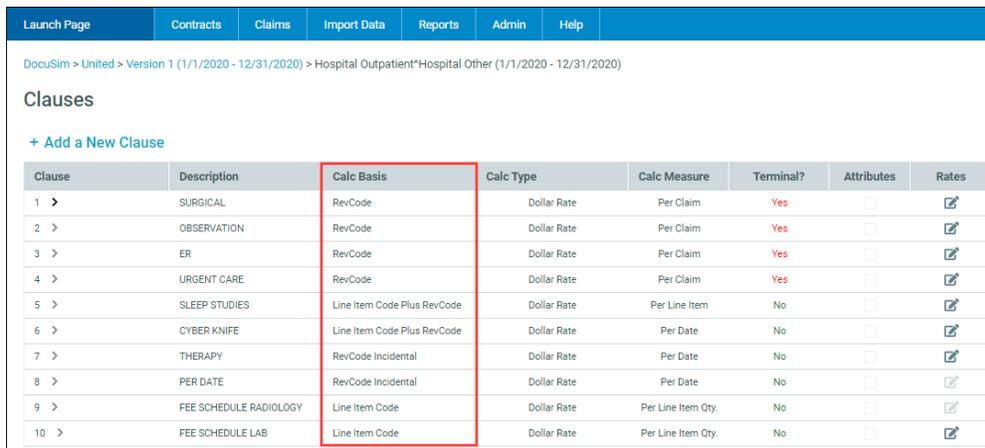
▶ Clause or term Calc Basis

The following example shows some of the possible selections for the clause/term calculation basis. **You cannot edit these.** The calculation basis is used in conjunction with the calculation type and measure to determine a specific reimbursement method.

The Calc Basis paired with the rates loaded for the clause or term determine whether a claim will qualify. For example, if you select Admit Diagnosis Code, Axiom Contract Management only finds claims for which the defined clause/term codes match the admitting diagnosis code on a claim.

The CMS-based options include specially built calculation rules that are used with the defined factors for the provision.

Certain calc basis options are considered claim level and some are considered line item level. Selecting one or the other determines the options available for Calc Type and Calc Measure. For example, DRG is considered claim level, whereas RevCode is considered a line item level calculation basis.



Clause	Description	Calc Basis	Calc Type	Calc Measure	Terminal?	Attributes	Rates
1 >	SURGICAL	RevCode	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	
2 >	OBSERVATION	RevCode	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	
3 >	ER	RevCode	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	
4 >	URGENT CARE	RevCode	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	
5 >	SLEEP STUDIES	Line Item Code Plus RevCode	Dollar Rate	Per Line Item	No	<input type="checkbox"/>	
6 >	CYBER KNIFE	Line Item Code Plus RevCode	Dollar Rate	Per Date	No	<input type="checkbox"/>	
7 >	THERAPY	RevCode Incidental	Dollar Rate	Per Date	No	<input type="checkbox"/>	
8 >	PER DATE	RevCode Incidental	Dollar Rate	Per Date	No	<input type="checkbox"/>	
9 >	FEE SCHEDULE RADIOLOGY	Line Item Code	Dollar Rate	Per Line Item Qty.	No	<input type="checkbox"/>	
10 >	FEE SCHEDULE LAB	Line Item Code	Dollar Rate	Per Line Item Qty.	No	<input type="checkbox"/>	

Example of Calc Basis column in list of clauses

▶ Calc Type

There are three possible selections for the Calc Type field. Either the clause/term will be paid at a Dollar Rate, a % of Charge, or a % of Cost, with the first two selections being the most commonly used. The calc types available for selection are determined by the Calc Basis selected.

▶ Calc Measure

The five possible selections for the Calc Measure field are: Per Claim, Per Diem, Per Date, Per Line Item, and Per Line Item Qty. These options are limited based on the calc basis selected for the clause/term. For example, if DRG is selected as the calc basis, the option for Per Date, Per Line Item, and Per Line Item Qty are not applicable because those are used with line item level parameters only.

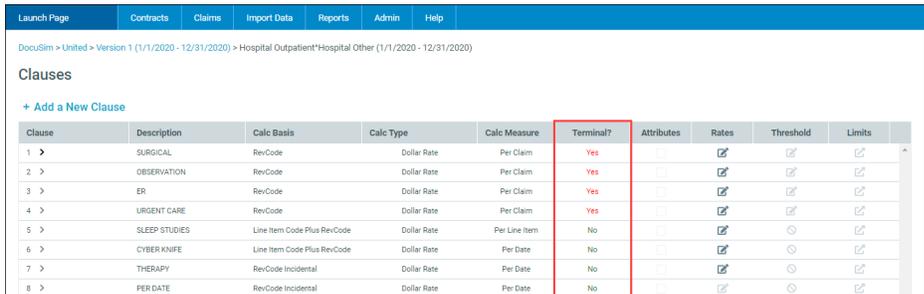
▶ Terminal vs. Non-terminal

Setting a clause or term as terminal or non-terminal (the default) determines if a claim will continue calculating on the clause or term below it.

Setting a *clause* to Terminal (i.e., Yes) stops the claim from progressing to the next clause; it does not stop it from moving through all of the terms (if any) below that clause.

Setting a *term* to Terminal stops it from progressing to the next term under the same clause; it does not stop it from moving through any clauses (if any) below it. For the terminal logic to apply to a claim, it must qualify on the defined calculation criterion for the clause or term.

For example, if a claim has an implant revenue code, a certain dollar amount will apply to that rev code line item for all claims, and even if a claim qualifies for this payment, it will continue down to the next clause. If the claim qualifies for Orthopedics, it stops there, and Orthopedics will be the only other possible payment method on the claim, as that is a terminal clause. If it is not an Orthopedic claim (based on the defined DRG), it will continue on. If a claim qualifies on Clause 8 Med/Surg, it could also qualify and reimburse on Clause 9 ICU, as that is a non-terminal clause.



Clause	Description	Calc Basis	Calc Type	Calc Measure	Terminal?	Attributes	Rates	Threshold	Limits
1 >	SURGICAL	RevCode	Dollar Rate	Per Claim	Yes				
2 >	OBSERVATION	RevCode	Dollar Rate	Per Claim	Yes				
3 >	ER	RevCode	Dollar Rate	Per Claim	Yes				
4 >	URGENT CARE	RevCode	Dollar Rate	Per Claim	Yes				
5 >	SLEEP STUDIES	Line Item Code Plus RevCode	Dollar Rate	Per Line Item	No				
6 >	CYBER KNIFE	Line Item Code Plus RevCode	Dollar Rate	Per Date	No				
7 >	THERAPY	RevCode Incidental	Dollar Rate	Per Date	No				
8 >	PER DATE	RevCode Incidental	Dollar Rate	Per Date	No				

Example Clauses/Terms page with Terminal column outlined in red

Managing clause and term descriptions

The description is the first criterion that you need to define for a clause or term. A few standardized descriptions are already included with the initial Axiom Contract Management installation, but you can add, edit, and delete descriptions at any time.

Clause and term descriptions are available in all simulations.

▶ Add a new clause or term description

To add a new description:

1. In the main menu header, click **Admin > Manage Clause/Term Descriptions**.
The Clause/Term Descriptions page opens.
2. In the upper right corner of the page, click **Create New Record**.
3. On the **Create New Clause/Term Descriptions** page, in the **Description** field, type the description.

The field has a 50-character limit.

4. Do one of the following:
 - To save and return to the main Clause/Term Descriptions page, click **Save**, and then, in the upper right corner of the page, click **Back to Descriptions**.
 - To save and close the page, click **Save and Close**.

The new description is now available from the Description drop-down when you or others are adding or editing clauses and terms.

▶ Edit or delete a clause or term description

IMPORTANT: If you change a description, the change will be reflected in all accounts and data where the description is used.

To edit a description:

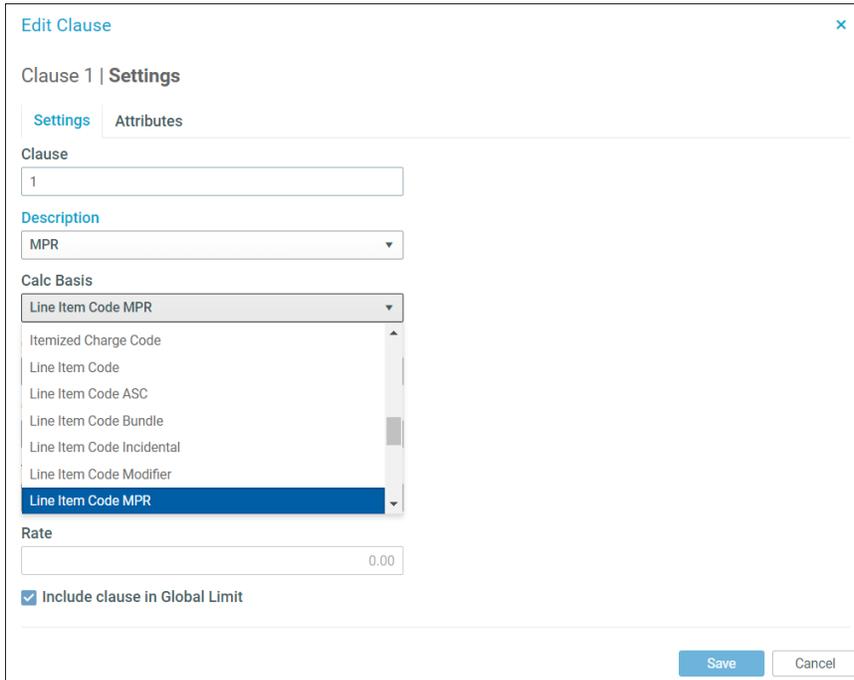
1. In the main menu header, click **Admin > Manage Clause/Term Descriptions**.
The Clause/Term Descriptions page opens.
2. In the list of descriptions, locate the desired description. If needed, click the Filter icon () and filter the list.
3. At the end of the description row, click the Edit icon ().
4. On the **Edit Clause/Term Descriptions** page, in the **Description** field, make the desired change.
5. Do one of the following:
 - To save and return to the main Clause/Term Descriptions page, click **Save**, and then, in the upper right corner of the page, click **Back to Descriptions**.
 - To save and close the page, click **Save and Close**.

To delete a description:

1. In the main menu header, click **Admin > Manage Clause/Term Descriptions**.
The Clause/Term Descriptions page opens.
2. In the list of descriptions, locate the desired description. If needed, click the Filter icon () and filter the list.
3. At the end of the description row, click the Delete icon ().
4. In the confirmation dialog, click **OK**.

About multiple-procedure payment reduction line item calculations

When modeling contracts, you can include multiple-procedure payment reduction calculations by percentage to handle contracts with multi-procedure payment reduction (MPR) line items in excess of three reimbursement rates. This calculation handles dollar and percentage rates. The Line Item Code MPR calculation basis calculates claims that are reimbursed based on multiple rate tiers. This calculation basis is available in the Calc Basis menu for clauses and terms, as shown in the following example:



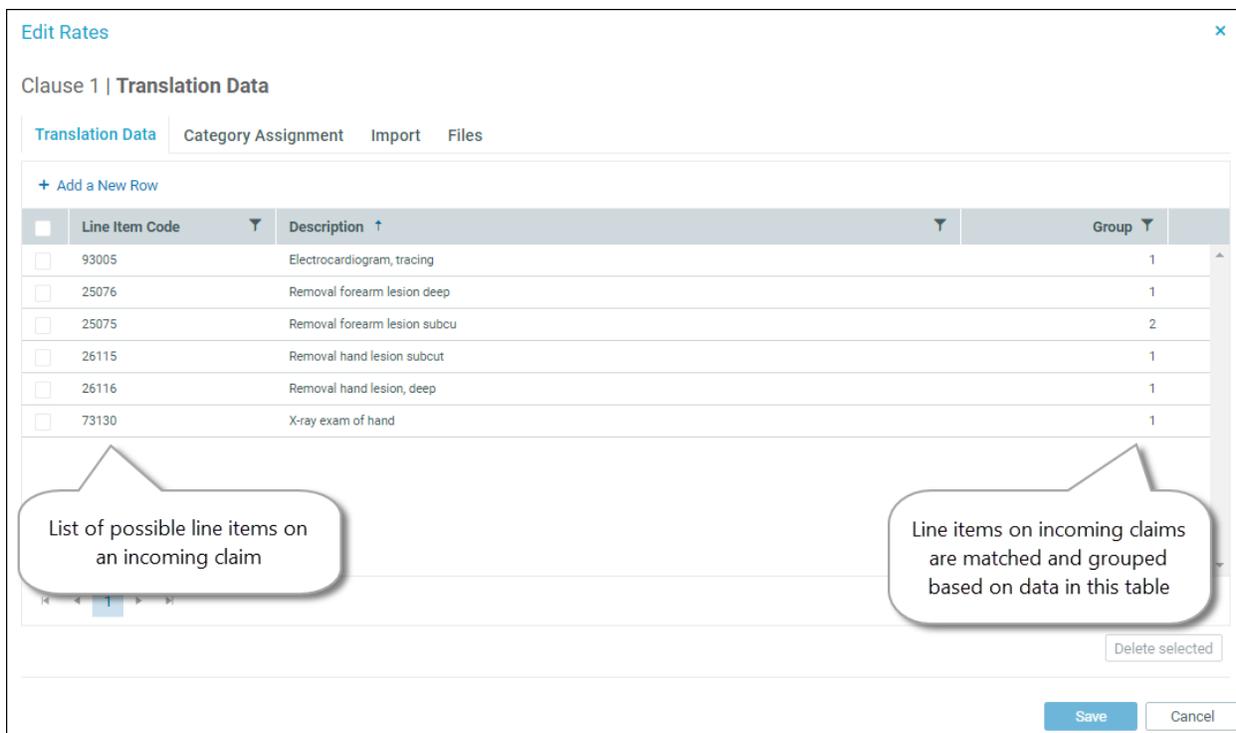
The screenshot shows the 'Edit Clause' dialog box with the following fields and values:

- Clause:** 1
- Description:** MPR
- Calc Basis:** Line Item Code MPR (selected from a dropdown menu that also includes Itemized Charge Code, Line Item Code, Line Item Code ASC, Line Item Code Bundle, Line Item Code Incidental, and Line Item Code Modifier)
- Rate:** 0.00
- Include clause in Global Limit:**

Buttons for 'Save' and 'Cancel' are located at the bottom right of the dialog.

Line Item MPR uses translation tables similar to Line Item ASC. Translation tables consist of columns of line item codes and their associated Group column. (Descriptions are not needed in the table because they are automatically populated based on the existing Line Item Code library entries.)

IMPORTANT: When adding translation tables and rates to a line item MPR clause, you must add the translation table file before you add the rates file, or else the rates will not load.



The Rates dialog for Line Item MPR has a ten-tier procedure reduction calculation consisting of nine rate columns and one sub rate column on the Category Assignment tab (see following image example) to handle procedure reduction logic in contracts. You do not need to specify all ten tiers, but at minimum you must specify one rate and the Subrate column. You can enter rates manually or upload translation and rates tables. For more information, see [Import rates for a clause or term](#).

With Line Item MPR, rates may be either percentages (loaded as decimals) or dollars.

When loading rates using an Excel file, the subrate must be defined. The subrate is the last payable rate. Therefore, if a contract says all services are reimbursed at 100/50/25/25, then program 100% of the given rate in Rate 1, 50% of the given rate in Rate 2, and 25% of the given rate in the Subrate. This will calculate all services found in the translation table.

If reimbursement is limited to a set number of services, use the rate columns and subrate to limit reimbursement. For example, if only three services are payable, program Rate 1-3 with the appropriate value and subrate with \$0. This prevents any services from calculating after the third procedure.

As with Line Item ASC, reimbursement order is determined by rate, assessing the services with the highest reimbursable amount, and paying those first.

NOTE: In the case of professional contracts with services that are always payable, you can ensure that these are calculated first regardless of highest reimbursable amount. For details, see [Add an exclusion to a professional Line Item MPR calculation](#).

Clause 1 | Category Assignment

Translation Data | Category Assignment | Import | Files

+ Add a New Row

Group	Rate 1	Rate 2	Rate 3	Rate 4	Rate 5	Rate 6	Rate 7	Rate 8	Rate 9	SubRate
1	100.00	50.00	25.00	0.00	0.00	0.00				15.00
2	70.00	54.00	25.00							10.00

1 - 2 of 2 items

Save Cancel

When a qualifying claim comes in and triggers the Line Item MPR clause, the system determines the group it belongs to based on the translation table. After all qualifying line items are grouped, the system assigns the rates to each group based on the Day of Service and rates set for the clause/term.

For more information, see the following:

- [Add a clause to a provision](#)
- [Add a term to a clause](#)
- [Add a unit max limit to a Line Item MPR](#)
- [Modeling clauses and terms](#)

► Claim voucher reports display Line Item Code MPR calculation details

When reconciling an MPR calculation on a claim, you can use the voucher report to see which line items on the claim triggered Line Item Code MPR on a contract and were paid based on that calculation logic. You can use this detail to track down under or over payments and to justify proper payment from the payer.

In the following example, a claim voucher report displays the following details for a Line Item MPR calculation on a claim:

- The service codes on the claim that matched those on the Line Item MPR clause
- The service date detail, line item code with description, and the group, units, and qualified level
- Payment amount for each

Create a Line Item MPR clause or term

Use these instructions to create Line Item MPR calculations on a clause or term. Line Item MPRs calculate claims that are reimbursed based on multiple rate tiers.

To create a line item MPR clause or term:

1. [Navigate to the Clauses or Terms page for the desired provision.](#)
2. Click **+Add a New Clause** (or **+Add a New Term**).
3. In the **Add a New Clause** (or **Term**) dialog, from the description field, select a description.
4. From the **Calc Basis** drop-down, select **Line Item Code MPR**.
5. From the **Calc Type** drop-down, select either **Dollar Rate** or **% Charges**, whichever applies.

The **Calc Measure** drop-down is set automatically to **Per Line Item**, which is required for this calculation basis.

6. For **Terminal?** select either **Yes** or **No**.
7. Click **Save**.
8. [Import translation tables](#) and then [import rates](#).

About volume discount calculation line items

Users modeling contracts can include multi-channel discount calculations to handle volume discount pricing on claim line items. The line item code Multi-Channel Discount calculation basis calculates claims against contract line items that are reimbursed based on volume tiers. This calculation basis is available in the Calc Basis menu for clauses and terms, as shown in the following example of the Edit Clause dialog:

The screenshot shows the 'Edit Clause' dialog box with the following details:

- Title:** Edit Clause
- Tab:** Settings (Attributes is also visible)
- Clause:** 1
- Description:** AMBULANCE - LAND
- Calc Basis:** Multi-Channel Discount (dropdown menu is open showing options: Line Item Code Bundle, Line Item Code Incidental, Line Item Code Modifier, Line Item Code MPR, Line Item Code Plus RevCode, Line Item Code POS, and Multi-Channel Discount)
- Rate:** 0.00
- Include clause in Global Limit:**
- Buttons:** Save, Cancel

This calculation basis pays a set amount based on the number of units found for a set of procedures on a claim.

Multi-Channel Discount line items use translation tables similar to the way Line Item ASC does.

Translation data consists of a column of line item codes and a Category column. The description does not need to be in the translation table because it automatically populates with the description in the Line Item Code Library.

The screenshot shows a dialog box titled 'Edit Rates' with a sub-header 'Clause 1 | Translation Data'. It has tabs for 'Translation Data', 'Category Assignment', 'Import', and 'Files'. Below the tabs is a '+ Add a New Row' button. The main area contains a table with the following data:

<input type="checkbox"/>	Line Item Code	Description	Category
<input type="checkbox"/>	82450	NO DESCRIPTION	2
<input type="checkbox"/>	844478	NO DESCRIPTION	2
<input type="checkbox"/>	82247	Bilirubin, total	1
<input type="checkbox"/>	82248	Bilirubin, direct	1
<input type="checkbox"/>	82374	Assay, blood carbon dioxide	1
<input type="checkbox"/>	82465	Assay, bld/serum cholesterol	2
<input type="checkbox"/>	82040	Assay of serum albumin	1
<input type="checkbox"/>	82310	Assay of calcium	1
<input type="checkbox"/>	82435	Assay of blood chloride	2
<input type="checkbox"/>	84460	Alanine amino (alt) (sgpt)	2

At the bottom of the table, there is a pagination control showing '1' of 10 items and a 'Delete selected' button. At the very bottom of the dialog are 'Save' and 'Cancel' buttons.

The Rates dialog for this type of line item contains multiple lines for specifying categories, number of units, rates, and the effective range of those rates based on unit volume. You can enter rates manually or upload translation and rates tables. For more information, see [Import rates for a clause or term](#) and [Import translation tables](#).

For each category, claims are paid based on a volume discount of tiered pricing. The following example shows items for categories 1 and 2. If an incoming claim fits Category 1 and has three units, the rate paid is \$4.00 because the Effective Range is $3 \leq \text{Units} < 4$. If the claim has four units, the rate paid is \$5.00 because the Effective Range is $4 \leq \text{Units} < 5$. Any claim with eight units or more is paid at the \$11.00 rate.

Edit Rates ×

Clause 1 | Category Assignment

Translation Data | **Category Assignment** | Import | Files

+ Add a New Row

Category	Unit	Rate	Effective Range
1	3.00	4.00	3.00 <= Units < 4.00
1	4.00	5.00	4.00 <= Units < 5.00
1	5.00	6.00	5.00 <= Units < 6.00
1	6.00	7.00	6.00 <= Units < 7.00
1	7.00	9.00	7.00 <= Units < 8.00
1	8.00	11.00	8.00 <= Units
2	2.00	4.00	2.00 <= Units < 3.00
2	3.00	5.00	3.00 <= Units < 4.00
2	4.00	6.00	4.00 <= Units < 5.00
2	5.00	7.00	5.00 <= Units < 6.00

1 - 12 of 12 items

For more information, see the following:

- [Modeling clauses and terms](#)
- [Add a clause to a provision](#)
- [Add a term to a clause](#)

► Claim voucher reports display Volume Discount calc details

When reconciling a multi-channel discount payment calculation on a claim, you can use the voucher report to see which line items on the claim triggered a Line-Item Code Multi-Channel Discount calculation on the claim, and were paid based on that calculation logic. You can use this detail to track down under or over payments, and to justify proper payment from the payer.

In the following example, a claim voucher report displays the following details for a multi-channel discount calculation on a claim:

- The Line item Multi-Channel Discount codes on the claim that matched those on the clause
- The service date detail and the category
- Payment amount for each

Add a clause to a provision

When creating a clause, you need to define the services being reimbursed and their contracted rates. For this, you select the calculation criteria. (For information on Calc Basis, Calc Type, Calc Measures, and Terminal vs. Non-terminal, see [Modeling clauses and terms](#).) You can also [add attributes](#) to a clause.

To add a new clause:

1. [Navigate to the desired provision.](#)
2. On the **Provisions** page, in the desired provision row, click **Go to Clauses**.
3. On the **Clauses** page above the table of clauses, click **Add a New Clause**.

The **Add a New Clause** dialog opens.

NOTE: The clause number is assigned by the system and cannot be edited initially, but after creating the clause and saving it, you can move it to a different position in a group of two or more clauses on a provision.

4. From the **Description** drop-down, do one of the following:

- Select a description for the clause.

TIP: In drop-downs with numerous results, like **Description**, you can search for a specific result: click in the **Description** field and begin typing a search word. Matches display in the drop-down results; click a description to select it.

- Add a new description: click the **Description** field name, which is linked to the Clause/Term Descriptions page where you can [add a new description](#) if you are an administrator.

5. From the **Calc Basis** drop-down, select the basis for calculation.
6. If applicable (depends on the selected Calc Basis), from the **Calc Type** drop-down, select the calculation type.
7. If applicable, from the **Calc Measure** drop-down, select the measure on which the calculation is made (for example, Per Claim, Per Line Item, Per Diem).
8. From the **Terminal?** drop-down, select **Yes** for Terminal or **No** for non-terminal.
9. Do one of the following:
 - To add rates, continue to step 10.
 - To add thresholds, skip to step 11.

10. To add rates, do one of the following:

- For a single rate, type the rate into the **Rate** field.

NOTE: Some calculation bases and their associated calculation types and measures require multiple rates or rates from an uploaded file. When this occurs, the Rate field is inactive.

- For multiple rates, [enter rates manually](#) or [import rates](#) from a file.

NOTE: The **Include clause in Global Limit** check box is enabled automatically if the parent provision contains a global limit.

11. To add thresholds, do one of the following:

- [Add thresholds manually](#).
- [Import thresholds](#).

NOTE: Not all calculation bases allow thresholds. For more information, see [About Thresholds](#).

12. Click **Save**.

13. (Optional) [Add an attribute](#).

14. If needed, [add a limit](#).

Add a term to a clause

A term always resides beneath a clause. The clause is considered the parent of the term.

When creating terms, you need to select the calculation criteria. For information on Calc Basis, Calc Type, Calc Measures, and Terminal vs. Non-terminal, see [Modeling clauses and terms](#).

To add a new term:

1. [Navigate to the desired clause](#).
2. In the row for the desired clause, click **Go to Terms**.
3. On the **Terms** page, above the table of clauses, click **Add a New Term**.

The **Add a New Term** dialog opens.

NOTE: The term number is assigned by the system and cannot be edited initially, but after creating the term and saving it, you can move it to a different position in a group of two or more terms on a clause.

4. In the **Description** drop-down, do one of the following:

- Select a description for the term.

TIP: In drop-downs with numerous results, like **Description**, you can search for a specific result: click in the **Description** field and begin typing a search word. Matches display in the drop-down results; click a description to select it.

- Add a new description: click the **Description** field name, which is linked to the Clause/Term

Descriptions page where you can [add a new description](#) if you are an administrator.

5. From the **Calc Basis** drop-down, select the basis for calculation.
6. From the **Calc Type** drop-down, select the calculation type.
7. If applicable, from the **Calc Measure** drop-down, select the measure on which the calculation is made.
8. From the **Terminal?** drop-down, select **Yes** for Terminal or **No** for non-terminal.
9. To add rates, do one of the following:
 - For a single rate, type the rate into the **Rate** field.

NOTE: Some calculation bases and their associated calculation types and measures require multiple rates. When this occurs, the Rate field is inactive.

- For multiple rates, [enter rates manually](#) or [import rates](#) from a file.
10. Click **Save**.

Using rates

Rates are entered at the clause or term level of a contract. Once the clause or term is added, you need to define the services being reimbursed and their contracted rates.

There are two kinds of rates: rates and thresholds. This topic is about rates. For information on thresholds, see [Using thresholds](#).

You can add rates or thresholds to a clause/term but not both.

► Rate requirements

Rates require the following:

- Code – The code for the procedure or service that appears on claims.
- Description – Populated from the code description library for the code being used, but if the code is not in the library, you can add it manually.
- Rate – Contracted charge for the procedure or service.

The following calculation bases require information additional to a code and rate, and therefore require uploaded rate files and additional uploaded files as listed:

- Line Item ASC – Excel upload only; translation file and rate file
- Line Item MPR – Excel upload only; translation file and rate file
- Line Item Incidental – Excel upload only; translation file and rate file
- Line Item Bundle – Requires two codes and a rate
- Line Item Modifier – Requires additional field for modifier associated with the code

- Line Item Plus Rev Code – Requires combination of codes: Line Item and Revenue Code
- Line Item POS – Requires additional field for Place of Service
- Multi-Channel Discount – Two files needed: translation file and rates/units
- RevCode Incidental – Excel upload only; translation file and rate file
- DRG Cost Outlier – Requires Code, RCC, Threshold, Reduction Percent and Reduction Amount
- CMS Outpatient – Ability to adjust 3M output by Overall Adjustment, APC Status Indicator, APC or Line Item
- CMS Psych, CMS DRG, CMS CMG – Require detailed Excel file uploads that work with the provision factors

When setting rates, a rate code may exist only once per clause/term, with one exception as noted:

- A code may only exist once per clause/term. For example: DRG 775 may be added at \$5000.00. If you try to add code 775 again, a message displays indicating that this code already exists.
- The exception is Line Item plus RevCode. In this case, the code *combination* may only exist once. For example: Line Item Code 36415 with RevCode 0301 may exist along with Line Item Code 36415 with RevCode 0302 because the combination of codes is unique.

▶ Entering rates

Rates can be either dollar amounts or percentages.

- If the calculation type is *Dollar Rate*, then the rate should be a monetary value with two decimal places (13000 = 13,000.00).
- If the calculation type is *% Charges* or *% Costs*, then the rate needs to display four decimal places (70% = .7000 or 74.25% = .7425).
- Admin users can manually enter rates, edit the rates, and delete the rates.
- Admin users can edit and delete multiple rates at a time.

Multiple rates entered manually or uploaded from a file display in the Edit Rates dialog. Admin users need to be able to check any combination of lines and have the “Set Rate To” or “Factor Rate By” applied to those selected. Admin users also need the option to Select/De-Select All entries across pages of rates.

- In the Edit Rates dialog, rates can be filtered by the Code and Description columns.

Manually add rates to a clause or term

Use these instructions when you need to manually add rates to a clause or term. You can also [import the rates from a file](#) instead of adding them manually if you prefer or if you have a page or more of rates.

To manually add rates to a clause/term:

1. [Navigate to the desired clause or term.](#)
2. In the **Rates** column, click the Edit icon () (if no rates are attached, the icon will be grayed out).

3. In the **Edit Rates** dialog, click **Add a New Row**. A new row displays in the Rates Data View tab on the left, as shown in the following example:



4. In the **Code** field, type a code associated with the chosen calculation basis for the clause/term. (To see the calculation basis, open the Edit Clause/Term dialog and view the Calc Basis field.) The code description will autopopulate. If no description is associated with the code, it will read “NO DESCRIPTION,” and will be selected so you can enter a description manually.

IMPORTANT: Once you save the description, you cannot change it.

5. In the **Rate** field, type a corresponding rate.
6. Add more rate rows as needed. To apply the same rate to multiple codes, see the following step 7.
7. (Optional) To apply the same rate to some or all the entered codes, or to adjust some or all of the rates by a specific factor:
 - a. On the left, select check boxes for the rate rows to affect.
 - b. At the bottom of the dialog, from the **Adjust selected rows** drop-down, do one of the following:
 - **Set rate equal to** – To set all checked rows to the same rate, in the field to the right of the drop-down, enter the desired rate.
 - **Factor rate by** – To adjust all checked rows by an entered value, enter the adjustment percentage as a decimal value (for example, enter 1.02 to increase the set rate 2%),
 - c. Click **Apply**.
8. (Optional) To delete a rate, select the check box for that row, and then at the bottom right of the dialog, click **Delete Selected**. In the confirmation dialog, click **OK**.
9. Click **Save**.

Import rates for a clause or term

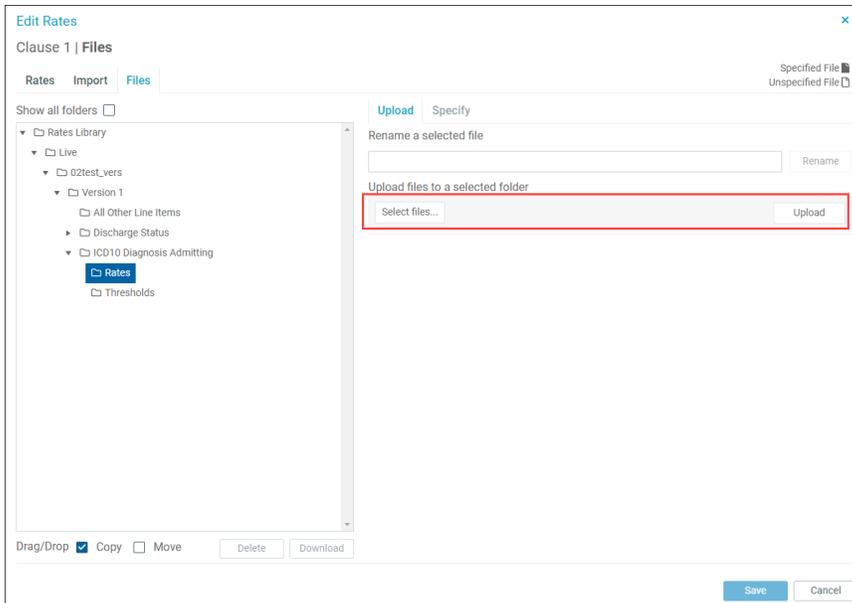
When working with large fee schedules, or when working with [certain calculation bases](#), manually entering rates may not be feasible or allowed. In such situations, you can import the fee schedule or rates table from an Excel file. If you are also importing translation tables, you need to import those before you import rates, or else the rates will not load.

IMPORTANT: There are many types of rate files (DRG, Line Item Code, Rev Code, etc.). When importing rates, make sure the rate file you upload matches the specific type of calculation basis used by the clause or term. For example, if the clause or term uses CMS DRG, then a DRG rate file that has a dollar rate would use these options: Calc Basis = DRG; Calc Type = Dolar Rate; Calc Measure = Per Claim.

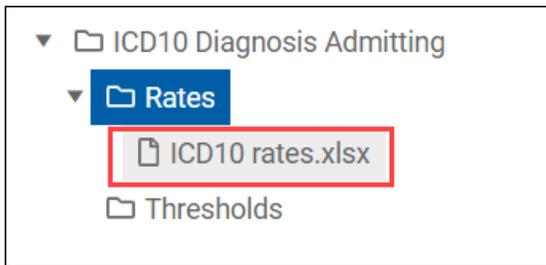
When importing rates, you first upload the rate file to the server, and then you attach it to the contract.

To import the rates:

1. [Navigate to the clause or term needing rates](#).
2. In the **Rates** column of the clause/term row, click the Edit icon ().
3. In the **Edit Rates** dialog, click the **Files** tab.
4. On the left side of the dialog, under the listed calculation basis for the clause/term, the **Rates** folder should be selected as the rates file destination. If it is not, select it.
5. On the right side of the dialog, in the **Upload files to a selected folder** area, do one of the following:
 - Drag and drop the rates file.
 - Click **Select files** and then select a rates file.



6. Click **Upload**. The uploaded file displays on the left under the destination folder, as shown in the following example:



7. Select the uploaded file.
8. (Optional) To rename, the file, on the right side of the dialog, the file name displays in the **Rename a selected file** field. If desired, rename the file and then click **Rename**.
9. On the right side of the dialog, click the **Specify** tab. The top part of the tab displays an image corresponding to the data in the uploaded file.
10. On the lower right of the dialog, in the **Excel Column**, for each row in the **Rates Column**, select from the drop-down the letter that corresponds to the column in the image above. In the following example, Code corresponds to column A in the Rates file. Do this for each field in the Rates Column that needs to be mapped.

Specified File
Unspecified File

Upload Specify

Sample data: ICD10 rates.xlsx

A	B	C	D
Code	Rate1	Rate2	Rate3
1	1000	500	250
2	1200	600	300
3	1500	750	375

Sheet1 Sheet2 Sheet3

Rates Column	maps to	Excel Column
Code	maps to	A ▼
Description	maps to	Not Mapped ▼
Rate	maps to	Not Mapped ▲

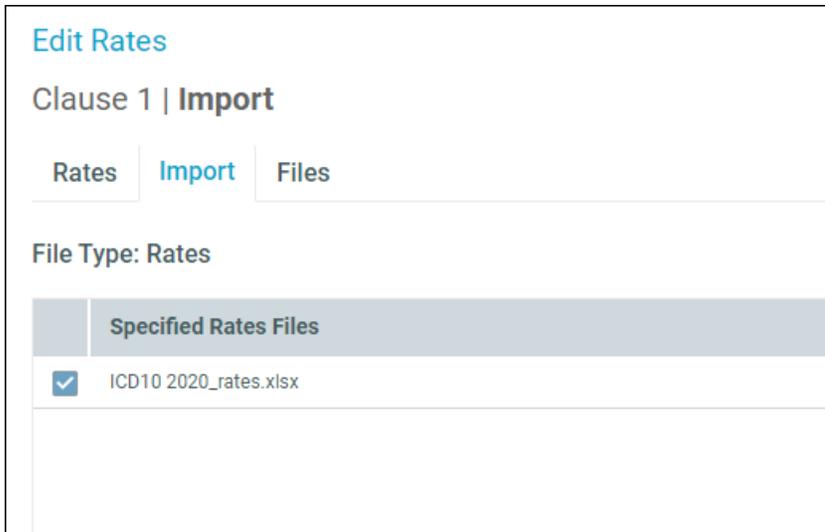
Excel data has column headers? No Yes Save specifications

Save
Cancel

11. For Excel data has column headers? select the appropriate option.
12. Click Save specifications.
13. Click the Import tab.
14. If needed, from the File Type drop-down, select Rates.

The file you uploaded displays under Specified Rates Files.

15. On the right side of the dialog, click Attach. When the file is attached, the check box displays checked:



16. To view the imported rates, click the **Rates** tab.
17. Close the **Edit Rates** dialog.

View rates for a clause or term

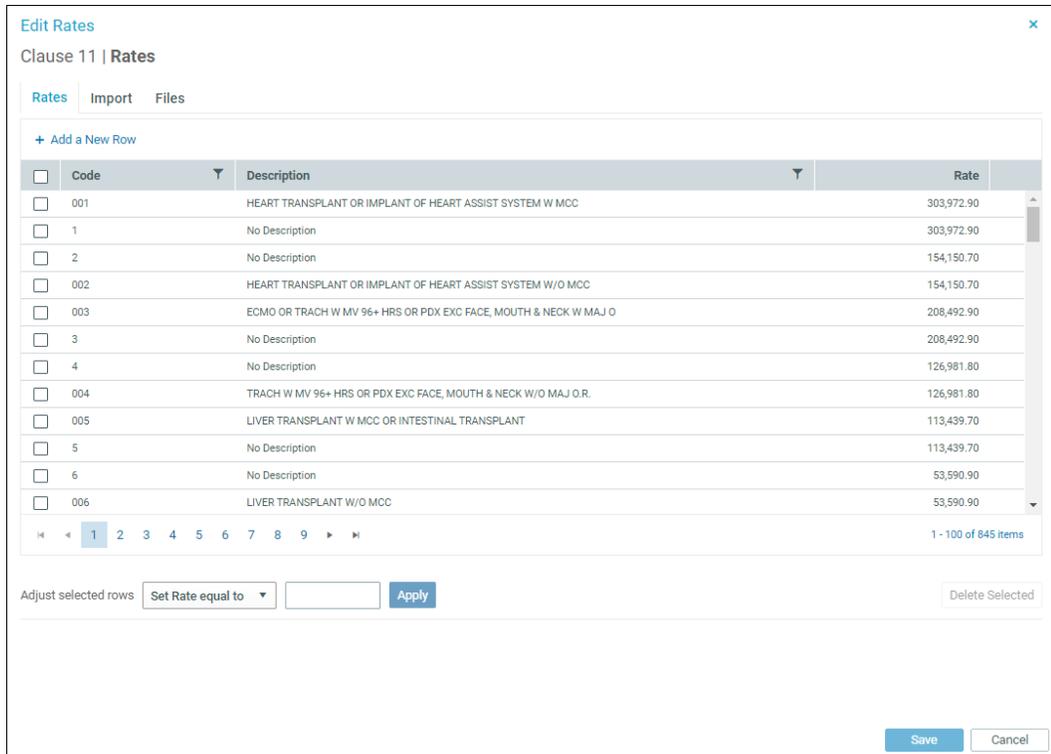
A clause or term may have a single rate, multiple pages of rates, or a set of tiered rates, depending on the service or procedure; or group or combination of services/procedures, contract type, provision, and so on.

If a clause or term has a single rate, the rate displays in the Rate field of the Edit Clause (or Edit Term) dialog.

If a clause or term has multiple rates or a set of tiered rates, the Rates are displayed in the Edit Rates dialog. The Edit Rates dialog also displays associated information and any attached files, if applicable.

To view the rates associated with a clause or term:

1. [Navigate to the desired clause or term.](#)
2. On the **Clauses/Terms** page, look in the **Rates** column.
 - If the clause/term has a single rate, the Edit icon is grayed out (🔒). To view the single rate, at the end of the row, click the Edit icon (🔗), and then, in the **Edit Clause/Edit Term** dialog, look in the **Rate** field.
 - If the clause/term has multiple or tiered rates, the Edit icon is not grayed out. Click the Edit icon. In the **Edit Rates** dialog, rates are displayed in the **Rates** tab.



Example of Rates dialog for a clause with multiple procedures and rates

Import translation tables

Translation tables are crosswalk code tables that map equivalent, identical, or similar information across two or more distinct data sets. Most crosswalking is done between a newer version and an older, out-of-date version of the same code set. Certain Contract Management calculation bases, such as the following, all require translation tables:

- Line Item Code Incidental
- RevCode Incidental
- Line Item Code MPR
- Line Item Code ASC
- Multi-Channel Discount

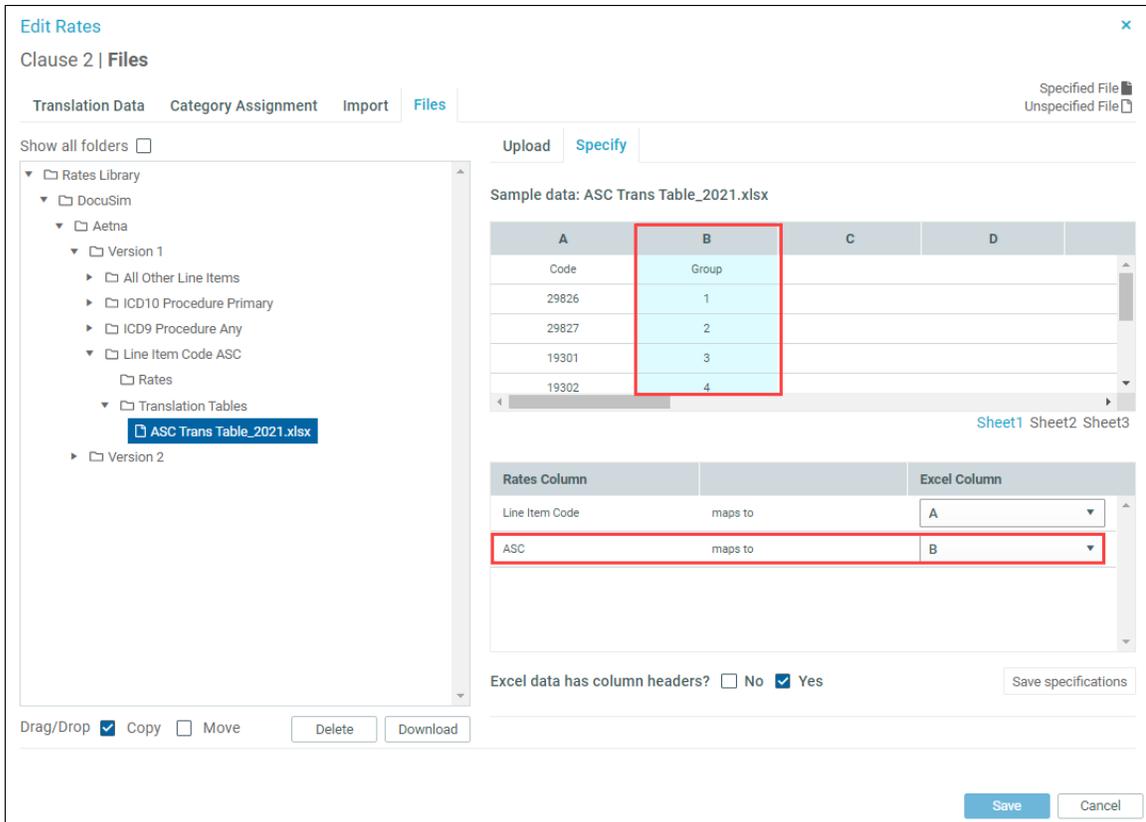
If you select any of these calculation bases, the Edit Rates dialog will contain a Translation Data tab in addition to the other tabs.

IMPORTANT: When adding translation tables and rates to a line item MPR clause, you must add the translation table file before you add the rates file, or else the rates will not load.

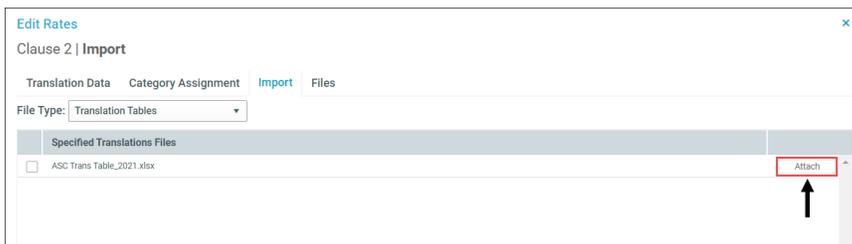
Importing translation tables follows the same basic process as [importing rate files](#).

To import a translation table:

1. [Navigate to the clause or term.](#)
2. In the **Rates** column, click the Edit icon () (if no rates are attached, the icon will be grayed out).
3. In the **Edit Rates** dialog, click the **Files** tab.
4. On the left side of the dialog, the **Translation Tables** folder under the calculation basis for the clause/term should be selected as the destination of the translation file. If it is not, select it.
5. On the right side of the dialog, in the **Upload files to a selected folder** area, either drag and drop a translation table file to this area or click **Select files** and select the file to upload.
6. Click **Upload**. The name of the file displays under the folder on the left side of the dialog.
7. Select the uploaded file.
8. (Optional) To rename, the file, on the right side of the dialog, the file name displays in the **Rename a selected file** field. If desired, rename the file and then click **Rename**.
9. On the right side of the dialog, click the **Specify** tab. The top part of the tab displays an image corresponding to the columns and rows in the uploaded file.
10. In the lower right of the dialog, in the **Excel Column**, for each row in the **Rates Column**, select from the drop-down the letter that corresponds to the column in the image above. In the following example, column A corresponds to the Line Item Code column in the translation tables file, and column B corresponds to ASC. Do this for each field in the Rates Column that needs to be mapped.



11. Select whether or not the file uses headers, and then click **Save Specifications**.
12. Click the **Import** tab. If needed, from the **File Type** drop-down, select **Translation Tables**.
The translation table file should display under **Specified Translations Files**.
13. On the right side of the dialog, click **Attach**. When attached, the check box to the left of the listed file displays as checked.



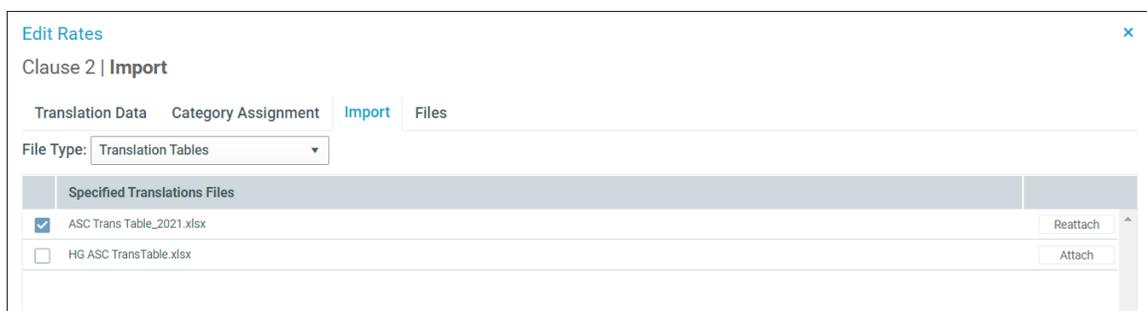
14. To view the uploaded data, click the **Translation Data** tab.
15. Close the **Edit Rates** window.

Attach or re-attach a file

Sometimes you need to attach multiple files; for example, if a clause or term has multiple Rev Code calculation bases. While you can upload more than one file of a kind (e.g., rates, translation, etc.), only one of those file types can be attached to the clause or term at a time. So, if a clause has a calculation basis that requires a rates file and a translation data file, you can attach only one of each kind to the clause at a time. When you attach a different file of the same type, the data in the new file replaces previous data stored in the clause/term.

If you accidentally attach the wrong schedule or other file, or want to use a previously uploaded file, do the following:

1. In the **Edit Rates** dialog, after uploading the desired file, click the **Import** tab.
2. If needed, from the **File Type** drop-down, select the file type.



3. In the **Specified [type] Files** section, do one:
 - To use the original file, click **Reattach**.
 - To use the newly uploaded file, click **Attach**.

NOTE: To add additional rates, there are two options: 1) Upload, specify and attach a new file that includes all rates required for the clause/term, or 2) manually add the new codes and rates.

IMPORTANT: Be aware that if a rate file is re-attached, any rate codes added manually will be replaced by what is in the file.

Copy, move, delete, or download attached files

Use these instructions to handle attached files, such as rate files, residing in system folders. If there are schedules or rate files you can use from other contract version(s), in the Files tab of Edit dialogs for attached files, you can either move a file or make a copy from another folder location by dragging and dropping. You can also download a file, make changes to it and then upload it.

To move, copy, download, or delete a file:

1. [Navigate to the desired contract level](#) and then open the Edit dialog for the attachment. For

example, if working with a rates file, then in the **Rates** column, click the Edit icon (✎).

2. In the Edit dialog, click the **Files** tab.

The left side of the tab displays the Rates Library and the folder system leading to the attached file.

NOTE: To see the folder structure for all simulations, above the folder structure, select the **Show all folders** option.

The screenshot shows the 'Edit Rates' dialog box with the 'Files' tab selected. The left pane displays a folder tree starting with 'Rates Library' (labeled as 'Top folder'). Below it are folders like 'Okazlova', 'one', 'Version 1', and 'Rates'. Under 'Rates', there are files: '2020 CMG Master.xlsx', '2020 CMG Master1.xlsx', '2020 CMG Master2.xlsx', and 'CMSDRGRateFile (1).xlsx'. The file 'CMSDRGRateFile.xlsx' is selected. The right pane has a 'File legend' (Specified File, Unspecified File), a 'Rename' section with a text box containing 'CMSDRGRateFile.xlsx', and an 'Upload' section with a 'Select files...' button. At the bottom, there are 'Delete' and 'Download' buttons, and 'Copy' and 'Move' checkboxes. A 'Save' button is at the bottom right.

3. Drill down through the clause/term calculation basis to the desired document, select the file, and then do any of the following:

IMPORTANT: Although information imported from files is retained when you delete or move a specified file, if you import another file and attach it to the clause or term, the previous information is replaced with the new information.

► Copy the file to another folder

- a. Below the folder tree, in the **Drag/Drop** section, select the **Copy** check box.

b. Drag the file to the destination folder. The original file stays in the source folder.

▶ Move the file to another folder

a. Below the folder tree, in the **Drag/Drop** section, select the **Move** check box.

b. Drag the file to the destination folder.

▶ Delete the file

NOTE: If the file is in use (the file icon to the left of the name is solid), you can delete it without removing the information from the clause or term as long as the imported file was the last one attached. You can also [reattach a file](#) before deleting it from the server.

a. Select the file, and then click the **Delete** button below the folder tree.

b. Click **Delete** in the confirmation dialog.

▶ Download the file

a. Select the file.

b. Click the **Download** button below the folder tree. The downloaded file displays at the bottom of the page, as in the following example:



From here, you can open the file, make changes, move the file elsewhere on your computer, or upload the file to the Contract Management system.

4. Close the Edit dialog.

Edit or delete a clause or term

You can make the following changes to a clause or term:

- Change the description
- Change the calculation basis, calculation type, and calculation measure, where applicable
- Change the terminal setting
- Add or remove attributes or change attribute values
- Add or remove attached rates

To edit a clause or term:

1. [Navigate to the desired clause or term.](#)
2. At the right end of the clause or term row, hover your cursor and click the Edit icon ().
3. Do any of the following as needed:

NOTE: The term number is assigned by the system and cannot be changed.

- To change the description, from the **Description** drop-down, select a different description.

NOTE: Administrators can [add a new description](#).

- To change the calculation basis, type, and measure, select from the corresponding drop-downs. Calculation type and measure may or may not be changeable depending on the calculation basis selected.
 - To change the terminal setting, select from the **Terminal** drop-down.
 - To change the rates, in the **Rate** field, type a new rate. If needed, [import a rates file](#).
 - To change attributes, click the **Attributes** tab and [add](#), [import](#), [edit](#), or [remove](#) attributes.
4. Click **Save**.

To delete a clause or term:

1. [Navigate to the desired clause or term.](#)
2. At the end of the row for the clause or term, hover your cursor and click the Delete icon ().
3. In the **Confirmation** dialog, click **OK**.

Copy a clause or term

Use these instructions to copy a clause or term to the same contract. To copy a clause or term to a different contract, you need to copy the provision it is attached to.

To copy a clause or term:

1. [Navigate to the clause or term to be copied.](#)
2. At the end of the row, hover your cursor and click the Clone icon ().

The Clone Clause or Clone Term dialog opens.

3. At the bottom of the dialog, clear any check boxes for items that you do not want to copy from the original clause or term.

The screenshot shows a dialog box with the following elements:

- Four checkboxes, all of which are checked:
 - Include clause in Global Limit
 - Include Rates
 - Include Terms
 - Include Attributes
- An information icon (i) in a circle, followed by a text box containing the message: "Settings, Attributes and Exclusions will not be editable until the clause is saved. The checkboxes may be used to include or exclude sections of data when cloned."
- At the bottom right, there are two buttons: "Save" (in blue) and "Cancel" (in white with a grey border).

NOTE: As stated at the bottom of the dialog, you must save the copy before you can edit the rest of the settings.

4. Click **Save**.
5. (Optional) **Edit the new copy** as desired. For example, you may want to give the copy a different description.

Set up post-grouper custom pricing

Some state Medicaid and commercial Medicare-like plans use Medicare grouping methodologies but then override some of the reimbursement rules for certain status indicators or APC codes. Or, they simply pay at a percentage above Medicare. For claims reimbursement, you need to be able to model these kinds of adjustments.

NOTE: These instructions do not apply to actual Medicare contracts, only Medicare-like contracts from commercial plans.

When modeling contracts for commercial Medicare-like plans that use customized Medicare grouping methodologies, you can include adjustments to the CMS Outpatient calculation. For example, you can set rates for clauses and terms that use the CMS Outpatient calculation basis and adjust those rates as needed.

During the CMS Outpatient calculation, the system receives the results from the 3M grouping and pricing process and pulls the results into the voucher. You can adjust the voucher results as necessary for payment in the following ways:

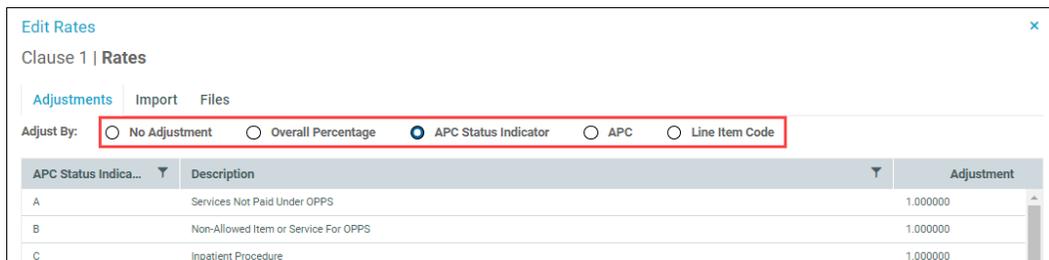
- **Adjust the CMS Outpatient calculation basis in the Rates window:**
 - **No Adjustment** – No adjustment is made to the rates coming from the grouping and pricing process. This is the default selection.
 - **Overall Percentage** – Adjust the post-grouping and pricing rate by a specified percentage.
 - **APC Status Indicator** – Adjust the calc basis based on the SI.
 - **APC code adjustment** – Adjust the calc basis based on the APC code.
 - **Line-item code adjustment** – Adjust the calc basis based on the line-item code.

Adjust rates for a CMS Outpatient calculation

Use these instructions to modify rates for a CMS Outpatient calculation basis on a clause or term, as part of modeling [post grouper custom pricing](#).

To set up post-grouper custom pricing on a contract:

1. [Navigate to the desired clause or term](#) with a CMS Outpatient calculation basis.
2. In the **Rates** column for the clause/term, click the Edit icon (.
3. In the **Edit Rates** dialog, in the **Adjustments** tab, select the type of adjustment:
 - **No Adjustment** – No adjustment is made to the rates coming from the grouping and pricing process. This is the default selection.
 - **Overall Percentage** – Adjust the post-grouping and pricing rate by a specified percentage.
 - **APC Status indicator** – Adjust the calc basis percentage based on the Status Indicator.
 - **APC** – Adjust the calc basis percentage based on the APC groupings.
 - **Line Item Code** – Adjust the calc basis percentage by specific line items on a claim.



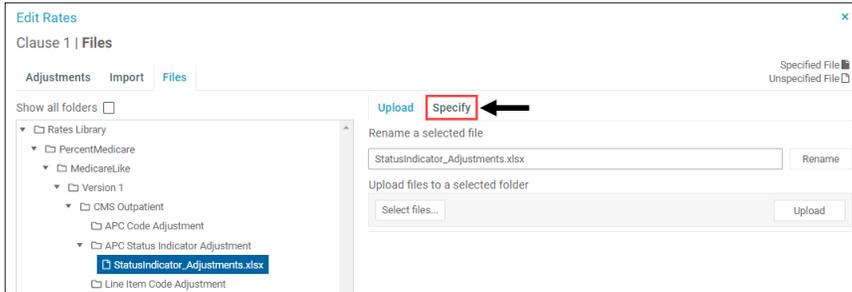
APC Status Indica...	Description	Adjustment
A	Services Not Paid Under OPSS	1.000000
B	Non-Allowed Item or Service For OPSS	1.000000
C	Inpatient Procedure	1.000000

4. Do one of the following, depending on your selection in the previous step:
 - If you selected **Overall Percentage**, then in the **Adjustment** field, enter a percentage written as a decimal value (e.g., 0.07), and then click **Save**. Skip to [step 14](#).
 - If you selected **APC Status Indicator**, **APC**, or **Line Item Code**, proceed to step 5.
5. Click the **Files** tab.

On the left side of the dialog, the folder corresponding to the selected type of adjustment is selected as the destination.
6. On the right side of the dialog, in the **Upload files to a selected folder** area, do one of the

following:

- Drag and drop the rates file.
 - Click **Select files**, and then select the desired file.
7. Click **Upload**. The uploaded file displays under the folder on the left side of the dialog.
 8. On the left, select the uploaded file. On the right side of the dialog, click the **Specify** tab.



9. The top part of the tab displays an image corresponding to the data in the uploaded file. On the lower right of the dialog, in the **Excel Column**, for each row in the Rates Column, select from the drop-down the letter that corresponds to the column in the image above. In the following example, APC Status Indicator corresponds to column A in the Rates file. Do this for each field in the Rates Column that needs to be mapped.

NOTE: Some files may contain fields that do not need to be mapped, or may not contain data for an optional field; however, if you try to save the file without mapping a critical field, the save will not work. In the following example, "Description" is not considered a critical field, so saving without mapping this field works.

Upload Specify

Sample data: StatusIndicator_Adjustments.xlsx

A	B	C	D
Status Indicator	Adjustment		
N	0.1		
A	0.2		
E	0.3		
S	0.4		

Sheet1

Rates Column		Excel Column
APC Status Indicator	maps to	A
Description	maps to	Not Mapped
Adjustment	maps to	B

Excel data has column headers? No Yes

Save specifications

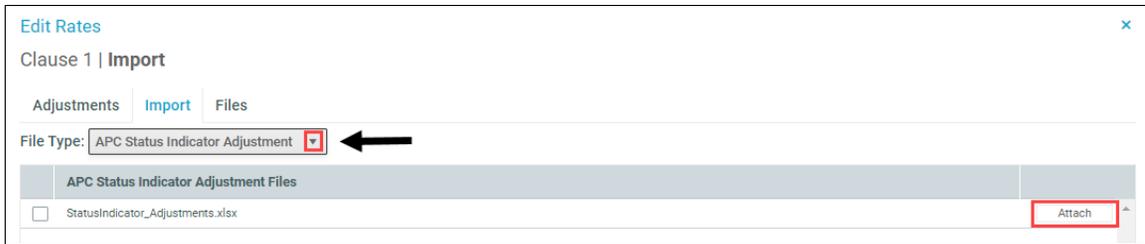
- For Excel data has column headers? select the appropriate option.
- After mapping, click Save specifications.

Rates Column		Excel Column
APC Status Indicator	maps to	A
Description	maps to	Not Mapped
Adjustment	maps to	B

Excel data has column headers? No Yes

→ Save specifications

- Click the Import tab.
- From the File Type drop-down, select the file type. The file you uploaded should display under the gray header. On the right, click Attach.



After attaching, the file's check box displays as checked.

14. Close the **Edit Rates** dialog.

Using thresholds

A threshold is a specific type of calculation that can be placed on either a clause or a term within a contract. Thresholds are used in situations where additional criteria, not just the code, is needed to qualify the service for reimbursement. For example, the payor may require that the Total Charges of the claim exceed a certain amount in order to qualify for additional reimbursement. Or, there may be different rates payable depending upon how many days a patient is in the hospital.

NOTE: Clauses and terms can have either rates or thresholds, but not both.

A threshold's parameters are defined by a Thresh Basis. A Thresh Basis a type of measurement used to define the tiers or levels of reimbursement within a threshold calculation. It is used in conjunction with both a Lower Bound and an Upper Bound to make a claim qualify for the clause/term. A Thresh Basis can be either claim-based (for example, Total Claim Days or Total Claim Charges), or line item-based (Total Line Charges/Units or Total Daily Line Charges/Units). Not all calculation bases allow thresholds. For example, Line Item ASC and Line Item MPR do not allow thresholds.

▶ Using calculation bases, measures, and types in thresholds

The Calc Basis, Calc Measure, and Calc Type, selected based on standard contract modeling rules, define how the claim pays on the clause or term if the Thresh Basis Lower Bound and Upper Bound criteria are met. As in normal contract modeling rules, the Calc Basis is used to determine if a claim qualifies for the clause or term. The Calc Measure and Calc Type combined define how the claim is paid.

The following table provides a list of the possible combinations that can be used with Thresholds. Notice that the first four are claim level, while the remaining three are line item based. These three calculation options are used to apply a rate on the claim, but the rate will be held within the limits of the Apply to Start and Apply to End fields that are set in the Threshold form.

Calc Basis	Calc Measure	Calc Type
DRG, CPT4, Rev Code, etc.	Dollar Rate	Per Diem

Calc Basis	Calc Measure	Calc Type
DRG, CPT4, Rev Code, etc.	Dollar Rate or % Charge	Per Claim
Any and All Services	Dollar Rate	Per Diem
Any and All Services	Dollar Rate or % Charge	Per Claim
CPT4 or Rev Code	Dollar Rate or % Charge	Per Date
CPT4 or Rev Code	Dollar Rate or % Charge	Per Line Item
CPT4 or Rev Code	Dollar Rate or % Charge	Per Line Item Qty

► Threshold examples

The following examples illustrate two situations for using thresholds.

NOTE: Regarding Lower Bounds – The Total Charges or Total Covered Days needs to fall within the bounds. On the second tier, you may repeat the Low Bound or you may use the given start for the next tier. The result will be the same as the Apply Start comes into consideration and will only apply the rate on the excess.

It is important for the first tier to have bounds that capture the full range from 1 to infinite, as that will ensure the lower tier is also calculated in these examples.

Charges

A payer might state that inpatient services are paid at 50% of charges but any inpatient claim that has charges in excess of \$100k will pay “Tiered Reimbursement” for which there would be varying reimbursement rates depending upon the charges. In this example, you need to define a couple of key terms:

- The Thresh Basis is Total Charges because we are paid a different rate based on the charges on the claim (after we exceed \$100k on a claim reimbursement changes)
- Two Rates need to be modeled. As an example:
 - 50% for the all claims up to \$100k
 - 75% on all claims exceeding \$100k
- The bounds capture the Total Charges from the claim. For the 50% Rate, the Lower Bound would be \$1 and the Upper Bound would be infinite (\$99,999,999). The next fields control the application of the rate. The Apply to Start would be \$1 and the Apply to End would be \$99,999k because we want the 50% to apply to all charges up to \$100k.
- For the 75% Rate, the Lower Bound could again be \$1 or change to \$100k and the Upper Bound would be \$99,999,999. Remember, the Total Charges need to fall within the bounds. However, the Apply to Start would now be \$100k and the Apply to End would be \$99,999,999 because we want the 75% to apply only to the charges over \$100k.

Days

A popular example of Day Thresholds is Maternity Cases. Often Maternity pays a Case Rate for a set number of days and then adds reimbursement for days in excess.

- The Thresh Basis is Per Diem because we are paid a different rate based on the Covered Days on the claim
- Two Rates need to be modeled. As an example:
 - The Case Rate for Days 1-3
 - The Per Diem Rate for Days greater than 3
- The bounds capture the Total Covered Days from the claim. For the Case Rate, the Lower Bound would be 1 and the Upper Bound would be infinite (999). The next fields control the application of the rate. The Apply to Start would be 1 and the Apply to End would be 1, because we want the Case Rate to only calculate once. So we will have it calculate on the first day (eliminate claim variability).
- For the Per Diem Rate, the Lower Bound could again be 1 or it could be 4 and the Upper Bound 999. Remember, the Total Covered Days need to fall within the bounds, but the Apply columns control applying the rate. So the Apply to Start would be 4 and the Apply to End would be 999 because we want the Per Diem Rate to apply only to days exceeding the defined parameters of the case rate.

Manually add a threshold to a clause or term

Use these instructions to add a simple threshold to a clause or term. For adding more complicated thresholds, see [Import a threshold for a clause or term](#).

To import a threshold file:

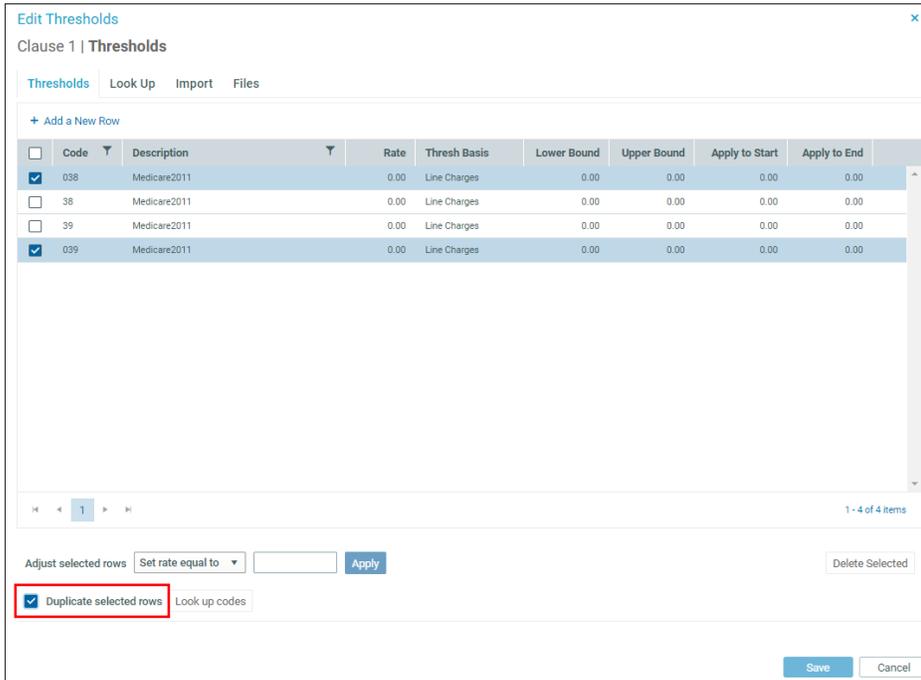
1. [Navigate to the desired clause/term](#).
2. In the **Threshold** column, click the Edit icon (). If you are adding a threshold for the first time, the icon is grayed out.
3. In the **Edit Thresholds** dialog, in the **Thresholds** tab, click **Add a New Row**.
4. Enter information in the following column fields: Code, Description, Rate, Thresh Basis, Lower Boundary, and Upper Boundary, and Apply to Start and Apply to End, as desired. For information on these fields, see [Using calculation bases, measures, and types in thresholds](#) and [Threshold file requirements](#). To locate codes, [use the look up option](#).
5. To add another threshold, repeat steps 3 and 4.
6. (Optional) If you need to add multiple rows that will have the same information for each code, you can [copy the rows](#) instead of adding each manually.
7. Click **Save**.

Copy threshold rows

When entering thresholds manually, often the Thresh Basis, upper bound, lower bound, etc., will be the same for every code. If a threshold entry exists that can be copied to other codes, you can use the *Duplicate selected row* option.

To copy threshold codes:

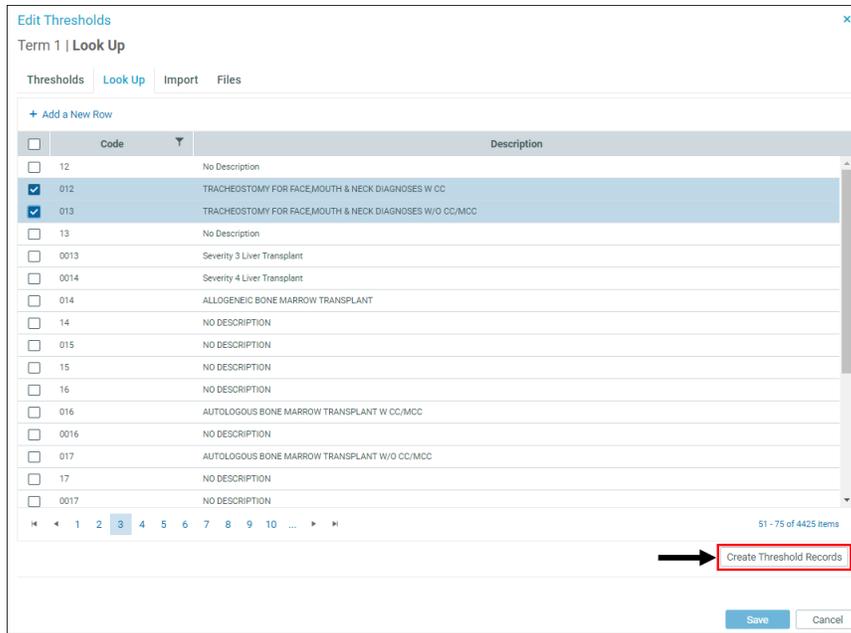
1. [Navigate to the clause or term](#) with the desired threshold record. In the **Threshold** column, click the Edit icon ()
2. In the **Thresholds** tab, do one of the following:
 - Click **Add a New Row** and then manually enter the information for the first record to duplicate, then select the row's check box.
 - For an existing row, select the row's check box.
3. On the bottom right, select the **Duplicate selected rows** check box, and then click the **Look up codes** button.



The screenshot shows the 'Edit Thresholds' window for 'Clause 1 | Thresholds'. It features a table with columns: Code, Description, Rate, Thresh Basis, Lower Bound, Upper Bound, Apply to Start, and Apply to End. The table contains four rows, with the first row (Code 038) selected. Below the table, there are controls for adjusting selected rows, including a 'Duplicate selected rows' checkbox which is highlighted with a red box, and a 'Look up codes' button. The window also includes 'Save' and 'Cancel' buttons at the bottom right.

Code	Description	Rate	Thresh Basis	Lower Bound	Upper Bound	Apply to Start	Apply to End
<input checked="" type="checkbox"/>	038 Medicare2011	0.00	Line Charges	0.00	0.00	0.00	0.00
<input type="checkbox"/>	38 Medicare2011	0.00	Line Charges	0.00	0.00	0.00	0.00
<input type="checkbox"/>	39 Medicare2011	0.00	Line Charges	0.00	0.00	0.00	0.00
<input checked="" type="checkbox"/>	039 Medicare2011	0.00	Line Charges	0.00	0.00	0.00	0.00

4. In the **Look Up** tab, find the code to add to the row, select the check box to the left of the code, and then click **Create Threshold Record**.



The selected codes are added to the Threshold tab as records.

5. Click **Save**.

Look up threshold codes

Use this feature to find threshold codes and add them as threshold records to clauses and terms.

To find codes to add as threshold entries:

1. In the **Edit Thresholds** dialog for the clause/term, click the **Look Up** tab.
2. Verify that the **Duplicate selected rows** option is NOT selected.
3. Locate and select the desired codes, and then, at the bottom right of the dialog, click **Create Threshold Records**.

The record is added to the list of threshold codes in the **Thresholds** tab.

4. Click **Save**.

Import a threshold for a clause or term

When adding a threshold to a clause or term, you select the method of payment for the clause or term.

You can add thresholds to a clause or term manually; however, you can add more complicated thresholds using the attach thresholds option. With this option, you build your threshold requirements in Excel and upload them to the system instead of entering them manually one at a time. This is the preferred method for more complex thresholds. For information on threshold files, see the following Threshold file requirements.

Before attaching threshold files, review the file requirements:

▶ Threshold file requirements

Unlike regular rate files, threshold files require a minimum of the following fields:

- **Code** – Code used for match (DRG, CPT4, etc.)
- **Rate** – The rate to reimburse if claim/line matches the threshold conditions (Percentage or Dollar Rate). Percentages must be represented as decimal values. For example, 100% → 1. 99% → .99
- **Thresh Basis** – The thresh basis controls which piece of information on the claim/line is analyzed by the calculation engine to determine if there is a match. Enter the corresponding number below in the Excel file. For example, if calculating Per Diem, enter 1 for each entry in the file.
 - **Claim Level Based**
 - (1) Total Days (Per Diem)
 - (2) Total Charges (Per Claim)
 - **Line Item Based**
 - (3) Line Charges (Per Line Item),
 - (4) Line Units (Per Line Item Qty),
 - (5) Total Daily Units (Per Date Units),
 - (6) Total Daily Charges (Per Date Charges)
- **Lower Bound / Upper Bound** – The lower bound represents the lowest value for your thresh basis trap. The upper bound represents the highest value for your thresh basis trap. Anything greater than or equal to the lower bound, and less than or equal to the upper bound, will be considered a match.
- **Apply to Start / Apply to End** – In some cases, you may only want to apply a percentage (%) to a range of your charges, or only apply a per diem on certain days. If this is the case, you would set your “apply to start” and “apply to end” to the range of days or charges to which you want to apply your rate.

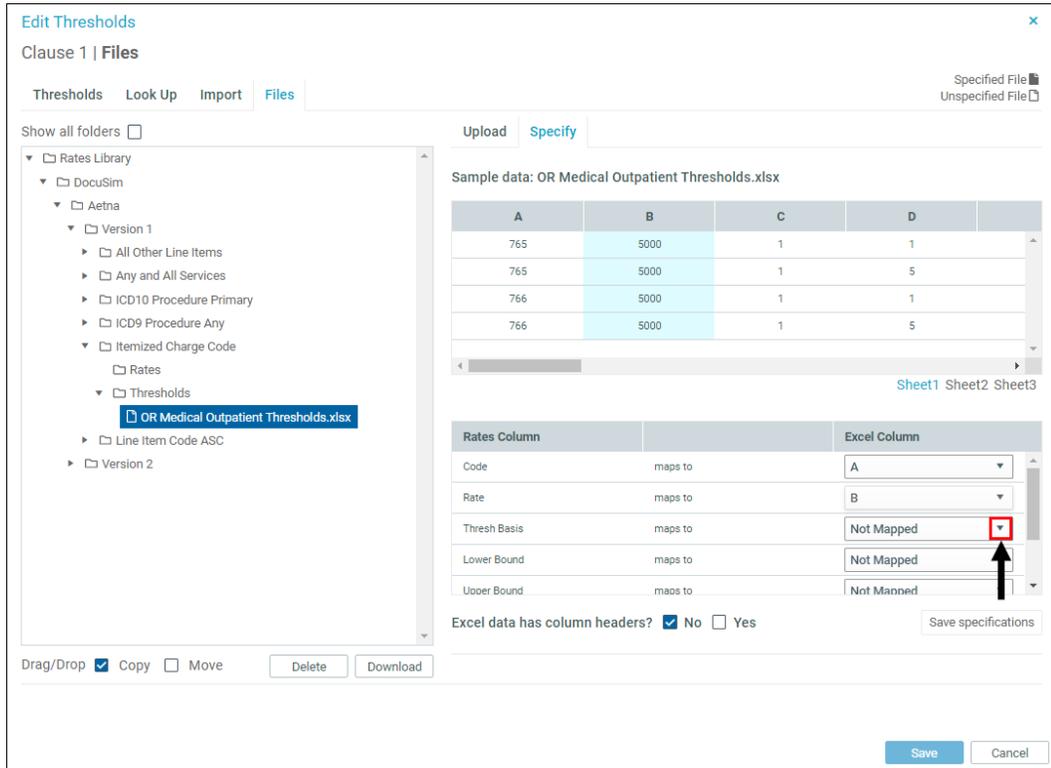
A Description is not needed in the file because it will populate from the corresponding library. Codes that are in the file but do not have a library entry will get a default description of NO DESCRIPTION.

To import threshold files to a clause or term:

1. [Navigate to the desired clause/term.](#)
2. In the **Threshold** column, click the Edit icon (). If you are adding a threshold for the first time, the icon is grayed out.
3. Click the **Files** tab.
4. In the **Upload** tab on the right, drag the threshold file to the **Upload files to a selected folder** area or click **Select files** and select the threshold file.
5. Click **Upload**. The file name displays under the Thresholds folder on the left.
6. Select the file, and then click the **Specify** tab on the right. The top part of the tab displays an image

corresponding to the data in the uploaded file.

7. Define the columns of your file (refer to [Threshold file requirements](#) if needed):
 - a. On the lower right of the dialog, in the **Excel Column**, for each row in the **Rates Column**, select from the drop-down the letter that corresponds to the column in the image above. In the following example, Code corresponds to column A in the threshold file. Do this for each field in the Rates Column that needs to be mapped.



- b. For **Excel data has column headers?** select the appropriate option.
8. Under the mapping table on the right, click **Save Specifications**.
9. At the top of the dialog, click the **Import** tab. The file you uploaded displays under **Specified Thresholds Files**.
10. On the right side of the dialog, click **Attach**. When the file is attached, the file's check box displays as checked.
11. To view the imported thresholds, click the **Thresholds** tab.
12. Close the **Edit Thresholds** dialog.

Using limits

Axiom Contract Management gives you the ability to model “lesser of” and/or “greater of” language common among many payers. These are known as *limits* because they limit reimbursement for a particular case, and can be added to any clause, term, or provision in a contract. In the contract level hierarchy, limits sit on top of clauses and terms, which means they belong to the particular clause or term they reside on. Global limits belong to the provision that they reside on.

▶ Limit restrictions

In Axiom Contract Management, you do not need to worry that your limit may not be compatible with the parent clause or term that you are adding it to because the system handles it automatically. The type of limit you can set on a particular clause or term depends on its parent type. For example, if you are creating a limit on a case rate type clause, the type of limits available when you build it are restricted to case rate calculation bases and types. If you are creating a limit on a line item clause or term, the limit selections will be for line item calculation bases and types.

▶ What is a Maximum?

A Maximum sets a limitation on the particular clause or term it sits on, restricting it to a specified amount that it can receive *at most*. For example, if you would like to limit reimbursement to the lesser of 100% of charges on a DRG Case rate clause, you would set a max on that clause paying 100% of Any/All Services. When the claim is calculated, the calculation will create a record for the DRG Case rate, a record for the Maximum, and then compare the two and pay whichever is less.

▶ What is a Minimum?

A minimum sets a limitation on the particular clause or term it sits on, restricting it to a specified amount that it must receive at a bare minimum. For example, if you have a percent of charge clause that pays 50% of charges but your contract states that you will receive at least \$500 for every claim, then you would create a minimum on your % of charge clause, setting it to pay \$500 of Any/All Services per claim.

▶ Limit hierarchies

In many cases, you will be creating contracts for which you have terms attached to clauses, and would like to limit both the clause and its attached terms. You can do this by setting limits on both terms and their corresponding parent clause; however, there is a hierarchy involved when doing so.

After all applicable terms are calculated, the clause limit is applied as a final step to determine if the limit (s) apply or not. Remember, terms report their reimbursement back to their parent clause, so if a limit exists on the clause, all terms attached to it are subject to that limit.

There are cases in which you will not want to include a particular term’s reimbursement when applying the limit. The system allows for this by enabling you to toggle a term’s Include option. When you set a limit on a term, a check box becomes enabled on the term, allowing you to include its reimbursement or to exclude its reimbursement from reporting back to the parent clause’s limit. In Axiom Contract

Management, these are known as “carve-out” terms. Their reimbursement does not count toward the parent clause limit and are added to the result after the limit winner is determined. The Include option can be located on terms for normal limits, and clauses for global limits.

Creating limits

Limits are defined generally as Maximums and Minimums, and they either cap or raise reimbursement.

You can create limits on the following contract levels:

- Provisions
- Clauses
- Terms

NOTE: Limits on provisions are called *global limits* because they apply to all clauses and terms under the provision.

To create a limit:

1. [Navigate to the desired clause or term.](#)
2. To add a limit to a clause or term, do one of the following:
 - [Add a line item limit.](#)
 - [Add a maximum and/or minimum limit.](#)
3. To add a limit to a provision, [add a global limit.](#)

After setting a limit, the Edit icon is no longer grayed out.

Create a maximum or minimum limit

Adding a minimum or maximum limit to a clause or term restricts the reimbursement to a specified amount that it can receive *at most* or *at least*.

NOTE: You can create only one maximum and one minimum per clause or term.

To create a maximum or minimum:

1. [Navigate to the desired clause or term.](#)
2. In the **Limits** column, click the Limit icon (.
3. On the **Limits** page, do one of the following:
 - To create a maximum, select the **Maximum** check box.
 - To create a minimum, select the **Minimum** check box.
4. In the **Description** field, select a description from the drop-down.
5. In the **Calc Basis** field, select a calc basis from the drop-down.

6. Select a **Calc Type** and a **Calc Measure**.

NOTE: Depending on which calc basis you selected, you may or may not need to, or be able to, select a calculation type and calculation measure.

7. Click **Save**.
8. To set rates, do one of the following:
 - For a single rate, type the rate into the **Rate** field.
 - When multiple rates are required, a Rates button displays below the grayed-out Rates field. To add multiple rates, click the **Rates** button and then [add rates manually](#) or [import rates](#).
9. If you are creating both a maximum and a minimum, select the **Minimum** check box and then complete the fields as you did for the maximum limit. You will need to save your selections before you can enter a rate.
10. Click **Save**.
11. (Optional) If desired, [set an exclusion](#) for the limit(s).

Create a global limit

Global limits allow you to set a maximum and a minimum amount for reimbursement on a claim. Global Limits are applied at the provision level and apply to all clauses and terms under the provision. To apply a limit to a specific clause or term only, see [Creating limits](#).

To create a global limit:

1. [Navigate to the desire clause or term](#).
2. In the **Global Limit** column, click the In the **Global Limits** column, click the Limit icon (.
3. On the **Global Limits** page, add a maximum or a minimum, or both, as desired. The steps for setting both are identical:
 - a. Select the **Global Maximum** (or **Global Minimum**) check box. Below the check box, settings fields display populated with defaults.
 - b. In the **Description** and the **Calc Basis** fields, select from the drop-down. You can search the lists in these drop-downs by clicking the field and then typing the description or calculation basis to search for. The list filters to the first letter or word you typed.
 - c. For **Calc Type** and **Calc Measure** fields, either leave the default or change the selection as needed.

NOTE: In some cases, you will not be able to select an option different from the default if the field is dependent on another field. For example, the selected Calc Type can limit the Calc Measure you can select.

Global Limits

Global Maximum

Description
78

Calc Basis
Any and All Services

Calc Type
Dollar Rate

Calc Measure
Per Claim

Rate
0.00

Global Minimum

Description
78

Calc Basis
Any and All Services

Calc Type
Dollar Rate

Calc Measure
Per Claim

Rate
0.00

NOTE: You cannot set a rate or an exclusion until you save your selections for the other fields.

4. Click **Save**.
5. Do one of the following:
 - For single rates, in the **Rate** field, enter a rate.
 - When multiple rates are required, a Rates button displays below the grayed-out Rates field. To add multiple rates, click the **Rates** button and then [add rates manually](#) or [import rates](#).
6. (Optional) [Set an exclusion](#).
7. Click **Save**.

Create a line-item limit

When a limit is defined on a line-item clause or term, it no longer compares the final reimbursement for that clause or term to the limit, but instead compares the reimbursement to the limit on a line-by-line basis. The most common way to use the line-item limit is by capping fee schedules at the charge amount. The capping of fee schedules is language common to several managed care contracts, which typically would state that all fees are paid the lesser of charges or the pre-determined fee scheduled amount.

To create a line item limit for a clause or term:

1. Create the [clause](#) or [term](#), or [navigate to an existing clause or term](#) that has a line item calculation basis.
2. In the **Limits** column, click the Limit icon (.
3. On the **Limits** page, select either the **Maximum** or **Minimum** check box.
4. From the **Description** drop-down, select a description.

5. From the **Calc Basis** drop-down, select **Line Item Code**.
6. From the **Calc Type** drop-down, select **Dollar Rate**.
7. From the **Calc Measure** drop-down, select **Per Line Item**.
8. Click **Save**.
9. Below the Rates field, click the **Rates** button and attach your fee schedule to the clause/term. See [Import rates for a clause or term](#) for detailed instructions on attaching fee schedules.

Set a limit exclusion

NOTE: Exclusions can be set in two places, depending on the calculation basis. When the Calc Basis for a clause or term is either *Itemized Charge Code* or *LI MPR*, exclusions are set from the clause/term Edit dialog. When the Calc Basis is *Any and All services*, exclusions are set from the Limits/Global Limits dialog.

You can set exclusions on limits placed on clauses or terms, and on global limits placed on provisions. Exclusions are available only when the calculation basis for the provision, clause, or term is Any and All Services. Rates are entered manually.

- Manual entry is used to enter codes into the grid
- Services are excluded by either Date of Service or Total Charges
 - There are *before or after, less than or greater than* selections
 - Numeric values are entered for days or dollars
- Exclude by Service Code drop-down list determines which Code library we are validating against – Charge Code or Rev Code. The functionality will always be the same, whether in clauses, terms, Limits, or global limits. Only the context changes.

To set exclusions on a limit:

1. [Navigate to the provision, clause, or term with the limit needing an exclusion.](#)
2. In the provision/clause/term row, in the **Limits** column (**Global Limits** if a provision), click the Limit icon (🔗).
3. On the **Limits** page, under the Maximum limit fields, click **Exclusions**.
4. In the **Edit Exclusions** dialog, on the right side, from the **Exclude by Service Type** drop-down, select the service type: **Line Item Code** or **Rev Code**.
5. On the left side of the dialog, click **+Add a New Row**.
6. Enter the following information in the new row:
 - a. In the **Code** field, type the code.
 - b. If the code is in the system, the description displays in the **Description** field and cannot be edited. If the code is new to the system, type a description into the field.

- c. Enter a rate in the **Rate** field.

NOTE: You can enter negative rates as well as positive ones. To enter a negative rate, put a minus sign (or hyphen) before the number.

7. To add another exclusion, repeat step 6.
8. Click **Save**.

Add a unit max limit to a Line Item MPR

Use these instructions to add a Unit Max limit on a contract clause or term that uses the Line Item MPR calculation basis. Setting a unit max limit puts a cap on how many units are paid. The unit max acts as a counter; when the limit is reached, additional claims for that item that are eligible are not reimbursed (they are paid at \$0).

NOTE: The Unit Max limit used on an MPR calculation applies to professional claims only.

To add a unit max limit to a Line Item MPR calculation:

1. [Navigate to the clause or term](#) that has the Line Item MPR calculation method.

NOTE: Be sure you have added translation tables and rates to the clause before setting a limit.

2. In the **Limits** column of the clause/term row, click the Limit icon ().
3. On the **Limits** page, click the **Maximum** check box.
4. From the **Description** drop-down, select a description.
5. From the **Calc Basis** drop-down, select **Unit Max**.
Notice that you cannot change the selected Calc Type.
6. From the **Calc Measure** drop-down, select whether the max should be applied per claim, per date, or per line item.

NOTE: When creating a unit max limit, you cannot change the default Calc Type or Calc Measure after selecting Unit Max as the Calc Basis.

Limits

Maximum

Description

Calc Basis

Calc Type

Calc Measure

Rate

7. In the **Rates** field, enter the unit limit. For example, if the *unit* is the number of therapy sessions and the contract stops paying after the 6th visit, enter 6.
8. Click **Save**.

The voucher report for claims that are run against this limit will display the limits and a payment of 0 once the rate cap is met.

Add an exclusion to a unit max limit Line Item MPR calculation

Use these instructions to add an exclusion to a unit max limit on a Line Item MPR calculation for professional contracts. The exclusion allows always-payable services to calculate separately from the items in the reduction calculation while still being counted in the unit max limit.

To add an exclusion to a Unit Max Limit Line Item MPR calculation:

1. If not already set up, [create a clause](#) for the always-payable services with the following selections (do not forget to select the calculation type):
 - a. For **Calc Basis**, select **Line Item Code**.
 - b. For **Calc Measure**, select **Per Line Item**.
 - c. For **Terminal?**, select one:

- **No** – Select to allow a claim to continue calculating on the clauses/terms below this one.
 - **Yes** – Select to prevent a claim from calculating on any clauses/terms below this one.
- d. Click **Save**.
2. [Add a unit max limit to the Line Item MPR calculation.](#)
 3. Exclude the always-payable services from the Line Item MPR:
 - a. At the end of the Line Item MPR row, hover your cursor and click the Edit icon (✎).
 - b. In the **Edit Clause** (or Edit Term) dialog, click the **Exclusions** tab.
 - c. Click **+Add a New Row**.
 - d. In the **Code** column, type the code for an always-payable service. Repeat for any additional codes needing to be excluded.
 - e. Click **Save**.
 4. To ensure that the always-payable services are included in the Unit Max Limit count and that they process first, drag the clause row to the top of the table if it is not already there: select the row and hold down your mouse button while dragging the row to the top of the table. The Unit Max limit Line Item MPR clause does not need to be directly below it as long as it is lower in the table than the one for always-payable services.

Clause	Description	Calc Basis	Calc Type	Calc Measure	Terminal?	Attributes	Rates	Threshold	Limits
1	Professional always payable	Line Item Code	Dollar Rate	Per Line Item	No	<input type="radio"/>			
2	Max limit line item MPR	Line Item Code MPR	Dollar Rate	Per Line Item	Yes	<input type="radio"/>			
3	ALL OTHER CHARGE	All Other Line Items	Dollar Rate	Per Line Item	Yes	<input type="radio"/>			
4	11123	Itemized Charge Code	Dollar Rate	Per Line Item	Yes	<input type="radio"/>			

Using attributes

Users who have permissions to model contracts can add attributes to contracts.

Attributes are custom tags that you add to contracts and contract levels (i.e., versions, provisions, and clauses/terms) to:

- Extend the contract data model – Attributes allow you to add information to a contract that exists on the physical contract but for which there may not be room in the modeled version.
- Organize key aspects of payer contracts

- Enhance reporting across contracts and payers by
- Augment reporting for current calculations and modeling detail
- Ensure key details are collected during contract building

Attributes can be applied at all contract levels: contract, version, provision, clause and term. You can [apply an attribute from the list of attributes](#) for that contract level or you can [import an attribute](#) from another contract at the same level. Contract levels with applied attributes display a circled with check mark icon (☑) in their Attributes column.

Attribute data:

- **Name** – Attribute name
- **Description** – Explanatory information about the attribute
- **Data Type** – The format of the attribute’s data value (e.g., text, integer, percent, etc.). For example, if the Data Type is text, then the attribute’s value field accepts only text entries. The following are the data types for attributes:
 - **Integer** – Accepts a number
 - **Money** – Accepts dollar and cents amounts
 - **Decimal** – Accepts decimal values
 - **Percent** – Accepts percentages
 - **Text** – Accept text
 - **Library** – A drop-down list from which you select a value for the attribute
- **Attribute Type** – The contract level at which the attributed can be used (i.e., contract, version, provision, clause/term)
- **Enabled/Disabled** – Whether or not the attribute is available for use. If an attribute is disabled by the system administrator, it will not display in any attribute selection lists.

Add an attribute to a contract level

You can add attributes to contracts at each level: contract, version, provision, and clause/term. When adding attributes, you can add only attributes of the type that corresponds to the contract level. For example, you can add only version attributes to versions, and clause/term attributes to clauses or terms.

To add an attribute to a contract level:

1. [Navigate to the desired contract level](#).
2. At the end of the contract/version/provision/clause or term row, hover your cursor, and then click the Edit icon (✎).
3. In the **Edit [contract level]** dialog, click the **Attributes** tab.

- In the **Attributes** section, for the desired attribute, select the attribute value from the **Attribute Value** field.

Attribute values depend on the attribute's data type (e.g., text, integer, percent, etc.).

Attribute Data Type	Selection process
Library	Select from a drop-down list of options
Text	Input the desired text
Decimal	Click the arrows to indicate the number of decimals
Integer	Click the arrows to indicate the number of integers
Money	Click the arrows to indicate the amount of money
Percent	Click the arrows to indicate the percentage.

In the following example, to add the contract attribute Color, select the desired color from the drop-down.

The screenshot shows a web interface titled 'Edit Contract' with a close button (X) in the top right. Below the title, there's a breadcrumb 'Aetna | Attributes' and two tabs: 'Settings' and 'Attributes'. The 'Attributes' tab is active. Underneath, there's a section labeled 'Attributes' containing a table with two columns: 'Attribute Name' and 'Attribute Value'. The table lists several attributes: 'Color' (highlighted in blue), 'Decimal', 'FinClass', 'Integer', and 'Money'. The 'Color' attribute has a drop-down menu with 'Select...' as the current selection. The other attributes have empty input fields. A vertical scrollbar is visible on the right side of the table.

- Click **Save**.

Import an attribute to a contract level

Use these instructions to add attributes to contracts by importing them from other contracts. When you import an attribute, the system copies the attribute from the source and applies the copy to the target contract level.

▶ Import an attribute to a contract

- Navigate to the contract that needs the attribute.

2. At the end of the contract row, hover your cursor, and click the Edit icon (✎).
3. In the **Edit Contract** window, click the **Attributes** tab.
4. In the **Import Attributes** section, verify that displayed simulation is the one with an attribute you want to use. If not, then from the **Simulation** drop-down, select the desired simulation.
5. In the list of contracts, locate and expand the level that has the attribute you want.

NOTE: Only contract-level attributes will be included in the list to choose from.

Import Attributes Simulation: Live

Contract Name	Attribute Name	Attribute Value
▶ AETNA		
◀ ORG1 - BCBS		
	Color	Red
	Decimal	
	Integer	
	Money	

1 - 4 of 4 items

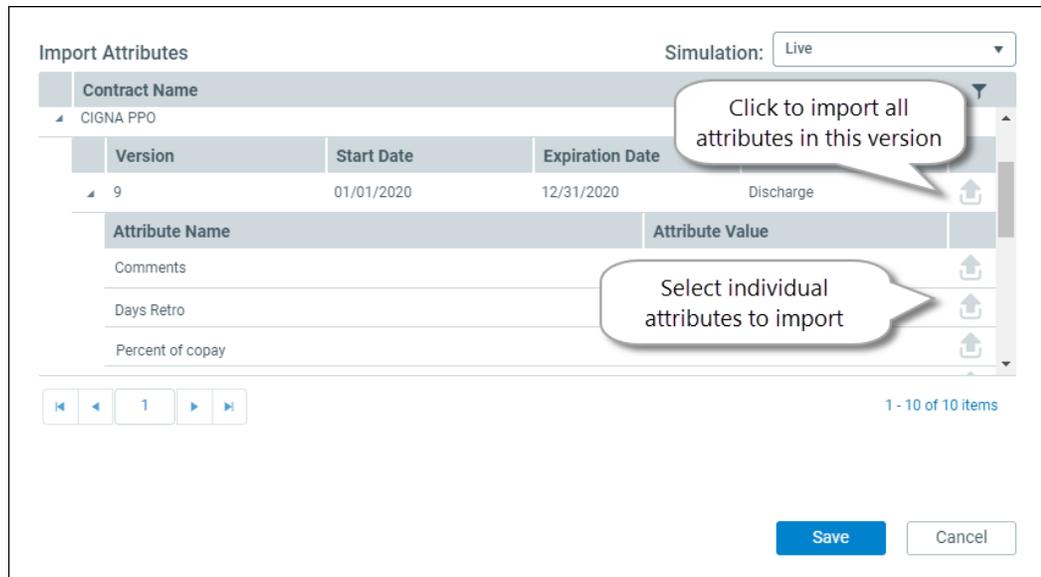
Save Cancel

6. To import the attribute, click the Assign icon (📁).
7. Click **Save**.

▶ Import an attribute to a version, provision, clause, or term

1. [Navigate to the contract level needing the attribute.](#)
2. At the end of the version/provision/clause/term row, hover your cursor and click the Edit icon (✎).
3. In the **Edit [contract level]** dialog, click the **Attributes** tab.
4. Across from the **Import Attributes** section title, from the **Simulation** drop-down, select the desired simulation.
5. In the list of contracts, expand the desired contract levels to reach the desired level and then expand that level item. For example, if you are importing attributes for a clause, navigate to the desired clause and then expand the clause to view its attributes.
6. Do one of the following:

- To import all of the [contract level]'s attributes, click the Assign icon (📌) at the end of the row.
- To import selected attributes, click the Assign icon (📌) for the desired attributes.



Example of version-level attribute list

7. Click **Save**.

Edit or remove an attribute from a contract

Use these instructions to change an assigned attributes value or to remove the attribute from the contract level.

To edit or remove an attribute:

1. [Navigate to the desired contract level.](#)
2. At the end of the contract/version/provision/clause or term row, click the Edit icon (✎).
3. In the **Edit [contract level]** dialog, click the **Attributes** tab.
4. Do any of the following:
 - To change an assigned attribute's value, select the value from a drop-down or, if an integer, money, or percent value, type in the desired amount; the field is automatically formatted for the entry type. If a text value, edit the text as desired.
 - To remove the attribute from the contract level, if the value is from a drop-down, select from the drop-down. If the value is an integer, delete the value (setting the value to zero does not remove the attribute, it just changes it to 0) by selecting the value and pressing

the **Delete** key.

5. Click **Save**.

Managing simulations

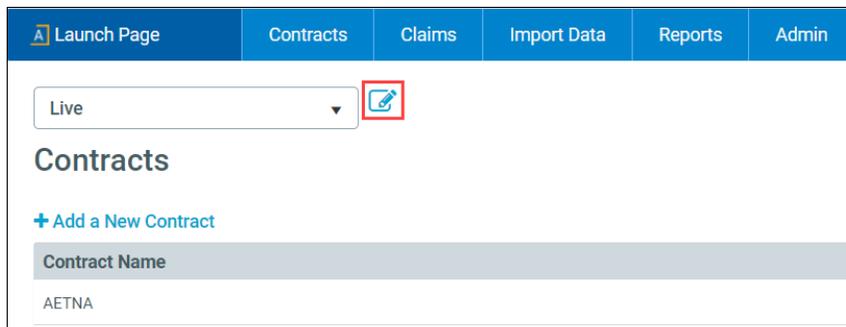
The ability to run a nearly endless number of simulations is one way that Axiom Contract Management sets itself apart from older editions. Simulations are an essential tool during contract negotiations, allowing you to model a number of proposed contracts and run reports for comparison to determine which proposal is most profitable.

Create a simulation

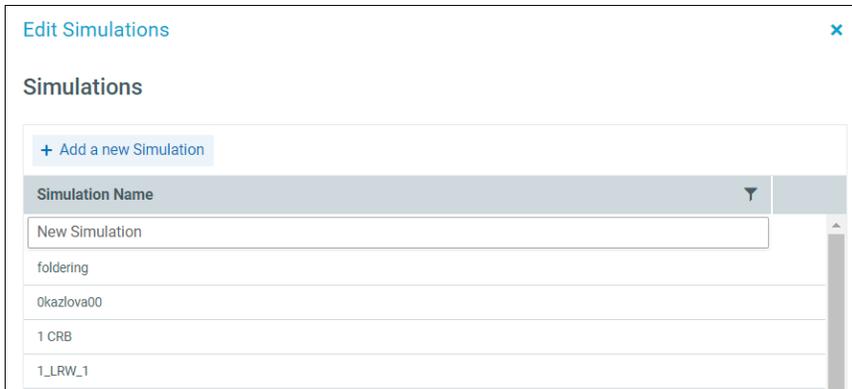
Creating simulations that model the identical contract structure allows you to get a more accurate view of how facility reimbursement is changing, and which services are affected. After creating a simulation you can add contracts to it.

To create a simulation:

1. At the top of the **Contracts** page, to the left of the simulation drop-down, click the Edit icon:



2. In the **Edit Simulations** dialog, above the table of simulations, click **Add a new Simulation**. A new simulation row is added to the table, as shown in the following example.



3. In the new row, type a name for the simulation and then click **Save**. The newly created environment can now hold contracts.
4. [Add a contract](#) to the simulation.

Edit or delete a simulation

Use these instructions to change a simulation name or to delete a simulation.

To change a simulation name or delete a simulation:

1. At the top of the **Contracts** page, click the **Edit Simulations** link.
2. In the **Edit Simulation** dialog, for the desired simulation, click and then edit the name.
3. To delete a simulation, at the end of the simulation row, click the Delete icon (🗑️).
4. Click **Save**.
5. Close the **Edit Simulation** dialog.

Setting up reporting across simulations

Axiom Contract Management administrators can assign simulations to the Expected Payment drill-down reporting field for side-by-side reporting and analysis. Administrators can map up to four simulations for a total of five mapped simulations. The first mapped simulation is to the Live environment, which you cannot change.

▶ How the mapping works

The Estimated Payment fields in drill-down reports are used in this case to compare estimated payments between different simulation environments. These fields are defined with the following field names:

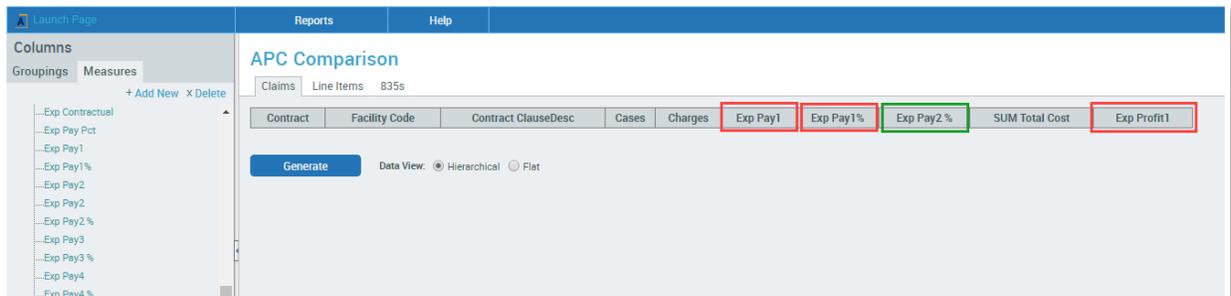
- TotalExpectedPayment1 where 1= Live simulation; so TotalExpectedPayment1 equates to Estimated Payments from Live in drill-down reports
- TotalExpectedPayment2 where 2 = a simulation of your choice
- TotalExpectedPayment3 where 3 = a simulation of your choice
- TotalExpectedPayment4 where 4 = a simulation of your choice
- TotalExpectedPayment5 where 5 = a simulation of your choice

When users build drill-down reports, they need to include the TotalExpectedPayment variable for the desired simulation in a calculated field they add to the report.

In the following example, a contract is compared between two simulations. The calculated fields **Exp Pay1**, **Exp Pay1%**, and **Exp Profit1** are mapped to the Live environment by using the variable Total Expected Payment1 in the equation for each calculated field:

- $\text{Exp Pay1} = \text{Sum}(\text{Total Expected Payment1})$
- $\text{Exp Pay1\%} = \text{Sum}(\text{Total Expected Payment1}) / \text{Sum}(\text{Total Charges}) * 100$
- $\text{Exp Profit1} = \text{Sum}(\text{Total Expected Payment1}) - \text{Sum}(\text{Total Cost})$

The calculated field **Exp Pay2%** is mapped to the EPAY2 simulation by using the variable TotalExpectedPayment2 in the equation: $\text{Exp Pay2\%} = \text{Sum}(\text{Total Expected Payment2}) / \text{Sum}(\text{Total Charges}) * 100$



The generated example report looks like the following:

Launch Page Reports Help

APC Comparison

Claims Line Items

Rows View Settings

Limit Design View Export 1 record found

Contract	Cases	Charges	Exp Pay1	Exp Pay1%	Exp Pay2 %	SUM Total Cost	Exp Profit1
AETNA	14	82,163	73,946	90.0	92.8	26,946.11	47,000.20
Facility Code ^	Cases	Charges	Exp Pay1	Exp Pay1%	Exp Pay2 %	SUM Total Cost	Exp Profit1
13 - Hospital Outpatient	14	82,163	73,946	90.0	92.8	26,946.11	47,000.20
Contract ClauseDesc ^	Cases	Charges	Exp Pay1	Exp Pay1%	Exp Pay2 %	SUM Total Cost	Exp Profit1
SURGICAL	14	82,163	73,946	90.0	92.8	26,946.11	47,000.20
	14	82,163	73,946	90.0	92.8	26,946.11	47,000.20
	14	82,163	73,946	90.0	92.8	26,946.11	47,000.20

Applied Filters Add Filters

IMPORTANT: Since only administrators can see which simulations are mapped to each mapping assignment field, as an administrator, you will need to create the custom calculated fields needed and name them appropriately. For example, a calculated field representing Sum(Total Expected Payment 1) for a simulation named Aetna KMC could be named **AetnaKMC Exp Payment**. For information about creating calculated fields, see [Add calculated fields to a report](#).

► Map simulations to drill-down reporting Expected Payment fields

To map simulations to expected payments variables:

1. In the main menu header, click **Admin > Simulation Mapping**.
2. For Mapping Assignment 2, from the drop-down, pick a simulation to assign to the Estimated Payment drill-down reporting field.

NOTE: Mapping Assignment 1 is set to the Live simulation environment. This cannot be changed.

Launch Page | Contracts | Claims | Import Data | Reports

Simulation Mapping

Mapping Assignment 1
Live

Mapping Assignment 2
A ChgAdj Per Line

Mapping Assignment 3
CKK Test Simulation

Mapping Assignment 4
LileTesting

Mapping Assignment 5
Kendo Testing Chrome

Save

3. Repeat for the other mapping assignments as desired.
4. Click **Save**.

When you make a change to this assignment and click Save, the field is cleared to ensure that all past calculation results from previously used simulations are not still stored and used in the report.

NOTE: Results from a newly assigned simulation become available only after a user calculates contracts within the selected simulation. Past calculation results are not retained for a simulation when it is assigned to a different mapping field.



Working with claims

The View a Claim function in Axiom Contract Management allows you to access or view all information related to claims. The multiple forms of information are compiled from data contained in the Claims, Payments, and adjustments imports. Other important data fields are calculated by the system, or imported from other Syntellis systems.

You have the following options for selecting and viewing claims:

- **Patient Account #** – Account number or billing identification number imported from the claim
- **Patient Name** – Patient name imported from the claim (you can also search for the name in this field if you do not know the full name)
- **Claim #/UCRN** – Unique record number or Claim Sequence number assigned by the patient accounting system

▶ Access View a Claim

To access **View a Claim**:

In the main menu header, click **Claims > View a Claim**.

The Claims page opens with fields for selecting a claim to view:

Claims

View By: Patient Acct. # Account # Live Claims Only View Claim(s)

The Axiom Contract Management system defaults to show Live Claims Only. To have the system return results for all instances of the claims, clear the **Live Claims Only** check box before making a View a Claim Selection.

View a claim by selected criteria

Use these instructions to view claims by patient account number, patient name, or client #/UCRN.

NOTE: By default, the selection criteria includes only live claims. To include all claims, clear the **Live Claims Only** check box before clicking **View Claim(s)**.

To select claims by patient account number:

1. On the Claims page, from the **View By** menu, select **Patient Acct #**.
2. In the **Account #** field, enter the account number and then click **View Claim(s)**.

Acct #	Claim Type	Organization	Patient Name	MRN	Admit Date	Discharge...	Sub Date	Total Charges
C921371604	837I - 111 - Active ...	KREG MEDICAL CT...	[REDACTED]	M54748	09/24/2013	10/07/2013	10/29/2013	\$89,836.46
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/24/2013	09/24/2013	10/29/2013	\$21.00
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/25/2013	09/25/2013	10/29/2013	\$42.00
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/25/2013	10/04/2013	10/29/2013	\$1,164.00
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/27/2013	09/27/2013	10/29/2013	\$787.50
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/27/2013	09/27/2013	10/29/2013	\$140.00
C921371604	837P - Active Recor...	KREG MEDICAL CT...	[REDACTED]	M54748	09/28/2013	09/29/2013	10/29/2013	\$400.00

To select claims by patient name:

1. From the **View By** menu, select **Patient Name**.
2. In the **Patient Name** field, type the patient last name, and then click **View Claims(s)**. If this does not return the desired claim, type in the patient's first and last names.

TIP: You can also search for patient names using the percent symbol % as a wildcard: %son (returns claims for patients whose first or last name ends in the letters "son"); son% (returns claims for patients whose first or last name begins with the letters "son"); %son% (returns claims for which the letters "son" appear anywhere in the first or last name).

NOTE: If the criteria selected matches multiple claims, all of those claims will appear in the Account Selection List.

Acct #	Claim Type	Organization	Patient Name	MRN	Admit Date	Discharge...	Sub Date	Total Charges
26463774	837P - Active Recor...	KREG MEDICAL CT...	SMITH, [REDACTED]		10/03/2006	10/10/2006	10/15/2006	\$100.00
26462967	837P - Active Recor...	KREG MEDICAL CT...	SMITH, [REDACTED]		10/03/2006	10/10/2006	10/15/2006	\$100.00
R03996273 #01	837P - Active Recor...	KREG MEDICAL CT...	SMITH, [REDACTED]		03/21/2005	03/21/2005	03/26/2005	\$520.24
26407789	837P - Active Recor...	KREG MEDICAL CT...	SMITH, [REDACTED]		10/03/2005	10/03/2005	10/15/2005	\$79.04
CLMNO12345	837P - Active Recor...	KREG MEDICAL CT...	Smith, [REDACTED]		02/01/2004	02/01/2004	03/01/2004	\$2,232.93
TS234H3	837P - Active Recor...	KREG MEDICAL CT...	SMITH, [REDACTED]		05/06/2005	05/06/2005	07/11/2005	\$252.71
756049CRB	837I - 131 - Active ...	QA Test Code 01	SMITH, [REDACTED]		04/01/2005	04/01/2005	06/30/2005	\$50.00

To select claims by Claim #/UCRN:

1. From the **View By** menu, select **Claim #/UCRN**.

2. In the **Claim #/UCRN** field, enter the number and then click **View Claim(s)**.

▶ Account Selection List details

TIP: To sort any column in the table of selection list results, click the gray column head.

The account selection list results contains the following claim fields:

- **Acct#** – Lists the account number imported from the claims.

NOTE: Account numbers in this column are also links that will take you to the Claim Details page for the respective claim.

- **Claim Type** – Identifies the type of claim and its status in Axiom Contract Management
- **Organization** – Identifies the organization imported from the claim
- **Patient Name** – First and Last name imported from the claim
- **MRN** – Medical Record Number imported from the claim, if applicable
- **Admit Date** – Admission date imported from the claim
- **Discharge Date** – Discharge data imported from the claim
- **Sub Date** – Submission date imported from the claim
- **Total Charges** – Total Charge amount imported from 0001 line on the claim form minus non-covered charges

View claim details

The claim details page of Axiom Contract Management provides an easy-to-use interface that allows you to view all information associated with a claim. Use the tab-based pages to navigate from summary-level information to detailed line item information. To view information on a tab, click the tab name.

Launch Page Contracts Claims Import Data Reports Admin Help Logout Queued Tasks: 0 ?

Claims > Patient Acct. #: C921371604

Claim Details

View Voucher Recalculate Go to Contract Grouper Edits View 835 Access this menu from any tab

Summary Codes Demographics Insurance Line Items Physicians Postings Tracking

Summary for: C921371604 --

Claim Information					
Patient Account #:	C921371604	Calculated Contract:	ORG1 - Medicare - Version 5	Admit Date:	9/24/2013
Claim Number:	U922482469	Type of Bill:	111 - Hospital-Inpatient (Part A)-Admit Through	Discharge Date:	10/7/2013
Import Batch #:	2291 - 8371	Patient Status:	20 - Patient Expired	Submission Date:	10/29/2013
Last Recalc:	2/28/2014 11:24:14 AM	Total Covered Chgs:	\$89,836.46	Length of Stay:	13
Ins. Plan Code:	MC001	Non-Covered Chgs:	\$0.00	Covered Days:	13
DRG:	853				

Claim Totals					
Expected Payment:	\$35,015.41	Actual Payments:	\$950.23	Payment Variance:	\$34,065.18
Expected Contractual:	\$54,821.05	Actual Contractual:	\$1,838.27	Contractual Variance:	\$52,982.78
Total Cost:	\$32,939.41	Actual Profit:	(\$31,989.18)	Medicare Deductible:	Not Imported
Fixed Cost:	\$1,147.22	Expected Profit:	\$2,076.00		
Variable Cost:	\$17,542.05				
Indirect Cost:	\$14,250.14				

Claim Tracking					
Claim Status:	Open	Opened By:		Assignment:	Claim Denial
Last Activity Date:	7/8/2014 12:54:29 PM	Closed By:		Assigned To:	CMASupport CMASupport

Above the row of tabs is a line of additional options:

- **View Voucher** – Click this button to open a new browser tab containing the Claim Voucher Report. The Claim Voucher Report provides an explanation of exactly how the system arrived at the expected payment, and how much the payer has paid. This information is ideal for follow-up with the payers to ensure proper payments are being received.

Launch Page Contracts Claims Import Data Reports Admin Help Logout Queued Tasks: 0 ?

Simulation: Live Claim Voucher Report

BillID: C921371604	Admission Date: 9/24/2013	Total Charges: \$89,836.46
Claim Status: Active	Discharge Date: 10/7/2013	Non-Covered Charges: \$0.00
Patient Name: [REDACTED]	Provision Date: 5/9/2013 to 9/30/2013	Expected Contractual: \$54,821.05
Insurance ID: SMID3769	Provision: Hospital Inpatient (Including Medicare Part A)	Actual Contractual: \$1,838.27
Bill Code: 111	Contract Name: ORG1 - Medicare	Expected Payment: \$35,015.41
Insurance Plan Code: MC001	Organization: KREG MEDICAL CTR ORG1	Actual Payments: \$950.23
Covered Days: 13		Contractual Variance: \$52,982.78
Version #: 5		Balance Due: \$34,065.18

TOTAL CLAUSE REIMBURSEMENT \$35,015.

Clause # 3: CMS DRG \$35,015.

CMS DRG

Calculation Basis CMS DRG

This Clause Matched on the Following CMS DRG as a Standard DRG Case

This Standard Amount (Minus Deductible) was Adjusted by the Sequestration Rate of 0.9800000000

Patient Deductible amount available for calculation:

Code	Desc	Standard Amount	Estimated Payment
853	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	\$35,705.85	\$35,015.41

Expected Payment for this Clause: **\$35,015.41**

FINAL CLAIM EXPECTED PAYMENT \$35,015.

- **Recalculate** – Click this button to recalculate the current claim. For more information, see [Recalculate a claim from Claim Detail](#).

- **Go to Contract** – Click this button to open the contract’s clause or term page to which the claim applies in a new browser tab. Additionally, the specific contract clause is highlighted, as shown in the following example.

Live > ORG1 - Medicare > Version 5 (10/1/2012 - 9/30/2013) > Hospital Inpatient (Including Medicare Part A) (5/9/2013 - 9/30/2013)

Clauses

+ Add a New Clause

Clause	Description	Calc Basis	Calc Type	Calc Measure	Terminal?	Attributes	Rates	Threshold	Limits
1 >	TRANSFER 03,05,06	Discharge Status	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 >	TRANSFER 02	Discharge Status	Dollar Rate	Per Claim	Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 >	CMS DRG	CMS DRG			Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 >	NO QUALIFYING CLAUSE	Any and All Services	Dollar Rate	Per Claim	No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- **Grouper Edits** – Click this button to detail all APC and eAPG edits. This is important when determining why a Medicare claim has an expected payment = \$0. In Axiom Contract Management, if there is an edit on a line item (code, modifier, etc.), the system automatically pays the claim at \$0. This helps you easily identify claims that can potentially be fixed and re-billed for a higher total redemption from Medicare. Following is an example of Grouper Edits for APC ICD9 Code edits.

Grouper Edits ✕

Simulation: Claim Number: 182833

APC Claim Edits
 APC ICD9 Code Edits
 APC Line Item Edits
 eAPG Claim Edits
 eAPG ICD9 Code Edits
 eAPG Line Item Edits

Edit	Edit Description	Procedure Code	Procedure Type
0002	CMS: OCE ICDEdit - Diagnosis and age conflict. (RTP)	76503	D2
0002	CMS: OCE ICDEdit - Diagnosis and age conflict. (RTP)	76522	D3
0002	CMS: OCE ICDEdit - Diagnosis and age conflict. (RTP)	V3000	D1

▶ Claim Detail tabs

▶ Summary tab

The Summary tab displays information identifying the type of account, the contract used for calculation, and important demographic information. The Summary tab also contains all the information necessary to identify whether a claim is paid correctly:

- **Expected Payment** – Calculated expected payment using contract terms
- **Expected Contractual** – Total Covered Charges minus Expected Payment
- **Actual Payments** – Total of all Payments imported by Account # from payment import file
- **Actual Contractual** – Total of insurance contractual imported by Account # from Contractual File
- **Payment Variance** – The difference between Expected Payment and Actual Payments
- **Contractual Variance** – The difference between Expected Contractual and Actual Contractual

- **Total Cost** – Sum of Fixed, Variable, and Indirect Cost
- **Fixed Cost** – Imported from Cost Accounting System – represents fixed cost (materials and labor)
- **Variable Cost** – Imported from Cost Accounting System – represents variable cost (overtime)
- **Indirect Cost** – Imported from Cost Accounting System – represent cost not specifically assigned to dept.
- **Actual Profit** – Total Covered Charges minus Actual Payments
- **Expected Profit** – Total Charges minus Expected Payment

▶ Codes tab

The Codes tab contains all code-related information imported from the claim form. This information includes:

- ICD9 Codes – Diagnosis and Procedure Codes
- Condition Codes
- Occurrence Codes
- Occurrence Span
- Value Codes
- User Defined Codes

You can navigate through the various code types by clicking the name of that code type. Code type selection options are shown outlined in red in the following example.

Claims > Patient Acct. #: C921743197

Claim Details

[View Voucher](#) [Recalculate](#) [Go to Contract](#) [Group Edits](#)

Summary **Codes** Demographics Insurance Line Items Physicians Postings Tracking

Codes For: C921743197 -- [View Details](#)

Select Code Type: ICD9 Condition Codes Occurrence Codes Occurrence Span Value Codes User Defined Codes

Diagnosis Codes				Procedure Codes			
Type	Code	POA	Description	Type	Code	Date	Description
Diag. 1	V30.00		Single Lb In-Hosp W/O Cs	No records available.			
Diag. 2	765.03		Extreme Immatur 750-999g				
Diag. 3	765.22		24 Comp Weeks Gestation				
Diag. 4	760.2		Maternal Infec Aft Nb				

▶ Demographics tab

Use the Demographics tab to view demographic information imported from the claim.

Claims > Patient Acct. #: C921743197

Claim Details

View Voucher Recalculate Go to Contract Grouper Edits

Summary Codes **Demographics** Insurance Line Items Physicians Postings Tracking

Demographics for: C921743197 -- [Redacted]

Patient Information		Admission Information		Responsible Party Information	
Medical Record #:	M122860	Admit Date:	10/30/2010	Responsible Party 1:	LastName, FirstName (HIPAA)
Patient Address:	686 Leblanc Road, Atlanta GA 30318	From Date:	10/30/2010	Responsible Party 2:	Address1 (HIPAA)
Birth Date:	10/30/2010	Admit Source:	5 - Transfer From SNF	Responsible Party 3:	Address2 (HIPAA)
Sex:	M	Admit Type:	4 - Newborn	Responsible Party 4:	Address3 (HIPAA)
Patient Weight:		Discharge Information			
Patient Height:		Discharge Date:	10/30/2010		
		Discharge Status:	20 - Patient Expired		
Provider Information		Pay-to-Provider Information		Claim Remarks	
Provider Details 1:	Kreg Medical Center2	Pay-to-Name:	Kreg Medical Center2	Remarks 1:	Remarks1 (HIPAA)
Provider Details 2:	3525 Piedmont Road, NE	Pay-to-Address 1:	8 Piedmont Center Suite 412	Remarks 2:	Remarks2 (HIPAA)
Provider Details 3:	8 Piedmont Center Suite 412	Pay-to-Address 2:	Atlanta, GA 30305	Remarks 3:	Remarks3 (HIPAA)
Provider Details 4:	Atlanta, GA 30305			Remarks 4:	Remarks4 (HIPAA)
Federal Tax #:	99-00005				
NPI#:	87000011				

► Insurance tab

Use the Insurance tab to view information imported from the claim associated with Primary, Secondary, and Tertiary payer information.

Claims > Patient Acct. #: C921543391

Claim Details

View Voucher Recalculate Go to Contract Grouper Edits View 835

Summary Codes Demographics **Insurance** Line Items Physicians Postings Tracking

Insurance Information For C921543391 -- [Redacted]

Payer Name	Health Plan ID	Rel. Info	Asg. Ben.	Prior Payments	Est. Amount Due	Provider ID
AETNA KY	CI012	Y	Y	\$0.00	\$0.00	PPN5

Insured's Name	Patient Relationship	Insured's Unique ID	Group Name	Insurance Group #
LastName, FirstName (HIPAA)	18-Self	SMID27163		SGNum2944

Treatment Auth. Codes	Document Control #	Employment Status	Employer Location	Employer Name
35032508			City, State (HIPAA)	

▶ Line Items tab

Line Items tab is very important for claim review. Access the tab by clicking the **Line Items** tab. This tab displays imported Revenue Code detail for all claims, and Medicare APC information for Medicare OP claims. The following examples represent a view of a Non-Medicare Claim and a Medicare Claim, respectively.

Non-Medicare claim

Line Items For: C921771875 -- [Redacted]

Rev Code	Line Item Code	APC	SI	Units	Service Date	Charge Amount	Non-Covered ...	Batch #
0258			N	1	12/31/2013	\$35.91	\$0.00	2462
0301	80148		A	1	12/31/2013	\$134.00	\$0.00	2462
0305	8502		A	1	12/31/2013	\$89.00	\$0.00	2462
0306	8780459		A	2	12/31/2013	\$186.00	\$0.00	2462
0307	81001		A	1	12/31/2013	\$61.00	\$0.00	2462
0309	36415		A	1	12/31/2013	\$20.00	\$0.00	2462
0450	9928325	00614	V	1	12/31/2013	\$328.00	\$0.00	2462
0730	93005	00099	S	1	12/31/2013	\$166.00	\$0.00	2462

1 - 8 of 8 items

* Hover over codes for descriptions

Medicare claim

Line Items For: C921796617 -- [Redacted]

Rev Code	Line Item Code	APC	SI	Units	Service Date	Charge Amount	Non-Covered ...	Batch #
0636	90656		L	1	1/29/2014	\$76.12	\$0.00	2494
0771	60008	00436	S	1	1/29/2014	\$42.00	\$0.00	2494

1 - 2 of 2 items

* Hover over codes for descriptions

Medicare Claims contain two non-Imported Fields with values assigned by the 3M APC GPS software during import:

- **APC** – Ambulatory Payment Classification
- **Status Indicator (SI)** – Identifies type of APC

To see the description of a code listed in the Line Items tab, move your cursor over that tab, as shown in the following example:

Rev Code	Line Item Code	APC	SI	Units	Service Date	Charge Amount	Non-Covered ...	Batch #
0655	90656		L	1	1/29/2014	\$76.12	\$0.00	2494
0771	Drugs Requiring Id - Detail Codes	00436	S	1	1/29/2014	\$42.00	\$0.00	2494

► Physicians tab

The Physician tab displays physician information imported from the claim.

Physician Type	Physician Name	Primary ID Type	Primary ID	Secondary ID Type	Secondary ID
Attending	LastName, Firstname2071		P999709		P1896321
Other 1	LastName, Firstname266		P99940		P1896323
Surgical	LastName, Firstname125		P999892		P1896322

► Postings tab

The Postings tab details each payment posted to a claim. The system default view is Payments; however, you can change the view to show the different types of postings individually or together by clicking the **Contractuals** or **All** radio buttons, respectively.

Posting Date	Payment Date	Payer Code	Post Code	Payment Type	Is Prof?	Amount	Batch Number
11/11/2013	11/11/2013	MC001	13109	Payment - P1		\$0.00	6111
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$44.50	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$6.20	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$44.50	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$438.39	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$153.18	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$12.41	6125
11/13/2013	11/13/2013	MC001	1310	Payment - P1		\$80.19	6125
11/18/2013	11/18/2013	MC001	1310	Payment - P1		\$37.48	6161
12/03/2013	12/03/2013	MD001	1230	Payment - P1		\$2.63	6266

▶ Tracking tab

The Tracking tab allows you to mark an individual claim for follow-up. This includes identifying:

- The claim's status
- A generalized assignment category
- The person the claim is assigned to
- Ten user-defined fields
- Any additional notes

It also allows you to view the claim's Tracking History to see how it has been managed, and follow it through the recovery process. A summary of this information is provided on the Summary tab for quick reference when you open an account.

Claims > Patient Acct. #: C921373874

Claim Details

View Voucher Recalculate Go to Contract Grouper Edits View 835s

Summary Codes Demographics Insurance Line Items Physicians Postings **Tracking**

Tracking For: C921373874 --

Claim Status: Closed	Denial Category: None	Denied Amount: 899.00
Assignment: Claim Denial	Denial Reason Code: P1197 No Auth	Patient Responsibility: 0.00
Assigned To: Carolanne	Service Location: None	UP - Identified: 899.10
	Priority: None	UP - Recovered: 0.00
	Closed Reason Code: Appeal Denied	UP - Unrecoverable: 899.10

Notes:

Tracking History

Date	Status	Assignment	Assigned To	Notes	Modified By	Denial Category	Denial Reason Code	Service Location	Priority	Closed Reason Code	Denier
12/22/2020	Closed	Claim Denial	Carolanne Browne	testing	Admin Admin		P1197 No Auth			Appeal Denied	
5/14/2020	Closed	Claim Denial	Brendan Krieter	testing	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Krieter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Krieter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Krieter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	None	Claim Denial	Brendan Krieter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Pending Ins Rep	Unassigned	Brendan Krieter	No Pre Cert	Admin Admin						
1/7/2019	Pending Ins Rep	Claim Denial	Brendan Krieter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	

View Grouper Edits for a claim

When claims are grouped and priced, they may create edits that affect reimbursement. You can view these edits on a claim and switch to any relevant simulation these claims apply to from the Grouper Edits dialog. A Simulation menu at the top of the dialog allows you to select different simulations to see any grouper edits that simulation produces for the given contract (the contract needs to be modeled in the simulations you select).

To view grouper edits on a claim:

1. From the Claims menu, select **View a Claim**.
2. Filter for and select the desired claim.
3. On the **Claim Details** page, in the menu above the tabs, click **Grouper Edits**.
4. At the top left of the **Grouper Edits** dialog, from the **Simulation** drop-down, select the desired simulation.

The report lists any grouper edits that resulted from grouping and pricing the claim in the selected simulation.

Grouper Edits ✕

Simulation: Live Claim Number: 182833

APC Claim Edits
 APC ICD9 Code Edits
 APC Line Item Edits
 eAPG Claim Edits
 eAPG ICD9 Code Edits
 eAPG Line Item Edits

Edit	Edit Description	Procedure Code	Procedure Type
0002	CMS: OCE ICD9Edit - Diagnosis and age conflict. (RTP)	76503	D2
0002	CMS: OCE ICD9Edit - Diagnosis and age conflict. (RTP)	76522	D3
0002	CMS: OCE ICD9Edit - Diagnosis and age conflict. (RTP)	V3000	D1

Using claim tracking

Use Claim Tracking to organize institutional claims that need attention and easily locate them at another time.

Assign a claim

Assigning a claim is the first step in using the Claim Tracking feature.

To assign a claim:

1. In the main menu header, click **Claims > View a Claim**.
2. In the **View Claim By** section on the left, select the criteria for the claims to view, then click **View Claims**.
3. In the **Acct #** column, click the number of the claim to assign.
4. On the **Claim Details** page, click the **Tracking** tab.
5. Select the following claim details:
 - **Claim Status** – Select Open, Closed, or other user-defined status (Needs Review, Insurance Pending, etc.).
 - **Assignment** – Select the general reason for assignment. This is also a user-defined field.
 - **Assigned To** – Select the user assigned to this claim. This is a list of all system users, and is generated by Syntellis, and cannot be changed.
 - **User Defined (1 – 10)** – Select up to five user-defined fields with numeric formats, and five with character formats. Administrators can edit them as needed.
 - **Notes** – (Optional) Add any additional information in this text box. For example, provide details about the generalized assignment reason to offer more specifics to this particular claim.
6. Click **Save**. The claim displays in the Tracking History section.

Launch Page | Contracts | Claims | Import Data | Reports | Admin | Help | Logout | Queued Tasks: 0 | ?

Claims > Patient Acct. #: C921373874

Claim Details

View Voucher | Recalculate | Go to Contract | Grouped Edits | View 835s

Summary | Codes | Demographics | Insurance | Line Items | Physicians | Postings | **Tracking**

Tracking For: C921373874 --

Claim Status: <input type="text" value="Closed"/>	Denial Category: <input type="text" value="None"/>	Denied Amount: <input type="text" value="899.00"/>
Assignment: <input type="text" value="Claim Denial"/>	Denial Reason Code: <input type="text" value="P1197 No Auth"/>	Patient Responsibility: <input type="text" value="0.00"/>
Assigned To: <input type="text" value="Carollanne"/>	Service Location: <input type="text" value="None"/>	UP - Identified: <input type="text" value="899.10"/>
	Priority: <input type="text" value="None"/>	UP - Recovered: <input type="text" value="0.00"/>
	Closed Reason Code: <input type="text" value="Appeal Denied"/>	UP - Unrecoverable: <input type="text" value="899.10"/>

Notes:

[Save Changes](#)

Tracking History

Date	Status	Assignment	Assigned To	Notes	Modified By	Denial Category	Denial Reason Code	Service Location	Priority	Closed Reason Code	Deniec
12/22/2020	Closed	Claim Denial	Carollanne Browne	testing	Admin Admin		P1197 No Auth			Appeal Denied	
5/14/2020	Closed	Claim Denial	Brendan Kreter	testing	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Kreter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Kreter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Closed	Claim Denial	Brendan Kreter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	None	Claim Denial	Brendan Kreter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	
1/7/2019	Pending Ins Rep	Unassigned	Brendan Kreter	No Pre Cert	Admin Admin						
1/7/2019	Pending Ins Rep	Claim Denial	Brendan Kreter	No Pre Cert	Admin Admin		P1197 No Auth			Appeal Denied	

Claim details example

NOTE: System administrators can build new Claim Status options, Assignment options, and User Defined options into the system from Claim Tracking, as described in [Edit user-defined claim tracking quick filters](#).

As you follow the claim through the recovery process, you can make additional notes to any of the critical information on the page. The most recently saved information displays at the top of the Tracking History section.

Search assigned claims

You can search for assigned claims using the Quick Filters option or an existing filter containing saved criteria.

To search for assigned claims using quick filters:

1. In the main menu header, click **Claims > Track/Assign Claims**. The claim tracking page opens.
2. In the **View Tracking** tab, leave the default filter setting at **Use Quick Filters**.
3. In the **Select quick filters** section, select the following claim details:
 - **Assignment** – Select the general reason for assignment, or select **Any** to return all claims that match any assignment.
 - **Assigned To** – Select the user assigned to this claim, or select **Any** to return claims that match any user. This is a list of all system users, and is generated by Syntellis, and cannot be changed.

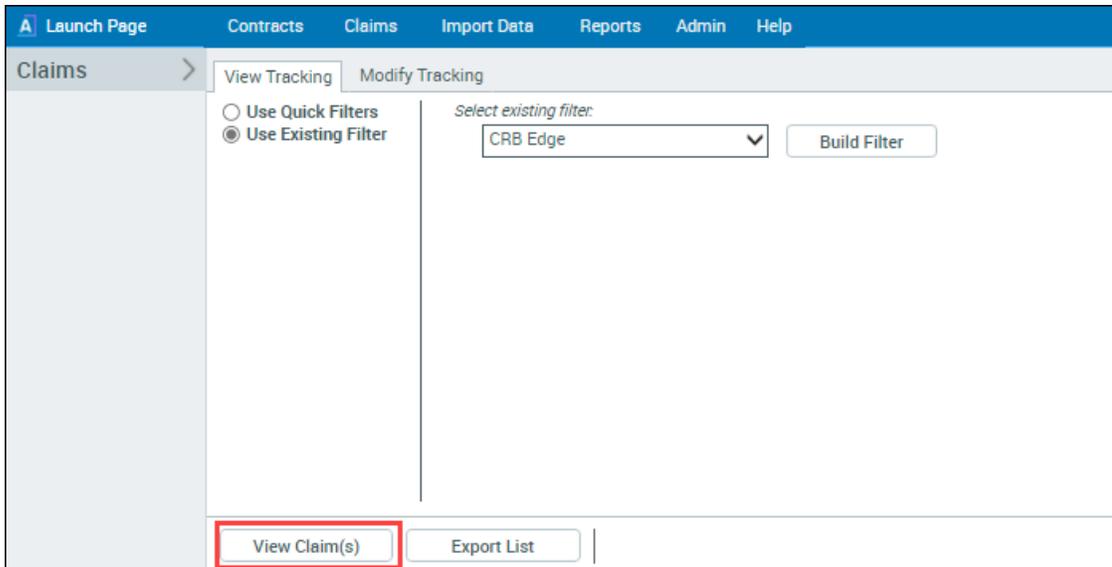
- **Status** – Select **Open**, **Closed**, or other user-defined status (Needs Review, Insurance Pending, etc.).
- **Opened By** – Select the user, or select **Any**. This list cannot be changed.
- **Closed By** – Select the name of the user or select **Any**. This list cannot be changed.

NOTE: Only users who set a claim tracking status to “closed” on a claim appear in this list.

- **Denial Category** – Select a category or select **Any** to return claims that match any of the categories.
 - **Denial Reason Code** – Select a code or select **Any** to return claims that match any of the denial reason codes.
 - **Service Location** – Select a location or select **Any** to return claims that match any of the locations.
 - **Priority** – Select the priority or select **Any** to return claims that match any priority.
 - **Closed Reason Code** – Select a code or select **Any** to return claims that match any of the codes.
4. Click **View Claim(s)**. This list of claims matching the set criteria displays below the filter options.
 5. To export the list of claims, click **Export List**. The list is exported to an Excel file that displays in the lower left corner of the page. Click the file to open it.
 6. To view a claim in the list, in the **Acct #** column, click the linked account number.

To search assigned claims using an existing filter:

1. On the **Claims Tracking** page, click **Use Existing Filter**.
2. From the **Select existing filter** drop-down, select a filter.
3. Click **View Claim(s)**.



Search results are displayed in the lower part of the page:

Account #	Patient Name	DOB	Admit Date	Dschg. Date	Plan Code	Insurance ID #	Contract	Version	Provision	APC
C921371028		09/05/1936	11/15/2013	11/15/2013	MC001	SMID131609	ORG1 - Medicare	6	12X13X014X	APC
C921371112		08/15/1960	10/21/2013	10/21/2013	MC001	SMID108554	ORG1 - Medicare	6	12X13X014X	APC
C921371179		05/17/1955	10/12/2013	10/12/2013	77082	SMID81780	zMiscellaneous Plan Codes	1	85X	ANN
C921371189		03/31/2005	10/25/2013	10/25/2013	MD008	SMID32036	ORG1 - Medicaid	6	13X14X	ANN
C921371356		07/25/1978	02/02/2014	02/02/2014	MD001	SMID67640	ORG1 - Medicaid	6	13X14X	ANN
C921371391		01/31/1943	08/11/2013	08/11/2013	MC001	SMID44222	ORG1 - Medicare	5	13X	MR
C921371440		02/29/2008	11/17/2013	11/17/2013	MD001	SMID59531	ORG1 - Medicaid	6	13X14X	ANN
C921371541		02/08/1998	11/24/2013	11/25/2013	MD001	SMID105895	ORG1 - Medicaid	6	13X14X	ANN
C921371583		10/04/1947	03/10/2014	03/10/2014	MC001	SMID36500	ORG1 - Medicare	6	12X13X014X	APC
C921371604		05/11/1951	09/24/2013	10/07/2013	MC001	SMID3769	ORG1 - Medicare	5	11X	CMF
C921371665		08/13/1948	12/23/2013	12/23/2013	MC001	SMID44221	ORG1 - Medicare	6	12X13X014X	APC
C921371754		07/02/2007	11/11/2013	11/11/2013	MD001	SMID131980	ORG1 - Medicaid	6	13X14X	ANN
C921371906		03/14/1940	10/15/2013	10/15/2013	XMC	SMID89619	zMiscellaneous Plan Codes	1	13X14X	ANN
C921372073		04/30/1971	08/02/2013	08/03/2013	MD001	SMID34685	ORG2 - Medicaid	5	13X14X	ANN
C921372173		09/27/1991	07/18/2013	07/19/2013	MD001	SMID99948	ORG2 - Medicaid	5	13X14X	ANN
C921372708		01/07/2001	06/01/2013	06/01/2013	MD001	SMID108116	ORG1 - Medicaid	4	13X14X	ANN

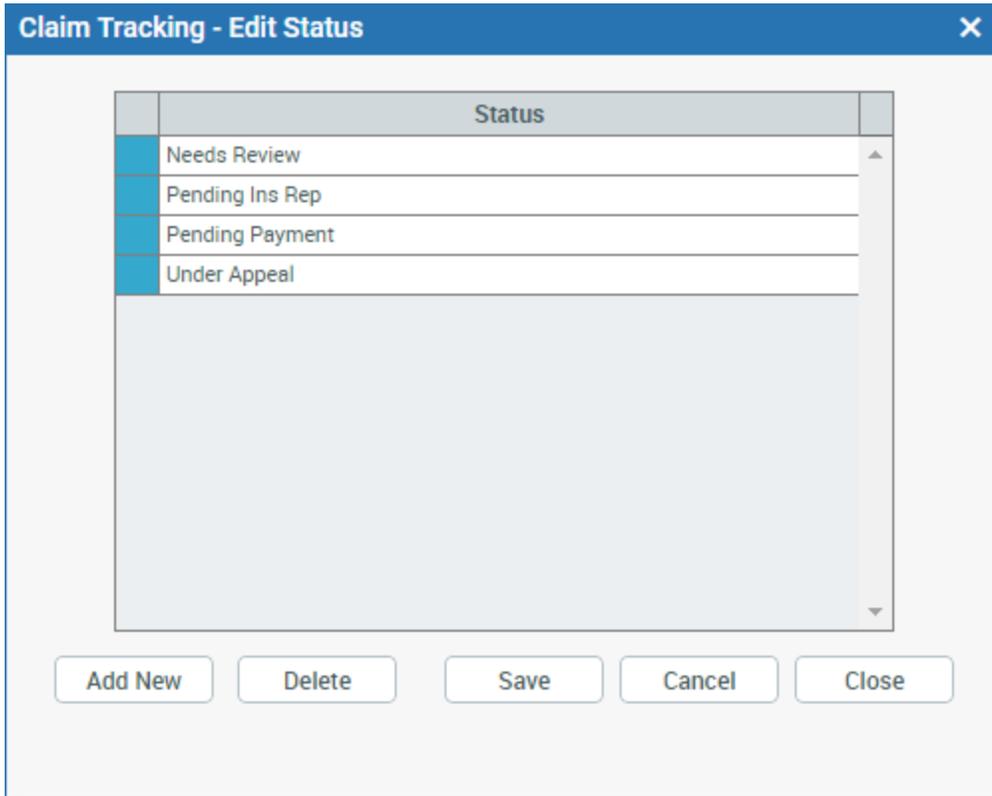
Edit user-defined claim tracking quick filters

Some of the claim criteria used in claim tracking Quick Filters can be user-defined. Quick filters allow you to locate only the claims that match the selected Quick Filter criteria.

To edit user-defined claims criteria:

1. In the main menu header, click **Claims > Track/Assign Claims**. The claim tracking page opens.
2. In the **View Tracking** tab, ensure that **Use Quick Filters** is selected.

3. In the **Select quick filters** list, click the desired user-defined quick filter. The edit dialog for that variable opens. In the following example, the **Status** variable options are being edited.



4. Do any of the following as desired:
 - To add a new option, click **Add New**. A new line is added to the table. Type the option in the row.
 - To edit an option, click in the row and make the desired change.
 - To delete an option, click the blue cell to the left of the name and then click **Delete**.
5. Click **Save**.
6. Click **Close**.

Build an advanced claims tracking filter

Use these instructions to build an advanced filter for searching tracked claims.

You can build filters here as shown in the following example. Use the same steps as for building an Advanced Filter in Reports.

To build a new filter:

1. On the **Claim Tracking** page, click **Use Existing Filter**.

2. Click **Build Filter**.

The screenshot shows a software interface with two tabs: 'View Tracking' and 'Modify Tracking'. The 'Modify Tracking' tab is active. On the left, there are two radio buttons: 'Use Quick Filters' (unselected) and 'Use Existing Filter' (selected). To the right, there is a label 'Select existing filter:' above a dropdown menu. The dropdown menu currently displays 'A Contractual Variance Report' with a downward-pointing arrow. To the right of the dropdown is a button labeled 'Build Filter', which is highlighted with a red rectangular border.

3. Follow the instructions beginning with step 2 in [Build an advanced filter](#).

Assign claims from claim tracking

Assign claims from the Claim Tracking page by performing a mass modification.

To assign claims from Claim Tracking:

1. In the main menu header, click **Claims > Track/Assign Claims**. The Claim Tracking page opens.
2. Click the **Modify Tracking** tab. This tab provides three methods for selecting claims: Current View, Quick Filters, or Existing Filters.
3. Select one of the following options and follow the provided instructions.

► Current View

Use this method to modify the tracking details of claims currently in the tracking page:

- a. Click **Use Current View**.
- b. In the **Select modifications** column, edit the tracking detail options.
- c. Click **Modify Claims**. Also, if claims are in the Current View, you can sort the claims and export them to MS Excel. You can sort on the current page, or, if there are numerous pages of claims, you can sort the entire set. This option is boxed in green in the following example. To the right of the Sort feature is another set of options. Here you select whether to export the current pages or all pages in the set. Then, to export to Excel, click the **Export List** button next to the **View Claim(s)** button, as shown outlined in red in the following Quick Filters example.

View Claim(s) Export List 72 rows returned.

Account # ▲	Patient Name	DOB	Admit Date	Dschg. Date	Plan Code	Insurance ID #	Contract
C921377198		06/24/	10/23/2013	10/23/2013	CI012	SMID15929	AETNA
C921382991		05/26/	02/10/2014	02/10/2014	CI012	SMID22771	AETNA
C921390924		03/14/	11/07/2013	11/07/2013	CI012	SMID109613	AETNA
C921403832		09/10/	11/26/2013	11/26/2013	CI012	SMID6882	AETNA
C921403904		05/05/	10/21/2013	10/21/2013	CI012	SMID22771	AETNA
C921416670		05/23/	10/28/2013	10/28/2013	CI012	SMID109078	AETNA
C921418300		06/17/	12/13/2013	12/13/2013	MD008	SMID71746	ORG1 - Medicaid
C921422946		10/30/	12/08/2013	12/08/2013	CI012	SMID28374	AETNA
C921426660		01/09/	02/02/2014	02/02/2014	CI012	SMID129663	AETNA
C921433964		12/26/	11/22/2013	11/22/2013	CI012	SMID86140	AETNA
C921451467		07/23/	03/26/2014	03/26/2014	CI012	SMID71816	AETNA
C921489740		02/21/	03/14/2014	03/14/2014	CI012	SMID113708	AETNA
C921492801		10/20/	04/16/2014	04/16/2014	CI012	SMID92289	AETNA
C921494148		12/08/	09/28/2013	09/28/2013	CI012	SMID56225	AETNA
C921503711		07/02/	09/21/2013	09/21/2013	CI012	SMID36362	AETNA

Sort: Current Page All Pages Export: Current Page All Pages Page 1 of 2 << >>

► Quick Filters

To use this method to mass modify claims:

- a. Click **Use Quick Filters**.
- b. In the **Select quick filters** column, specify the tracking details of the claims to modify.
- c. In the **Select modifications** column, specify the new tracking details to apply.
- d. Do one of the following:
 - To modify the claims immediately, click **Modify Claim(s)**.
 - To review the claims found, click **View Claims**; then, if the returned dataset is correct, click **Modify Claims**.

View Tracking **Modify Tracking**

Use Current View

Use Quick Filters

Use Existing Filter

Select quick filters:

Assignment:

Assigned To:

Status:

Opened By:

Closed By:

Denial Category:

Denial Reason Code:

Service Location:

Priority:

Closed Reason Code:

Select modifications:

Assignment:

Assigned To:

Status:

Notes:

Denial Category:

Denial Reason Code:

Service Location:

Priority:

Closed Reason Code:

View Claim(s) Export List **Modify Claim(s)**

► Existing Filters

The Existing Filters list contains filters built in Claim Tracking, and advanced filters built in Reports.

IMPORTANT: Use caution when using Advanced Filters from Reports to select accounts in Claim Tracking. Basic report parameters require you to specify a contract to run your report on as well as a discharge date range. The advanced filter does not necessarily specify a payer or date range; therefore, your returned results may be for all payers for the entire database. Modify by filters carefully and be sure to view your results before applying changes.

To use this method to assign claims based on existing filters:

- In the **Select existing filter** drop-down, select a filter. Alternatively, you can click the **Build Filter** button and build a filter from scratch, as explained in [Build an advanced filter](#).
- In the **Select modifications** column, specify tracking details to apply by editing the modifications.
- Click **Modify Claim(s)**. This can also be done in two steps by first clicking **View Claim(s)**.

The screenshot shows the 'Modify Tracking' interface. On the left, there are three radio buttons: 'Use Current View', 'Use Quick Filters', and 'Use Existing Filter' (which is selected). In the center, there is a 'Select existing filter:' section with a dropdown menu showing 'A Contractual Variance Report' and a 'Build Filter' button. On the right, there is a 'Select modifications:' section with several dropdown menus: 'Assignment', 'Assigned To', 'Status', 'Denial Category', 'Denial Reason Code', 'Service Location', 'Priority', and 'Closed Reason Code', all set to 'No Change'. At the bottom, there are three buttons: 'View Claim(s)', 'Export List', and 'Modify Claim(s)'.

► Customizing filters

As mentioned in [Assign a claim](#), Axiom Contract Management includes ten User Defined fields, five of which are formatted numerically and five of which are formatted as characters. You can also hide columns to prevent them from entering claim tracking reports. For example, if you want to eliminate the name field from claim tracking to comply with HIPAA regulations, contact a Syntellis representative.

Simulate adjustments to claim charges

Use the Charge Adjustments feature to preview adjustments to claims charges in simulations to understand the impact they will have on your net reimbursement and future contract performance.

NOTE: This feature is available to administrative users only.

To preview claim charge adjustments:

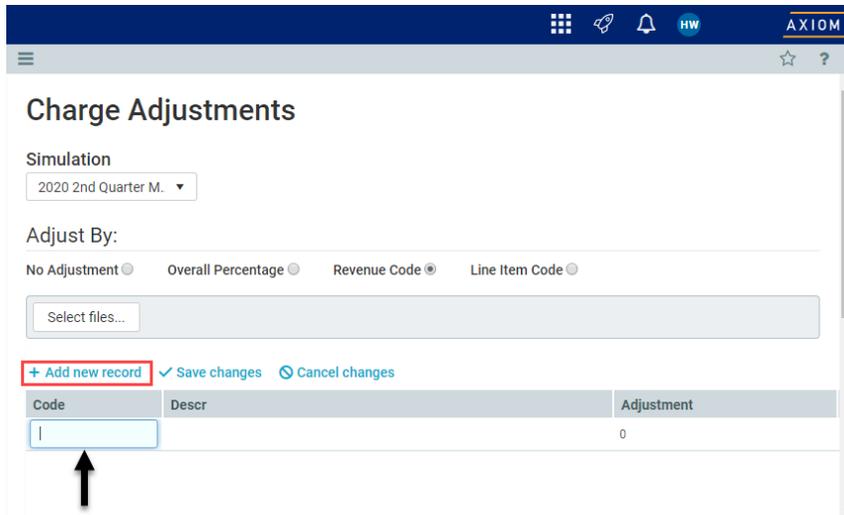
- If one does not already exist, [create a simulation](#) and add contracts for which you want to preview

price changes.

2. From the **Claims** menu, select **Charge Adjustments**.
3. From the **Simulation** drop-down, select the simulation that has the contracts against which you are running claim adjustments.

NOTE: This feature cannot be used in the Live environment.

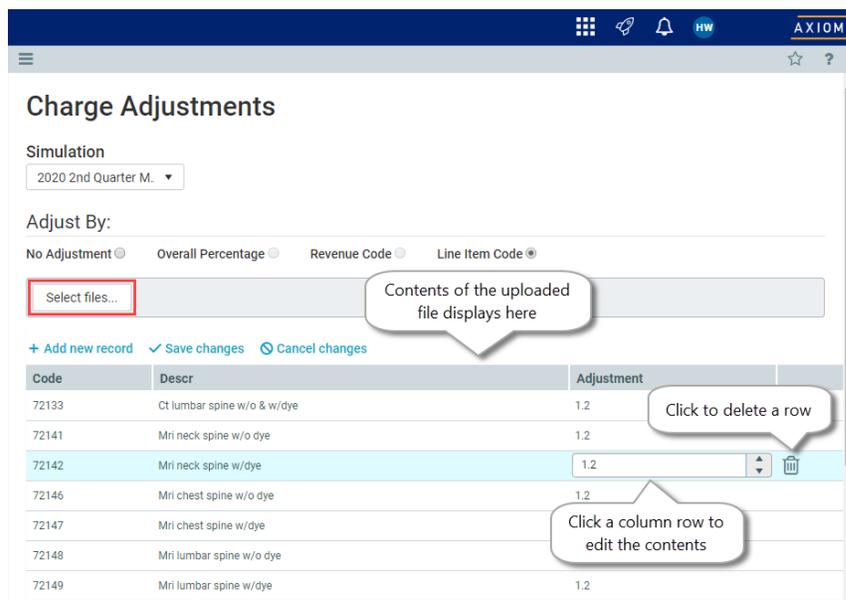
4. In the **Adjust By** section, select the desired type of adjustment:
 - **No Adjustment** – Select and then click **Clear** to clear the current selected adjustment type and its calculations.
 - **Overall Percentage** – Adjust the charge by a specified percentage.
 - **Revenue Code** – Adjust the charge by programming different revenue codes if they are different rates, for example.
 - **Line Item Code** – Adjust the charge by specific line items on claims.
5. Do one of the following depending on your selection in the previous step:
 - If you selected **Overall Percentage**, then, in the **Adjustment** field, enter a percentage written as a decimal value (e.g., 0.07), and then click **Save**. Skip to step 7.
 - If you selected **Revenue Code** or **Line Item Code**, proceed to step 5.
6. To adjust by **Revenue Code** or **Line Item Code**, you can input the codes manually or you can upload a file with the code adjustments. Do one of the following:
 - To enter the code adjustments manually:
 - a. Click **+Add new record**.
 - b. In the **Code** column, type the code, then press the **Tab** key.
 - c. In the **Description** column, type a description and then press **Tab**.
 - d. In the **Adjustment** column, click the up or down arrow to reach the desired adjustment number.
 - e. Click **Save changes**.



- To upload a file of code adjustments:
 - a. Click **Select Files**.
 - b. Navigate to and select the file containing the codes and their adjustments.

IMPORTANT: The file should be an Excel file and must have three columns in the following order: the first column must contain the codes, the second for the descriptions but can be left blank, and the third should contain the adjustments. If the Description column is left blank, the system will populate it from the appropriate library.

The file's contents display on the page:

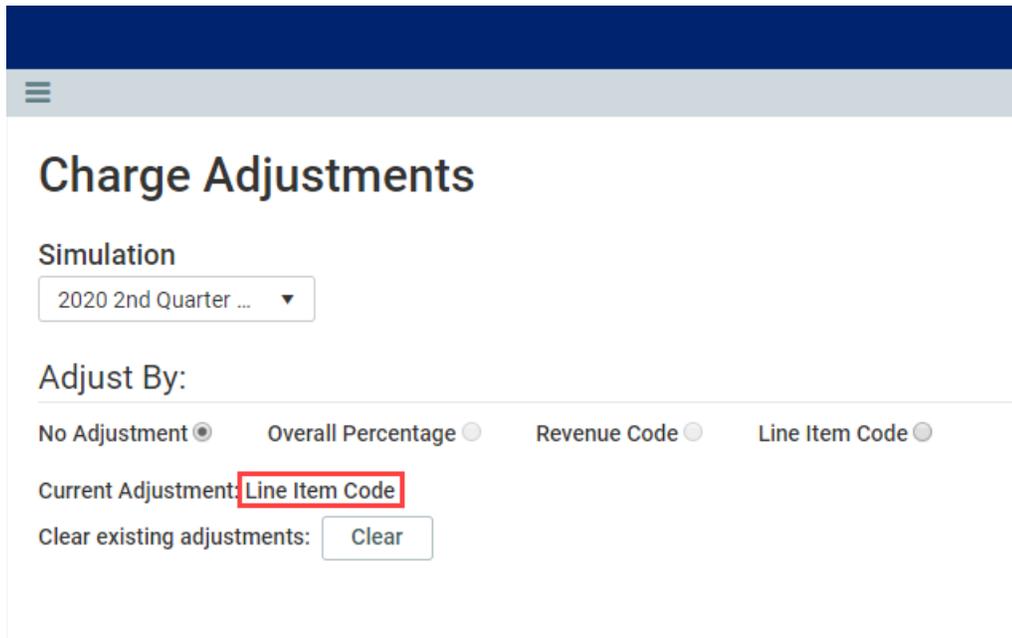


- c. (Optional) If desired, you can edit the file contents from this page:
 - o Edit any entry by clicking it and making changes.
 - o Delete an entry by clicking the delete icon () at the right end of the row and then confirming the deletion.
 - o To add a new code line item, click Add new record and input values.
 - o To cancel an edit, click **Cancel changes** (you cannot cancel changes after saving them).
 - o Click **Save changes** to save your edits.

7. Do one of the following:

- a. To view how the adjustments affect your reimbursements, [calculate the claims](#) and then [view the Voucher details](#); or from the Reports menu, [run any of the standard reports](#) for the adjusted claims.
- b. To preview a new adjustment, select the **No Adjustment** option, click **Clear**, and then repeat the steps starting with step 4.

NOTE: You cannot select a different adjustment option without first clearing the existing one. Clearing removes adjustments from all claims in the selected simulation.



Charge Adjustments

Simulation
2020 2nd Quarter ... ▼

Adjust By:

No Adjustment Overall Percentage Revenue Code Line Item Code

Current Adjustment: Line Item Code

Clear existing adjustments:

The adjustment about to be cleared is listed before clearing. After clearing, Clear Adjustments reads "None."

Grouping and pricing APC and eAPG claims

Many contracts include clauses or terms that include APC or eAPG reimbursement methods. Before these contracts can be calculated, the claim line items need to be grouped and priced into APCs or eAPGs.

Grouping and pricing can be a slow process when there are hundreds of thousands of claims, which is why claims processing is usually done during the nightly import. However, you may need to group and price claims on demand.

The Group and Price Claims page in the Claims section of Axiom Contract Management enables you to set up, save, and execute claim grouping and pricing tasks. Previously, all grouping and pricing took place either by a member of Client Success or during the nightly import process on claims coming into the system. Now you can run this process anytime on selected claims. For information, see [Group and price APC and eAPG claims](#).

Additionally, you can also [use the Shift Date By feature](#) to view a forecast of how new schedules will affect claims for the coming year.

Group and price APC and eAPG claims

For contracts with clauses or terms that include APC or eAPG reimbursements, you can group and price claim line items into APCs or eAPGs. You can also run a projection of what future claims will look like by shifting dates on claims forward in time to understand the impact of new CMS grouping and pricing logic. For information, see [Shift claim dates for grouping and pricing forecasts](#).

NOTE: Your system must have licenses for APCs and/or eAPGs.

To group and price claims:

1. From the **Claims** menu, select **Group and Price**.
2. From the **Grouping/Pricing Type** menu, select the desired option:
 - APC
 - eAPG

NOTE: Only options for which you are licensed display.

3. In **Select claims by**, select the desired option:
 - ▶ **Patient Account Number**
 - a. In the **Patient Account #** field, enter the patient account number.
 - b. From the **Claim Status** drop-down, select the status of claims to include.

c. From the **Simulation** drop-down, select the simulation the claims are in.

▶ **Claim Number/UCRN**

a. In the **Claim #/UCRN** field, enter the claim number or UCRN.

b. In the **Claim Status** field, select the status of claims to include.

c. From the **Simulation** menu, select the target simulation for the claims.

▶ **Date Range**

a. Select the **Date Type**.

b. For **Start Date**, click the calendar icon () and select the date range start date.

c. For **End Date**, select the date range end date.

d. From the **Claim Status** drop-down, select the status of claims to include.

e. From the **Simulation** drop-down, select the target simulation for the claims.

▶ **Contract**

a. Select the **Date Type**.

b. For **Start Date**, click the calendar icon () and select the date range start date.

c. For **End Date**, select the date range end date.

NOTE: You do not have to select Start and End dates if you want to work with the entire time frame selected by the provision/version.

d. From the **Claim Status** drop-down, select the status of claims to include.

e. In the **Contracts** section, from the **Current View** drop-down, select the target simulation.

f. In the **Contracts** section, select the contracts to include. You can select an entire contract, only certain versions of a contract, or specific provisions of a contract.

▶ **Insurance Plan Code**

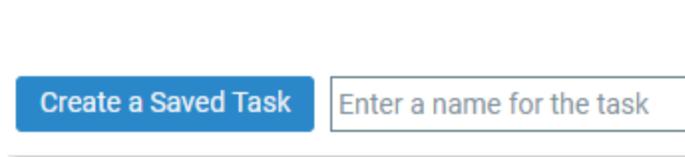
a. Select the **Date Type**.

b. For **Start Date**, click the calendar icon () and select the date range start date.

c. For **End Date**, select the date range end date.

d. From the **Claim Status** drop-down, select the status of claims to include.

- e. In the **Ins Plan Code** table, from the **Current View** drop-down, select the target simulation.
 - f. In the **Ins. Plan Code** table, select the insurance plan codes to include. You can also select an entire payer organization if desired.
4. Do one of the following:
- To perform the grouping and pricing now, click the **Group and Price** button.
 - To process the grouping and pricing later, save the selected claims as a grouping and pricing task:
 - a. In the upper right of the page, type a name in the field provided.



- b. Click **Create a Saved Task**

A confirmation message displays that the grouping/pricing task has been queued to run or saved, depending on your selection.

NOTE: If you selected to save the claims as a group and price task, your task is listed in the Saved Tasks tab, where you can [run it at any time](#).

Shift claim dates for grouping and pricing forecasts

Users who group and price claims for APG and eAPG contracts can shift dates on claims forward in time to accurately understand the impact of new CMS grouping and pricing logic for the upcoming year.

IMPORTANT: The shift claim dates feature works only in non-Live simulations.

When the new CMS grouping methods and schedules are released, you can get a forecast of how they will affect your APC and eAPG claims reimbursements by running some of your historical claims through the grouping and pricing process using the new rules. Normally, grouping logic prevents you from using future logic against historical claims because they are service-date specific. However, if you shift your historical claim dates into the next year, you can align your service dates with the 3M logic.

NOTE: You can also shift the dates backward in time by using a negative number of units. You might do this if you want to know what this year's claims reimbursements would have paid last year.

The Group and Price Claims page includes a Shift Date By section that remains inactive until you select a non-Live simulation in which to group and price your claims. You can use the date shift feature for any claims selection method (Patient Account Number, Claim Number/UCRN, Date Range, etc.) as long as you select a non-live simulation.

To date shift a set of claims for grouping and pricing:

1. In the main menu header, click **Claims > Group and Price**.
2. On the **Group and Price Claims** page, from the **Grouping/Pricing Type** drop-down, select the type.
3. In the **Select claims by** section, select an option, For details, see [Group and price APC and eAPG claims](#).
4. From the **Simulation** drop-down, select the desired simulation.

IMPORTANT: The simulation must not be Live.

5. In the first **Shift Date By** field, click the up or down arrows to select the *number of units* to shift the date by.
6. In the second **Shift Date By** field, click the drop-down and select the *unit* to shift the date by (Days, Months, Years).
7. Click **Group and Price**.
8. After grouping and pricing, view the claim voucher report to see the results.

In the following example, the top of the voucher report shows that the service took place in 2013, but on the bottom, you see that for calculating the expected payment, it used a future Grouper Schedule, and therefore, a different Grouper Logic.

Simulation: EPAY3 **Claim Voucher Report**

BillID: C921374551	Admission Date: 8/8/2013	Total Charges: \$1,714.00
Claim Status: Active	Discharge Date: 8/8/2013	Non-Covered Charges: \$0.00
Patient Name: Keefe, Wendy	Provision Date: 7/1/2013 to 9/30/2013	Expected Contractual: (\$613.64)
Insurance ID: SMID30128	Provision: Hospital Outpatient Hospital Other	Actual Contractual: \$171.40
Bill Code: 131	Contract Name: SH Aetna at Medicare Shift	Expected Payment: \$2,327.64
Insurance Plan Code: CI012	Organization: KREB MEDICAL CTR ORG1	Actual Payments: \$1,542.60
Covered Days: 0		Contractual Variance: (\$785.04)
Version #: 1		Balance Due: \$785.04

TOTAL CLAUSE REIMBURSEMENT **\$2,327.64**

Total Terms Reimbursement **\$2,327.64**

Term #1: ANY/ALL SERVICES \$2,327.64

ANY/ALL SERVICES

Calculation Basis: CMS Outpatient

Payment Summary Information

Medicare Outpatient Schedule: KH MCR 20140701-20140930

Schedule Effective Dates: 7/1/2014 - 9/30/2014

Services	Epay Amount	Medicare Portion	Patient Portion
APC	\$2,914.16	\$2,321.80	\$592.36
Total Expected Payment	\$2,914.16	\$2,321.80	\$592.36

Compare line-level APC calculation detail results

When running drill-down reports on claims and line items, you can include line-level calculation detail results created from grouping and pricing APCs from any simulation configured for drill-down reporting. You can do a side-by-side simulation comparison down to the line-level of detail to compare the impact of APC schedule changes on a set of claims.

NOTE: Your Axiom Contract Management administrator sets up simulations for drill-down reporting.

Claims and Line-level APC results for up to four simulations at a time

In addition to the Live simulation, up to four simulations can be set up to handle reporting of APC detail at the claim level. Previous to the 2019.3 release, we only stored grouped and priced APC results from the Live simulation. Now, we have extended grouping and pricing to all other simulations. The fields that are populated on the Claims and Line items tabs are available for the other four simulations selected for drill-down reporting. This means there are four fields for each claim and line level field currently populated during the group and price process (for example, fields such as PPSPayment, CoPay, Outlier, etc.).

Line Item tab Groupings:

- APC2
- APC3
- APC4
- APC5

Line Item tab Measures:

- Expected Payment 2 - 5
- OPPS EPay CMS 2 - 5
- OPPS EPay Copay 2 - 5
- OPPS EPay Outlier 2 - 5

Claims tab Measures:

- Total OPPS EPay 2 - 5
- Total OPPS EPay CMS 2 - 5
- Total OPPS EPay Copay 2 - 5
- Total OPPS EPay Outlier 2 - 5

To use these new fields in a drill-down report:

1. Run an APC group and price against claims in a simulation mapped to drill-down reporting:
 - a. Ensure your simulation environment contains the APC contract(s) with the appropriate Schedule(s).
 - b. Ensure your simulation environment is mapped to drill-down reporting. You may need to verify this with the Axiom Contract Management administrator.
 - c. Group and price the desired set of APC claims for the desired simulation (or simulations, if you are performing a comparison). For more information, see [Group and price APC and eAPG claims](#).
2. Create a drill-down report using the desired Claim tab or Line Item tab fields, then add filters to the report as needed to limit the data included, and then generate the report.

For more information, see the following:

- [Build a new drill-down report](#)
- [Apply filters to a drill-down report](#)
- [Export a drill-down report](#)

Run a saved group and price task

These instructions are for running a saved group and price tasks from the Claims Group and Price Tasks page.

To run a saved group and price task:

1. From the **Claims** menu, select **Group and Price**.
2. Click the **Saved Tasks** tab.
3. If needed, filter the list for the simulation and Task Type.
4. On the right side of the page, for the desired task, click **Run Once**.

Launch Page | Contracts | Claims | Import Data | Reports | Admin | Help | Admin Admin | Admin | Logout | Recalculations Queued: 0

Claims > Group and Price Claims | Saved Tasks

Group and Price Tasks

View Filters | Simulation: All Simulations | Task Type: All

Task Name	Simulation	Task Type		
APCGroupandPriceCalc - Web	Live	APC	Run Once	Delete
eAPGroupandPriceTask - Web	Live	eAPG	Run Once	Delete
example123	THENEWMPR	APC	Run Once	Delete

The page displays a brief notification that the task was queued.

- To delete a task when finished, in the row for that task, click **Delete**.

Calculating claims

Claims calculation is the process by which a claim is filtered through the defined contract structure to generate a claim payment voucher and a total expected payment amount. Claims are calculated in Axiom Contract Management in two ways:

- Nightly import process — Occurs during the import process and is done without any user intervention.
- On-demand calculation — Users can perform ad-hoc claim calculation from the Recalculate Claims feature, and also while viewing a claim [from the Claim Detail page](#). Administrators can recalculate claims from the [Recalc History page](#), and calculate simulated adjustments to claim charges.

Typically, every claim that enters the system calculates automatically during the nightly auto-import process; however, there are times when you need to manually recalculate a claim using the ad-hoc methods.

You might need to recalculate a claim for several reasons. The most common reason is a contract term modification. If a claim is calculated on a specific clause of a contract and that clause is adjusted in a way that the claim now qualifies for another clause or rate, a recalculation is warranted.

▶ Automatic calculation

Every new claim entering the system that has a matching Contract → Version → Provision → Clause/Term will automatically generate an expected payment during the auto-import process. This ensures that new information entering the system can be used during reporting and other analysis. No user intervention is needed, but it is important to note that if the contract structure is not kept up to date, then new claims that enter the system will not generate an expected payment. It is also important to note that even though a contract may exist for payer, if it is not modeled accurately, then the expected payment information will probably be inaccurate.

Keep an eye on contracts approaching expiration and make sure to extend the expiration date (if applicable), or model the new contract in Axiom Contract Management.

▶ Ad hoc calculation

You can select to recalculate a claim at any time using the Recalculate Claims feature ([Claims > Recalculate](#)). You can recalculate claims by a variety of criteria:

- [Recalculate by patient account number](#)
- [Recalculate by Claim Number/UCRN](#)
- [Recalculate by Date Range](#)
- [Recalculate by Contract](#)
- [Recalculate by Insurance Plan Code](#)

NOTE: You can also [recalculate a claim from the Claim Detail page](#).

Recalculate a claim

Each of the following criteria give you more flexibility in determining which claims to recalculate.

- Patient Account Number and Claim Number/UCRN are typically used to calculate single accounts/claims.
- Date Range and Contract allow you to select several claims at once for calculation.
- Insurance Plan Code allows you to recalculate all claims that have a specific payer code.

You select the claim to calculate in the Claim Type field. Your options are Institutional, Professional, or All. Since professional claims are stored in Axiom Contract Management as separate bills, you must select the appropriate Claim Type before calculating a claim.

The Claim Status field allows you to select whether to calculate on the Live accounts for a particular account # or all accounts (Live and Inactive).

NOTE: Reports in the system are based on the Live accounts, so it is not always required to recalculate inactive claims unless you are including those in your analysis.

To access Recalculate Claims:

In the main menu header, click **Claims > Recalculate**.

The Recalculate Claims page is displayed. Use the criteria explained in the following sections when determining what to calculate.

The screenshot shows the 'Recalculate Claims' page within the Axiom Contract Management interface. The top navigation bar includes 'Launch Page', 'Contracts', 'Claims', 'Import Data', 'Reports', 'Admin', 'Help', 'Logout', and 'Queued Tasks: 0'. The 'Claims' menu is expanded, showing 'Recalculate Claims' and 'Saved Tasks'. The main content area is titled 'Recalculate Claims' and features a 'Recalculate' button and a 'Create a Saved Task' button with an input field for naming the task. Below these are radio buttons for selecting claims by: 'Patient Account Number' (selected), 'Claim Number/UCRN', 'Date Range', 'Contract', and 'Insurance Plan Code'. The form includes several input fields: 'Patient Account #' (text), 'Claim Type' (dropdown menu with 'Institutional' selected), 'Claim Status' (dropdown menu with 'Live Claims Only' selected), and 'Simulation' (dropdown menu with 'Live' selected).

NOTE: You can also recalculate a claim directly from a claim's Claim Detail page. For information, see [Recalculate a claim from Claim Detail](#).

▶ Recalculate by Patient Account Number

You can calculate multiple accounts simultaneously by separating account numbers with a comma. If there are claims that match your criteria, a message informs you that the recalculation task was queued successfully. If no claims match your criteria, a message informs you that no claims met your selected criteria, and to try again.

To recalculate by account number:

1. In the **Recalculate Claims** tab, click the **Patient Account Number** option.
2. In the **Patient Account #** field, enter the account number.
3. From the **Claim Type** drop-down, select the type.
 - Institutional
 - Professional
 - All
4. From the **Claim Status** drop-down, select the status:
 - Live Claims Only
 - All
5. From the **Simulation** drop-down, select the simulation.
6. Click **Recalculate**.

▶ Recalculate by Claim Number/UCRN

IMPORTANT: This option should only be used if you are using the system's Claim Number / UCRN feature.

If any claims match your criteria, a message displays that says the recalculation task was queued successfully. If no claims match your criteria, a message informs you that no claims met your selected criteria, and to try again.

To recalculate by Claim Number / UCRN:

1. In the **Recalculate Claims** tab, click the **Claim Number/UCRN** option.
2. In the **Claim #/UCRN** field, type the number.
3. Select the **Claim Type**:
 - Institutional
 - Professional
4. Select the **Claim Status**.
5. Select the **Simulation**.

6. Click **Recalculate**.

▶ **Recalculate by Date Range**

The date range option allows you to select all claims that fall between a specific date range and recalculate them.

To recalculate by date range:

1. In the **Recalculate Claims** tab, click the **Date Range** option.
2. In the **Date Type** field, select the type of date:
 - **Discharge Date** – Date the account was discharged
 - **Admit Date** – Date the account was admitted
 - **Submission Date** – Date the bill was submitted to the payer for reimbursement
3. For the **Start Date** and **End Date** fields, select the desired dates.

You can enter dates manually, or use the drop-down calendar. Clicking any date sets that as your start/end date.

Contracts Claims Import Data Reports Help

Recalculate Claims Saved Tasks

Recalculate Claims Recalcula

Select claims by: Patient Account Number Claim Number/UCRN Date Range

Date Type: Claim Type: Claim Status: Simulation:

◀ June 2019 ▶

Su	Mo	Tu	We	Th	Fr	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Monday, June 03, 2019

4. Select the **Claim Type**:
 - Institutional
 - Professional
5. Select the **Claim Status**.
6. Select the **Simulation**.
7. Click **Recalculate**.

If there are claims that match your criteria, a message informs you that the recalculation task has been queued successfully. If no claims match your criteria, a message informs you that no claims met your selected criteria, and to try again.

► Recalculate by Contract

Selecting the Contract option allows you to select whole contracts. Calculating by contract gives you added flexibility by allowing you to filter down into contracts, versions, or even to the provision level. For example, to calculate only an outpatient provision of a contract, you can drill down to that provision and select it for recalculation.

In the following example, a user is recalculating provisions 6 and 7 of their Cigna PPO contract, as well as their entire ORG2 - BCBS contract.

The screenshot shows the 'Recalculate Claims' interface. At the top, there are navigation tabs: 'Launch Page', 'Contracts', 'Claims', 'Import Data', 'Reports', 'Admin', 'Help', 'Logout', and 'Queued Tasks: 0'. The 'Claims' tab is active, and the 'Recalculate Claims' sub-tab is selected. Below the navigation, there are buttons for 'Recalculate' and 'Create a Saved Task', along with a text input field for 'Enter a name for the task'. The main area is titled 'Recalculate Claims' and features a 'Select claims by:' section with radio buttons for 'Patient Account Number', 'Claim Number/UCRN', 'Date Range', 'Contract' (selected), and 'Insurance Plan Code'. Below this, there are dropdown menus for 'Date Type' (set to 'Discharge Date'), 'Claim Type' (set to 'Institutional'), and 'Claim Status' (set to 'Live Claims Only'). There are also input fields for 'Start Date' and 'End Date'. The 'Contracts' section has a 'Current View' dropdown set to 'Live' and a list of contracts with checkboxes. The selected items are: 'KREG MEDICAL CTR ORG2', 'CIGNA PPO' (expanded to show 'Version 6 (01/01/2014 - 12/31/2014)' and 'Version 7 (01/01/2015 - 12/31/2015)'), and 'ORG2 - BCBS'.

Notice that the Contract option also includes the same features as the Date Range selection dialog, allowing you to narrow your criteria even further.

To recalculate by contract:

1. In the **Recalculate Claims** tab, click the **Contract** option.
2. In the **Contracts** table, from the **Current View** drop-down, select the desired simulation.
3. Select the desired contract/version/provision to recalculate. You can select more than one.
4. In the **Date Range** section, enter the date range criteria (if you want to calculate the entire contract, then entering date information is not required).
5. In the **Enter a name for the task** field, type a name for this recalculation.

6. Click **Recalculate**.

If any claims match your criteria, a message informs you that the recalculation task was queued successfully. If no claims match your criteria, a message informs you that no claims met your selected criteria, and to try again.

► **Recalculate by Insurance Plan Code**

This option allows you to calculate claims for a single insurance plan code instead of calculating all the insurance plan codes assigned to a contract version. For example, you can use this option when a new insurance plan code has been added to a version and you do not want to re-process an entire version and all plan codes, just the claims with the new code.

To recalculate by insurance plan code:

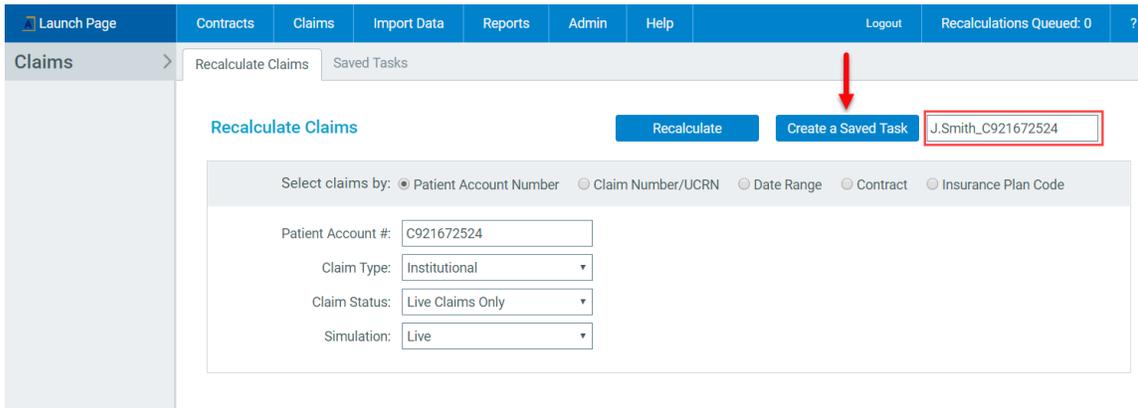
1. In the **Recalculate Claims** tab, click the **Insurance Plan Code** option.
2. In the **Date Type** field, select the type of date:
 - **Discharge Date** – Date the account was discharged
 - **Admit Date** – Date the account was admitted
 - **Submission Date** – Date the bill was submitted to the payer for reimbursement
3. For the **Start Date** and **End Date** fields, select the desired dates. You can enter dates manually, or use the drop-down calendar. Clicking any date sets that as your start/end date.
4. Select the **Claim Type**:
 - Institutional
 - Professional
5. In the **Claim Status** field, select whether to use Live claims or All.
6. In the **In. Plan Codes** table, do the following:
 - a. In the **Current View** field, select the desired simulation.
 - b. In the list of insurance plan codes, expand the organization and select the check box for the desired code. You can select as many codes as desired. You can also select the parent Org. code instead, which recalculates all claims that have that Org. code, including all the Payer codes associated with that Org code.
7. Click **Recalculate**.

Save and schedule calculations

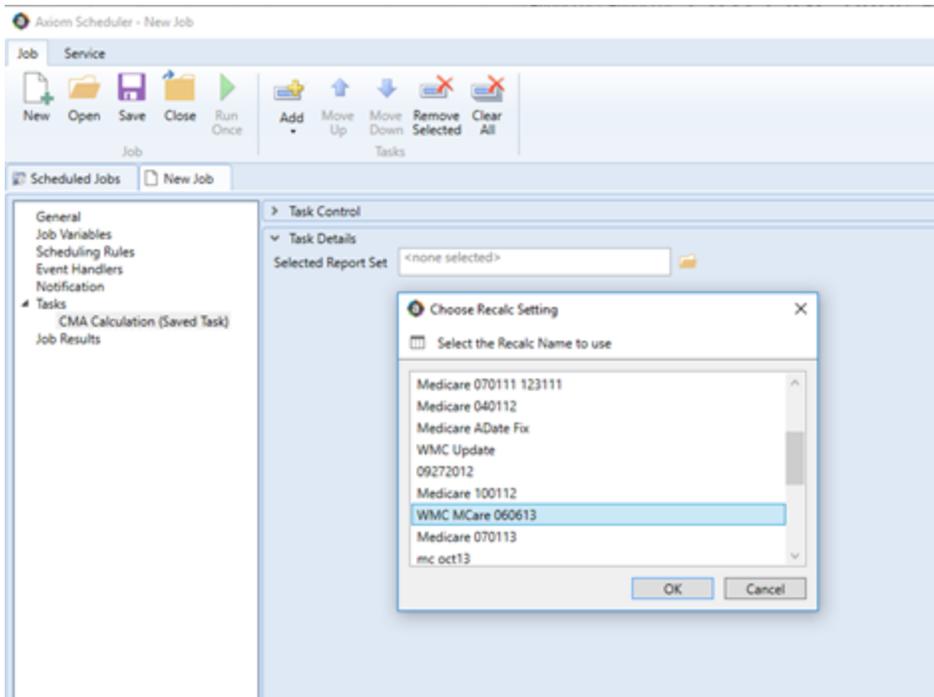
You can name and save calculation tasks and then schedule those tasks to run using the Axiom Scheduler. This feature is great for repetitive calculations or when you need to schedule a large calculation to run after hours or on a recurring, scheduled basis.

To save and schedule a calculation:

1. In the main menu header, click **Claims > Recalculate**.
2. In the Recalculate Claims tab, [select the claim to calculate](#).
3. In the Enter a name for the task field, type a name for the recalculation.
4. Click **Create a Saved Task**.



5. In the Desktop Client, in the Explorer task pane, access the Scheduler at **Libraries > Scheduler Jobs Library > Contract Management**.
6. If needed, create a new job for the calculation. Please see [Scheduler](#) for more details regarding assigning and completing jobs and tasks using the Scheduler.



You can access and run your saved tasks.

Run a saved recalculation task

You can rerun your [saved recalculation tasks](#).

To run a recalculation task:

1. From the **Claims** menu, select **Recalculate**.
2. On the Claims page, click the **Saved Tasks** tab.

The list of saved Recalculation Tasks displays all the saved tasks in all the simulations, by default.

The screenshot shows the 'Claims' page with the 'Saved Tasks' tab selected. The 'Recalculation Tasks' section is visible, featuring a 'View Filters' button and a 'Simulation' drop-down menu set to 'All Simulations'. Below this is a table with columns for 'Task Name', 'Simulation', 'Run Once', and 'Delete'. The table lists various tasks such as '09272012', 'APCGroupAndPriceCalc', 'ASC test', and several 'Medicare' tasks, each with a 'Run Once' and 'Delete' button.

Task Name	Simulation	Run Once	Delete
09272012	Live	Run Once	Delete
APCGroupAndPriceCalc	Live	Run Once	Delete
ASC test	ASC Test Sim	Run Once	Delete
eAPGGroupAndPrice	Live	Run Once	Delete
mrc oct13	Live	Run Once	Delete
Medicare 040110 093010	Live	Run Once	Delete
Medicare 040112	Live	Run Once	Delete
Medicare 070109 033110	Live	Run Once	Delete
Medicare 070111 123111	Live	Run Once	Delete
Medicare 070113	Live	Run Once	Delete
Medicare 100110 063011	Live	Run Once	Delete
Medicare 100112	Live	Run Once	Delete
Medicare 100113	Live	Run Once	Delete
Medicare ADate Fix	Live	Run Once	Delete
OP Medicaid 6/13-9/13	Live	Run Once	Delete

3. If desired, from the **Simulation** drop-down, select the desired simulation to filter the list of tasks.
4. Locate the tasks to run and then, in the task row, click the **Run Once** button.

A brief message displays that the task has been queued to run, and the "0" in the Recalculations Queued section changes to "1" (or the number of tasks you selected to run).

5. To delete a task, click the **Delete** button in the row for that task. In the confirmation dialog, click **OK**. A brief message displays that the task has been deleted.

Recalculate a claim from Claim Details

Users modeling contracts can now recalculate a claim from the Claim Details page instead of using the Recalculate Claims page if they want to recalculate just the claim they are viewing. This feature allows you to recalculate a claim and then refresh the page to view the recalculation without having to navigate between different pages and dialogs.

To recalculate a claim from Claim Detail:

1. From the Claims menu, select View a Claim.
2. Locate and view the claim.
3. In the menu on the left, click Recalculate.

The screenshot shows the 'Claim Details' page for Patient Account # C921742785. The 'Recalculate' button is highlighted with a red box. Below the navigation tabs, there is a 'Summary for: C921742785 --' section. The 'Claim Information' section contains the following data:

Patient Account #:	C921742785	Calculated Contract:	AETNA - Version 2	Admit Date:	4/15/2014
Claim Number:	U922387852	Type of Bill:	111 - Hospital-Inpatient (Part A)-Adm	Discharge Date:	4/19/2014
Import Batch #:	2614 - 8371	Patient Status:	01 - Discharged To Home Or Self-Care	Submission Date:	4/24/2014
Last Recalc:	11/26/2020 2:56:43 AM	Total Covered Chgs:	\$29,321.60	Length of Stay:	4
Ins. Plan Code:	CI012	Non-Covered Chgs:	\$0.00	Covered Days:	4
DRG:	417				

The 'Claim Totals' section shows:

Expected Payment:	\$0.00	Actual Payments:	\$25,489.94	Payment Variance:	(\$25,489.94)
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In the Queued Tasks section (on the right in the blue header), the “0” changes to “1.”

The screenshot shows the 'Queued Tasks' section with a table containing one task:

Priority	Task Type	Queued By	Claims
1	Recalculation	Williams, [redacted]	1

NOTE: If you already have recalculations waiting in the queue, or if other users have calculations waiting in the queue, the number is incremented. If you select another claim to recalculate before the first one is finished, the number increments again.

When the “1” changes back to “0,” the recalculation is finished.

4. Refresh the page in your browser to view the recalculation results.

The data in the Last Recalc: field has changed to reflect the new recalculation date.

Launch Page	Contracts	Claims	Import Data	Reports	Admin	Help
Claims > Patient Acct. #: C921742785						
Claim Details						
View Voucher Recalculate Go to Contract Grouper Edits View 835s						
Summary	Codes	Demographics	Insurance	Line Items	Physicians	Postings Tra
Summary for: C921742785 --						
Claim Information						
Patient Account #:	C921742785	Calculated Contract:	AETNA - Version 2			
Claim Number:	U922387852	Type of Bill:	111 - Hospital-Inpatient (
Import Batch #:	2614 - 8371	Patient Status:	01 - Discharged To Home			
Last Recalc:	5/4/2021 2:31:44 PM	Total Covered Chgs:				
Ins. Plan Code:	CI012	Non-Covered Chgs:				
DRG:	417					
Claim Totals						
Expected Payment:	\$0.00		Actual Payments:			

For additional recalculation options or to recalculate multiple claims, use the [Recalculate Claims](#) feature.

View claims recalculation history and rerun claims

Administrators can access a history page for recalculated claims. The Recalc History page contains a log of all recalculated claims, whether recalculated in a batch or individually, and the ability to rerun any listed recalculation.

The history includes:

- **Recalc ID** – Recalculation ID number
- **Run By** – Username of person/entity/process that ran the recalculation
- **Start Date/Time** – Start date and time of the recalculation
- **End Date/Time** – End date and time of the recalculation
- **Claims Selected** – Number of claims selected for recalculation
- **Claims Processed** – Number of Claims Selected that triggered a contract clause/term for payment
- **Error Count** – Number of errors that occurred during processing. Any errors found are displayed at the bottom of the page in the Recalc History Errors section.
- **Recalc button** – Click to rerun any of the listed recalculations

Recalc History

Start Date: 1/1/2021 End Date: 12/31/2021 **Filter** **Clear**

Filter the list to find a recalculation task

Click to rerun this recalculate task

Recalc ID	Run By	Start Date	End Date	Claims Selected	Claims Processed	Error Count	
1,402	Admin Admin	2021-04-13 2:27:35 PM	2021-04-13 2:27:44 PM	1	1	0	Recalculate
1,401	Admin Admin	2021-04-13 2:20:50 PM	2021-04-13 2:20:58 PM	1	1	0	Recalculate
1,400	Admin Admin	2021-04-13 2:18:15 PM	2021-04-13 2:18:23 PM	1	1	0	Recalculate
1,399	Admin Admin	2021-04-13 2:05:13 PM	2021-04-13 2:05:24 PM	1	1	0	Recalculate
1,398	CMA ZAdmin	2021-03-16 9:50:33 AM	2021-03-16 9:50:34 AM	5	4	0	Recalculate
1,397	CMA ZAdmin	2021-03-16 9:50:19 AM	2021-03-16 9:50:22 AM	5	5	0	Recalculate
1,396	Admin Admin	2021-03-11 7:54:38 PM	2021-03-11 7:54:40 PM	1	1	0	Recalculate
1,395	Admin Admin	2021-03-11 7:54:27 PM	2021-03-11 7:54:36 PM	1	1	0	Recalculate
1,394	Admin Admin	2021-03-11 7:45:26 PM	2021-03-11 7:45:27 PM	8	8	0	Recalculate
1,394	Admin Admin	2021-03-11 7:42:50 PM	2021-03-11 7:42:51 PM	8	8	0	Recalculate

1 - 10 of 77 items

Email: admin@axiomepm.com
Simulation Name: ATI MRP StepDown
Saved Recalc Name: ATI MRP StepDown

When a task is selected in the list, additional details about it display here

Recalc History Errors

Claim Number	Error Message	Contract Name	Version Number	Provision Description
No records available.				

Any recalculation errors display in this area

To access the Recalc History page, from the main menu, click **Admin > Recalc History**.

Launch Page | **Contracts** | **Claims** | **Import Data** | **Reports** | **Admin** | **Help**

Claims > Recalculate Claims | Saved Tasks

Recalculate Claims

Select claims by: Patient Account Number

Patient Account #:

Admin Menu:

- Manage Attributes
- Manage Insurance Plan Codes
- Simulation Mapping
- Recalc History**
- SQL Importer Log
- Provider Org Code Mapping

Verifying claims reimbursement calculation

Claims are automatically calculated during the nightly import process. However, there may be cases in which a claim does not calculate an expected reimbursement. Use the following list of checkpoints to ensure that claims are calculated properly, and to help you figure out why an expected reimbursement did not calculate as expected.

Claim calculation checkpoints

► Step 1: Verify that the claim dates fall within the contract version Start and Expiration dates

Navigate to the contract version and check the Start and Expiration dates. For a claim to calculate correctly against a contract version, the dates on the claim must fall within the contract version's date range, which is its active period.

Contract	Latest Expiration Date
KHA MANAGED CARE	12/31/2017
KHA MEDICAID	12/31/2017
KHA Medical Center	06/01/2020
Details	
Version	1
Start Date	06/01/2019
Expiration Date	06/01/2020
Calculation Date	Discharge
Attached Docs	
Ins. Plan Code	Set
Attributes	Add
KHA MEDICARE	09/30/2020
KHA Training	12/31/2018
ORG1 - BCBS	01/14/2017
ORG1 - BCBS State	01/14/2017
ORG1 - Humana Gold Choice	09/30/2017

► Step 2: Verify that the Payer Code on the claim matches a code assigned to the contract

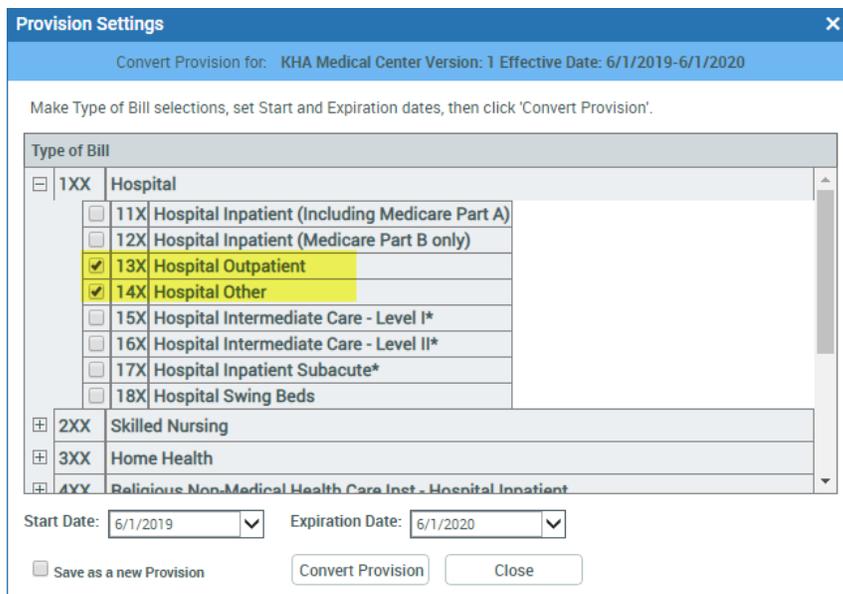
1. In **Ins. Plan Code** column of the contract version, click the **View/Edit** button.
2. In the **Insurance Plan Code** dialog, look in the Payer Code column and confirm that the claim insurance Payer Code is assigned to the contract:

Organization	Payer Code	Payer Description
01 - KREG MEDICAL CTR ORG1	00123	NO DESCRIPTION
01 - KREG MEDICAL CTR ORG1	05440	NO DESCRIPTION

- ▶ Step 3: Verify that the Claim Bill Type is built into the contract version Provision
 1. On the contract version row, click the **Details** link to go to the Provision page.
 2. On the Provision page, select the desired provision by clicking the blue square at the beginning of the row. The row is highlighted light blue.



3. In the side menu, click **Convert**. The Provision Settings dialog opens, displaying the Types of Bill on the provision. You may need to expand the top category row to see the underlying bill types, as shown in the following example.



- ▶ Step 4: Confirm that the claim has criteria that match the contract build
 1. Review the claim and compare the criteria to verify that it matches the capture data specified on the contract clause/term.

- Check that the contract also has a clause that captures non-reimbursable claims. In addition to criteria that catches reimbursable claims, each contract should have a final clause that captures non-reimbursable claims. Without a capture clause/term, the claim will not calculate expected reimbursement. In the following example, a No Qualifying clause is used.

Launch Page Contracts Claims Import Data Reports Admin Help Recalculations Queued: 0

Clauses/Terms >

Return To Provisions

New Clause

New Term

Save

Cancel

Expand All

Descriptions

View: Live
KHA Medical Center Version: 1 Effective Date: 6/1/2019-6/1/2020
Professional Contracts: 6/1/2019 - 6/1/2020

#	Description	Calc Basis	Calc Type	Calc Measure	Terminal?	Rates	Thresh	Limit	Global
1	AMBULATORY SURGERY	Line Item Code ASC			No	View	Set	Set	Set
2	RADIOLOGY SERVICES	Line Item Code MPR	% Charges	Per Line Item	No	View	Set	Set	Set
3	NO QUALIFYING CLAUSE	Any and All Services	Dollar Rate	Per Claim	No	0.00	Set	Set	Set



Working with standard reports

This chapter covers building a standard report.

Access standard reports

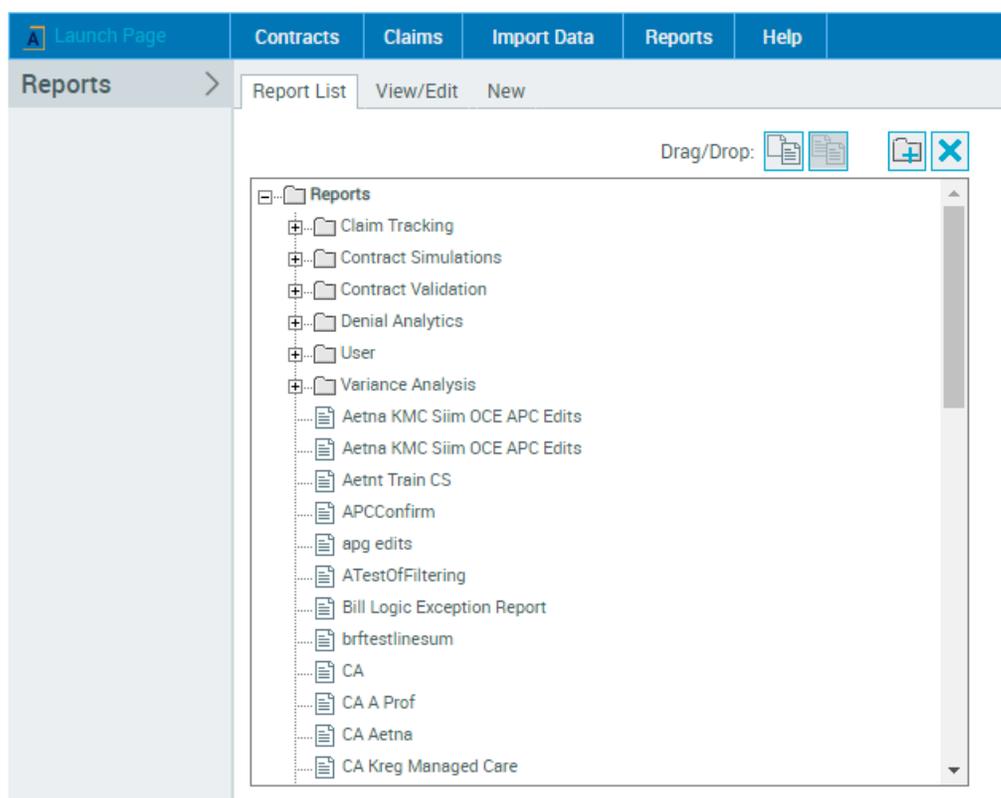
Use these instructions to access standard reports in Axiom Contract Management.

1. In the main menu header, click **Reports > Reports**.

The screenshot shows the main menu header with tabs for Launch Page, Contracts, Claims, Import Data, Reports, Admin, and Help. The Reports tab is selected, and a dropdown menu is open, showing 'Reports' and 'Drill-Down Reports'. Below the menu, there is a 'Live' dropdown, a 'Contracts' section with '+ Add a New Contract' link, and a table with columns 'Contract Name' and 'Latest Expiration'. The table contains one row with 'a CEB 121019' and '12/31/2019'.

Contract Name	Latest Expiration
a CEB 121019	12/31/2019

The Reports page opens to the Report List tab. All previously saved reports are located here.



2. Do one of the following as desired:

- To create a new report, click the **New** tab, and then follow the instructions in [Create a new standard report](#).
- To view an existing report, select the report from the list and then click the **View/Edit** tab.

Create a new standard report

Use these instructions to create a new standard report.

To create a new report:

1. In the main menu header, click **Reports > Reports**.
2. Click the **New** tab.
3. In the **Report Name** field of the new report form, type a name for your report.

Report Name:

Report Type: Clause Stats - Institutional

Start Discharge Date: 3/6/2019

End Discharge Date: 3/6/2019

Simulation: Live

4. From the Report Type drop-down, select the type of report template to run.

Report Name: Report 1

Report Type: Clause Stats - Institutional

Start Discharge Date: 4/6/2017

Simulation: Live

5. Select a report date range. The report parameters available depend on the selected report type. All reports have a date range parameter. You need to set a Start Date and an End Date for the report.

- In the **Start Date** field, click the drop-down and select a date from the calendar.
- In the **End Date** field, click the drop-down and select a date from the calendar.

Report Name: Report 1

Report Type: Clause Stats - Institutional

Start Discharge Date: 4/6/2017

End Discharge Date: 4/6/2017

Simulation: Live

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Today: 4/6/2017

- If the type of report you are creating requires you to select a contract against which to run the report, from the **Contract** drop-down, select an existing contract.

The screenshot shows a web application interface for creating a report. At the top, there are navigation tabs: Contracts, Claims, Import Data, Reports, and Help. The 'Reports' tab is active. Below the tabs, there are fields for 'Report Name' (containing 'Report 1'), 'Report Type' (a dropdown menu showing 'Clause Stats - Institutional'), and 'Save To' (a dropdown menu showing '/Reports'). A 'Save' button is located between the 'Report Type' and 'Save To' fields. Below these fields is a 'Parameters' section with a sub-tab 'Advanced'. In the 'Advanced' section, there are fields for 'Start Discharge Date' (4/6/2017), 'End Discharge Date' (4/6/2017), 'Simulation' (Live), and 'Contract' (a dropdown menu). To the right of the 'Contract' dropdown is a 'Hide Detail' checkbox. A list of filters is displayed below the 'Contract' dropdown, including:

- a CEB Test ORG Filter
- Aetna
- Anthem HMO POS PPO
- Anthem Indemnity
- Anthem Medicare
- BRFTestImportProvision

- If the type of report you are creating requires other parameters, these display in the Parameters section. Select any that apply to your report.
- To add filters to your report, in the **Parameters** heading bar, click the arrows to the left of the **Advanced** button. Do one of the following:
 - From the **Filter** drop-down, select a filter.
 - [Build a filter](#).
- Click **Save**. The report generates.

View a standard report

After the standard report is processed, the system displays the report in the Web Client. The initial view is the detailed view, meaning most of the rows are expanded, except for the most granular level; those usually are collapsed, with a boxed plus symbol to the left of the rows. Expanded rows have boxed minus symbols to the left.

To change the view of a report:

- To expand the details for an item, to the left of the item, click the plus symbol (+) (outlined in red in the following example).
- To access a claim from a report, expand the account row and then click the account number link.
- To view selected filters, on the left above the blue report column headings, click the plus symbol next to **Selected Filters**.

NOTE: These are not the same as Advanced Filters.

- To hide report details, click the **Hide Detail** check box (outline in green in the example) and then click **Save**. Report details usually include the most granular level of detail in a report, such as individual claim level account numbers and patient account information.
- To change the size of the report on the page, select an option from the **Page Width** drop-down (outlined in orange in the following example).

Contracts Claims Import Data Reports Help

Report List View/Edit New

Report Name CA Report Type Contractual Analysis - Institutional Save

Parameters Advanced

Start Discharge Date 1/1/2013 End Discharge Date 1/31/2013 Simulation LIVE Contract CIGNA PPO Hide Detail

150% Find | Next Export to

Clause Contractual Analysis Report

Report Date: 10-09-2018

Selected Filters:

Contract	Version	PTYPE	Clause Description	Claim Count	LOS	Charges	Expected Payment	Amount Paid	Balance Due	CMA Contractual	Payer Contractual	Contractual Variance
CIGNA PPO				38	54	\$251,524	\$221,341	\$198,790	\$22,551	\$30,183	\$49,590	(\$19,407)
				38	54	\$251,524	\$221,341	\$198,790	\$22,551	\$30,183	\$49,590	(\$19,407)
			Hospital Inpatient (Including Medicare Part A)	3	15	\$150,339	\$132,298	\$120,283	\$12,015	\$18,041	\$29,521	(\$11,480)
			(10) ICU-INTERMEDIATE / CCU-INTERMEDIATE	1	3	\$61,313	\$53,955	\$50,030	\$3,925	\$7,358	\$10,706	(\$3,348)
			Acct # Patient Name Date									
			(12) SURGICAL	1	9	\$84,640	\$74,484	\$66,525	\$7,959	\$10,157	\$18,157	(\$8,001)
			Acct # Patient Name Date									
			(14) ALL OTHER IP	1	3	\$4,386	\$3,860	\$3,728	\$132	\$526	\$658	(\$132)
			Acct # Patient Name Date									
			Hospital Other	4		\$700	\$616	\$465	\$151	\$84	\$143	(\$59)

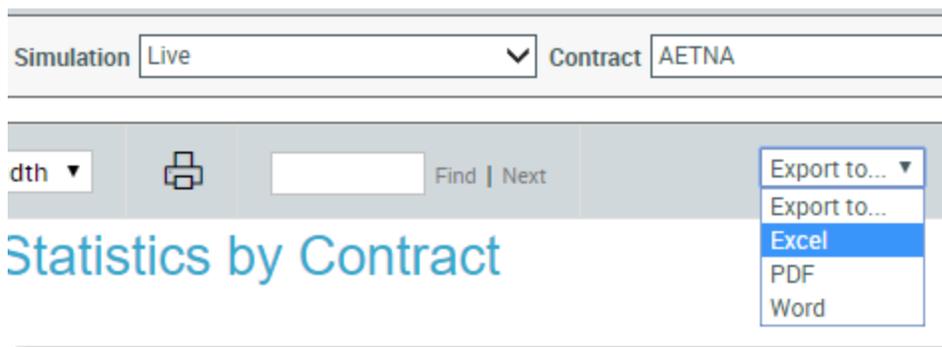
Report example

Export a standard report

Exporting reports to Microsoft Excel can be a useful tool for additional claim and data analysis. Exporting to Excel allows you to perform enhanced data sorts, comparisons, calculations, and edits.

To export a standard report to Excel:

1. Navigate to the desired report.
2. In the gray toolbar at the top of the report, click the **Export to** drop-down, and select **Excel**.



A Download button displays to the right of the export drop-down, which now displays as “Excel.”

3. Click **Download**. The Excel file name displays in the lower left corner of the page. Click the file to

open it.

- In Excel, you can expand report details similarly to the way you do in Axiom Contract Management: by clicking on the plus icon (+) to the left of an item.

Contract	Version	PRTYPE	Clause Description	Claim Count	LOS	Charges	Expected Payment	EPay as % of Chg	Avg Daily Chgs	Avg Daily EPay
AETNA	1		Hospital Inpatient (Including Medicare Part A)	1,520	152	\$2,356,050	\$2,120,221	89.99%		
			(5) MATERNITY C-SECTION	57	12	\$631,605	\$568,220	89.96%	\$4,155	\$3,738
			(6) MATERNITY NORMAL DELIVERY	6	11	\$31,944	\$28,750	90.0%	\$2,904	\$2,614
			(7) MATERNITY	1	5	\$4,603	\$4,142	90.0%	\$921	\$828
			(8) NEWBORNS	8	16	\$13,026	\$11,724	90.0%	\$814	\$733
			(10) ICU-INTERMEDIATE / CCU-INTERMEDIATE	4	11	\$65,831	\$59,247	90.0%	\$5,985	\$5,386
			(11) ICU/CCU	3	10	\$49,716	\$44,744	90.0%	\$4,972	\$4,474
			(12) SURGICAL	13	43	\$279,868	\$251,872	90.0%	\$6,509	\$5,857
			(14) ALL OTHER IP	17	44	\$131,959	\$118,564	89.85%	\$2,999	\$2,695
			Hospital Other	97	77,412	\$28,326	\$25,493	90.0%		
			Hospital Outpatient	1,366	1,629,592	\$1,696,119	\$1,526,507	90.0%		
1581			Total	1,520		\$2,356,050	\$2,120,221	89.99%	\$1	\$1

Example report with expanded filters

- To expand all filters, click the number of highest value in the group that sits just above and to the left of cell A1.

Filter	Value
Discharge Date:	7/1/2009 - 12/31/2011
Simulation:	Live
Contracts:	AETNA

Each greater number represents a deeper level of expansion. In the image below, number 5 has expanded the report down to the claim level.

Report Date: 10-02

Selected Filters:

Discharge Date: 7/1/2009 - 12/31/2011
Simulation: Live
Contracts: AETNA

Contract	Version	PT Type	Clause Description	Claim Count	LOS	Charges	Expected Payment	EPay as % of Chg	Avg Daily Chgs	Avg Daily EPay
AETNA				1,520		\$2,356,050	\$2,120,221	89.99%		
			Hospital Inpatient (including Medicare Part A)	1,520	152	\$2,356,050	\$2,120,221	89.99%		
			(5) MATERNITY C-SECTION	5	12	\$54,659	\$49,177	89.97%	\$4,555	\$4,098
			Acct # Patient Name Date							
			C921531153		3	\$10,802.98	\$9,722.66	90.0%	\$3,600.99	\$3,240.99
			C921509449		2	\$9,328.82	\$8,394.14	90.0%	\$4,663.41	\$4,197.07
			C921835356		2	\$13,298.78	\$11,968.90	90.0%	\$6,049.39	\$5,584.45
			C921502073		2	\$10,069.06	\$9,057.65	89.96%	\$5,034.53	\$4,528.83
			C921878893		3	\$11,180.95	\$10,033.52	89.9%	\$3,720.32	\$3,344.51
			C921878893		3	\$11,180.95	\$10,033.52	89.9%	\$3,720.32	\$3,344.51
			(6) MATERNITY NORMAL DELIVERY	6	11	\$31,944	\$28,750	90.0%	\$2,904	\$2,614
			Acct # Patient Name Date							
			C921903059		1	\$2,876.44	\$2,588.80	90.0%	\$2,876.44	\$2,588.80
			C921909341		2	\$4,461.72	\$4,015.55	90.0%	\$2,230.86	\$2,007.77
			C921430101		3	\$7,970.93	\$7,173.84	90.0%	\$2,656.98	\$2,391.28
			C921911148		2	\$5,045.08	\$4,540.57	90.0%	\$2,522.54	\$2,270.29
			C921724448		1	\$4,411.06	\$3,969.95	90.0%	\$4,411.06	\$3,969.95
			C921520862		2	\$7,179.26	\$6,461.33	90.0%	\$3,589.63	\$3,230.67
			C921520862		2	\$7,179.26	\$6,461.33	90.0%	\$3,589.63	\$3,230.67
			(7) MATERNITY	1	5	\$4,603	\$4,142	90.0%	\$921	\$828
			Acct # Patient Name Date							
			C921848131		5	\$4,602.54	\$4,142.29	90.0%	\$920.51	\$828.46
			C921848131		5	\$4,602.54	\$4,142.29	90.0%	\$920.51	\$828.46
			(8) NEWBORNS	8	16	\$13,026	\$11,724	90.0%	\$814	\$733
			Acct # Patient Name Date							
			C921819442		3	\$1,868.75	\$1,672.88	90.0%	\$619.58	\$567.83
			C921452850		3	\$2,401.50	\$2,161.35	90.0%	\$800.50	\$720.45
			C921715544		2	\$1,288.00	\$1,159.20	90.0%	\$644.00	\$579.60
			C921485504		1	\$904.20	\$813.78	90.0%	\$904.20	\$813.78
			C921843702		2	\$2,440.72	\$2,196.65	90.0%	\$1,220.36	\$1,098.32
			C921573882		1	\$1,032.11	\$928.90	90.0%	\$1,032.11	\$928.90
			C921508122		2	\$1,403.71	\$1,263.34	90.0%	\$701.86	\$631.67
			C921501441		2	\$1,697.14	\$1,527.43	90.0%	\$848.57	\$763.71
			C921501441		2	\$1,697.14	\$1,527.43	90.0%	\$848.57	\$763.71
			(10) ICU-INTERMEDIATE / CCU-INTERMEDIATE	4	11	\$65,831	\$59,247	90.0%	\$5,985	\$5,386
			Acct # Patient Name Date							

Example of fully expanded report

Edit or delete a standard report

Use these instructions to modify and save an existing standard report, or to delete a standard report. You can make changes incrementally if you want, by saving the report after each parameter change.

These instructions are generalized; not all reports contain the report parameters used in these instructions, and some reports contain parameters not mentioned here.

NOTE: You cannot change a report's type.

To modify a standard report:

1. In the **Report List** tab on the **Reports** page, click the report to edit and then click the **View/Edit**

tab.

2. To change the report name, in the **Report Name** field, type a new name.
3. To change a date parameter, expand the **Parameters** section if needed, and then select a new date range from the start and end date drop-downs.
4. To change the report's simulation, in the **Simulation** drop-down of the Parameters section, select a different simulation.

NOTE: If you change the simulation, you may be required to change the contract as well, since contracts are simulation specific.

5. To change the contract, in the **Contract** drop-down of the Parameters section, select the desired contract.
6. To add a filter to the report:
 - a. Click the arrows to the left of the **Advanced** button to open the Advanced parameters.
 - b. From the **Filter** drop-down, select the desired filter.
7. Click **Save**.

To delete a standard report:

1. In the **Report List** tab on the Reports page, right-click the desired report and select **Delete**.
2. In the confirmation dialog, click **OK** to delete the report.

Run APC and eAPG Edits Reports in any simulation

You can run APC/eAPG edit reports targeting a simulation environment other than Live. Although there is a Simulation drop-down menu for this report, previous to the 2019.1 release, the report always ran on the Live simulation for APC/eAPG reports, regardless of the simulation selected. Now you can view edits that occur on APC and eAPG claims grouped within any given simulation.

To run an APC/eAPG Edits report:

1. Click **Reports > Reports**.
2. Click the **New** tab.
3. In the **Report Name** field, type a name for this report.
4. From the **Report Type** drop-down, select one of the following:
 - **Edits - EAPG**
 - For APC, **Edits - OCE APC**.
5. Expand the **Parameters** section if needed, and select a **Start Import Date** and an **End Import Date**.
6. From the **Simulation** drop-down, select the desired simulation.

7. From the **Contract** drop-down, select the desired contract(s).
8. Click **Save**.

The report generates.

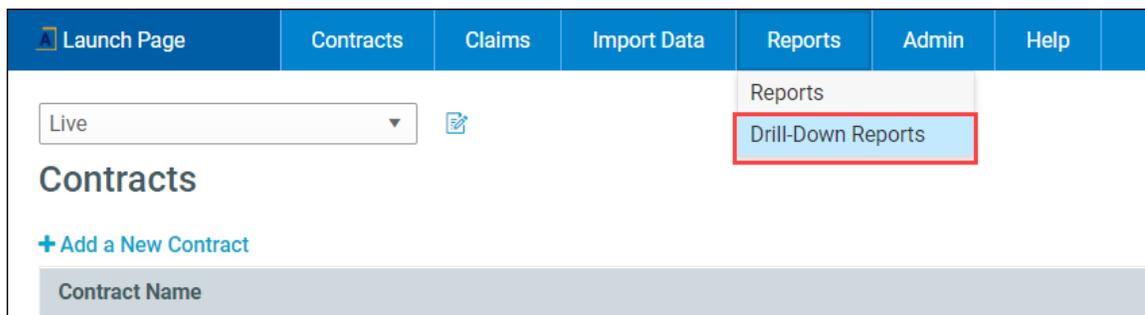
Working with drill-down reports

Axiom Contract Management's drill-down reporting feature enables you to create multi-level, complex reports with expandable / contractible sections. Drill-down reports are interactive and highly modifiable. After generating a report, you can sort and rearrange columns, add or delete additional rows or columns, apply or remove filters, etc.

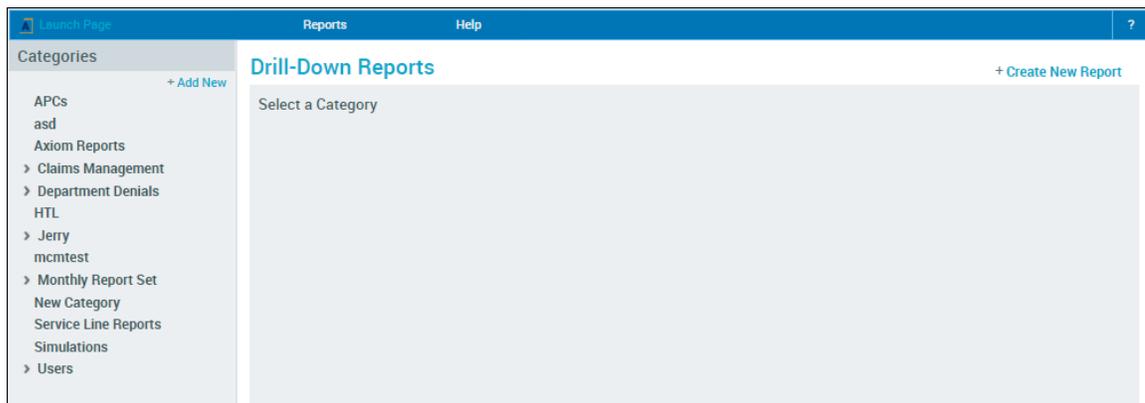
Accessing drill-down reports

To access Drill-Down Reports:

- In the main menu header, click **Reports > Drill-Down Reports**.

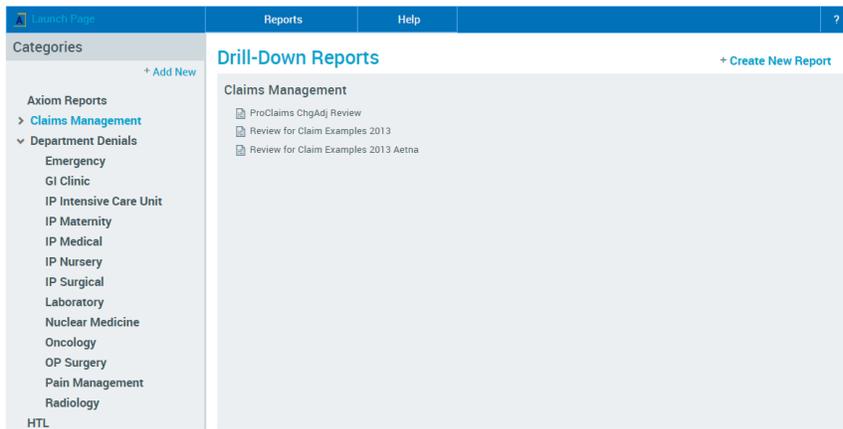


Drill-Down Reports opens in a new browser tab. To get started, see [Organizing drill-down reports](#).



Organizing drill-down reports

The initial page displays your organization's drill-down report folder structure that stores all previously saved reports. From this page, you can add a new folder to the structure, search for and open a saved report, or click **Create New Report** to access the report builder.



Drill-down reports page example

The system comes with the following folders:

- Claims
- Line Items

You can add and delete folders, and create additional subfolders as desired.

IMPORTANT: Be aware that when you make a change to any of the folders, it affects all users.

This initial set-up categorizes reports by type of report. Other options may be User Name or Department. How facilities use the folder structure is up to them.

► Add report folders

First determine whether the new folder should be for a new category or a subcategory.

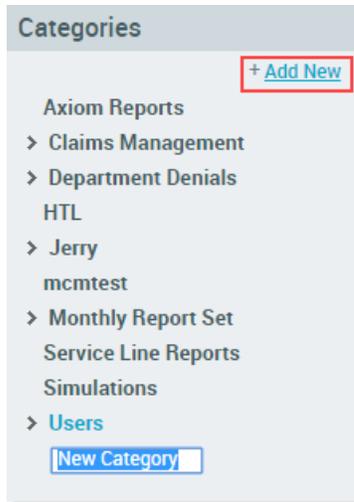
To add a new category folder:

1. In the **Categories** panel on the left, click **+Add New**.

This creates a new folder named **New Category#** that you can rename.

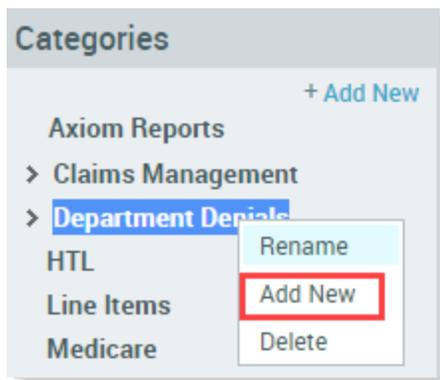
2. Rename the new category and then press **Enter**.

The new folder sorts alphabetically into the structure.



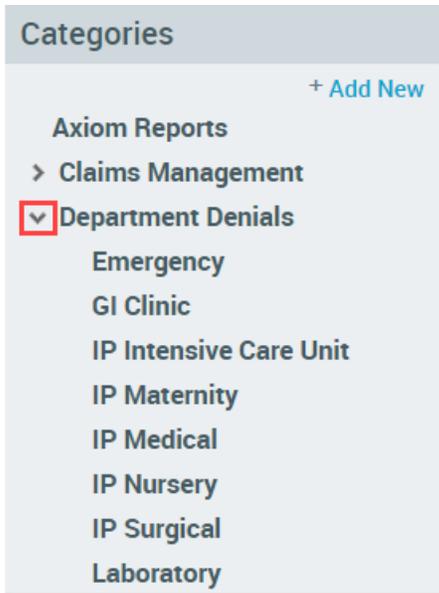
To add a new subcategory folder:

1. In the list of categories, right-click the existing category, and select **Add New**.



2. Rename the subcategory, and press **Enter**.

If a category has subcategories, an arrow icon (>) displays to the left of the Category name. To display all subcategories, click the arrow.



► Edit or delete report folders

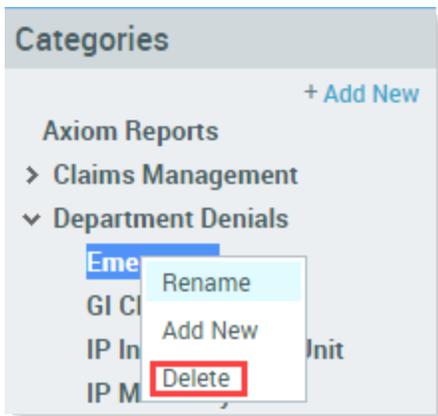
You can rename or delete report categories and subcategories.

To rename a category or subcategory:

1. Right-click the category, and select **Rename**.
2. Change the name, and then press **Enter**.

To delete a category or subcategory:

1. Right-click the category, and select **Delete**.



2. In the confirmation dialog, click **OK**.

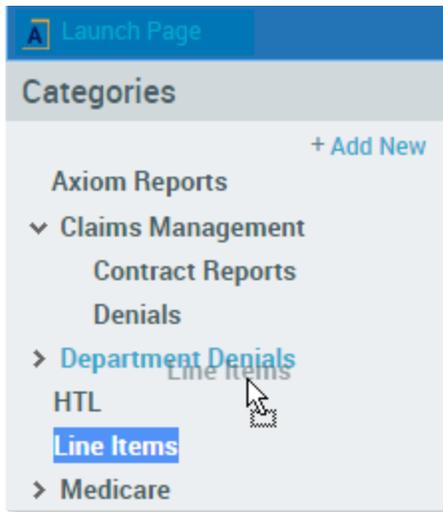
▶ Edit the folder structure

You can rearrange folders and subfolders by dragging and dropping them to new locations. You can move reports within folders the same way. Just keep in mind that any changes you make to a folder's structure or contents affects all users.

To move a folder to a different category folder:

- Drag a folder or subfolder to another category folder. Release the mouse button when the destination folder name changes color.

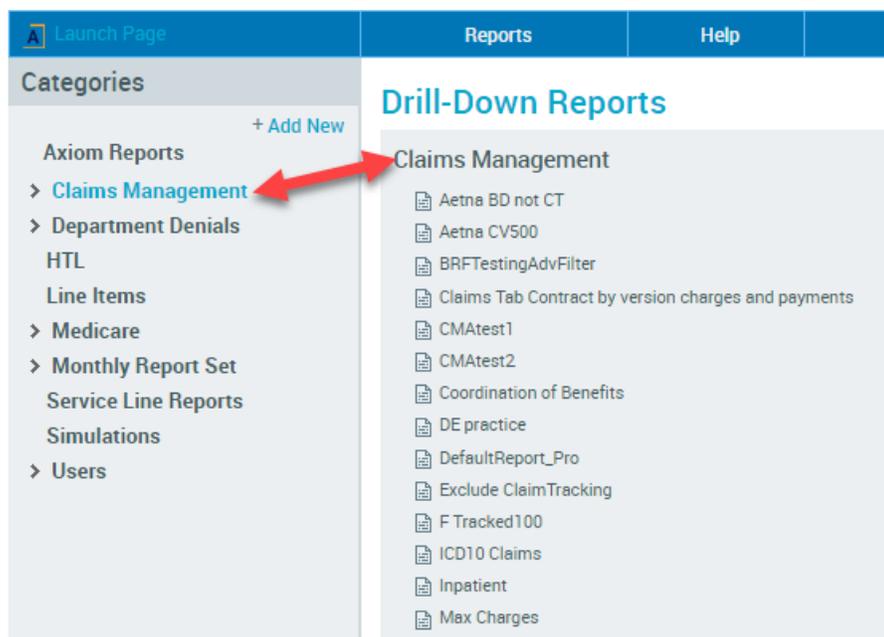
In the following example, the user drags the Line Items folder to the Department Denials folder.



▶ View the list of reports in a folder

To see the reports saved in folders:

1. Click the folder name. The reports display in the right pane under the name of the folder.



2. To view summary details about a report, click the report name.

An information box displays just below the report name, showing more details about the report, including the dates the report was created and last modified, the name of the user who modified it, and any notes that were added when the report was saved.



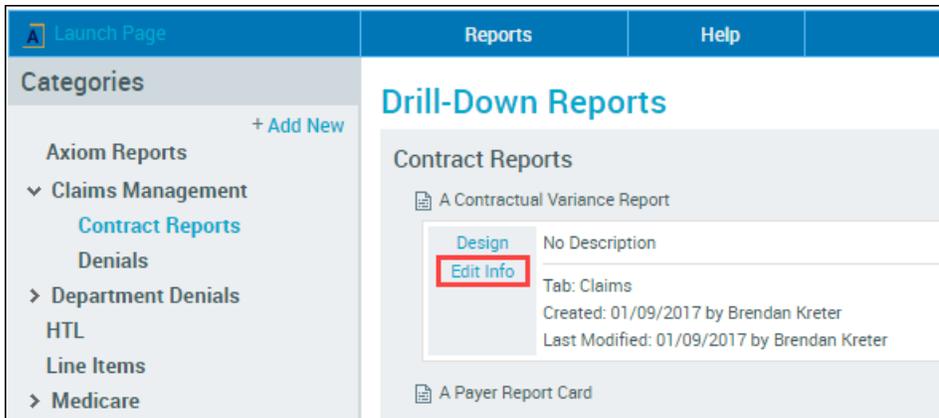
3. To close the summary details box, click the name of the report again.

► Edit report summary information

In addition to viewing report summary information, you can edit the report name, description, and folder location.

To edit report summary information:

1. To modify the report name, description, or folder location, on the left of the description, click **Edit info**.



2. In the Update Report Detail dialog, edit the desired information, and then click Save.

Configuring drill-down reports

When you view a report with the Columns panel open, the Groupings and Measures tabs display on the left side of the page. (By default, opened reports initially display with the Columns panel closed.)

Contract	Contract Version	SUM Total Charges	SUM Total Payments
AETNA	1 - 7/1/2009 to 12/3	150,405.85	111,503.06
CIGNA PPO	5 - 1/1/2013 to 12/3	258,831.19	199,671.69
KHA MANAGED CARE	1 - 1/1/2012 to 12/3	18,842.70	2,230.26
ORG1 - BCBS	5 - 1/15/2013 to 1/1	56,122.78	42,347.09
ORG1 - BCBS	4 - 1/15/2012 to 1/1	11,726.10	9,279.82
ORG1 - BCBS State	3 - 1/15/2013 to 1/1	412,609.35	290,573.35
ORG1 - BCBS State	2 - 1/15/2012 to 1/1	209,574.68	156,993.48

Report shown in flat view

These tabs contain all of the data elements available for building reports. When building a report, always select at least one item from Groupings and at least one item from Measures.

► Organizing groupings and measures

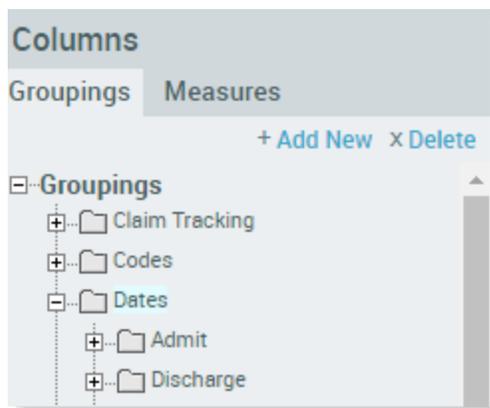
When organizing groupings and measures, you can use the provided folder structure or create your own. You can customize the tabs by adding, deleting, and rearranging folders to organize the groupings and measures data elements as you wish. The folder structure built by one user has no effect on any other user, nor does how you choose to organize the data elements. However, data elements remain within their designated tab, Groupings or Measures, and sort alphabetically within their folder. Measures sort alphabetically first by standard measures, then by calculated fields.

To create a new folder:

1. Determine where the folder should be created.
 - To create a main folder, click **Groupings** (or **Measures**), and then click **Add New**.
 - To create a subfolder, first click the main folder, and then click **Add New**.

A new folder displays, prompting you to name it.
2. Type in the name and press **Enter**.

In the following image, Dates is a main folder containing two subfolders: Admit and Discharge.



To delete a folder:

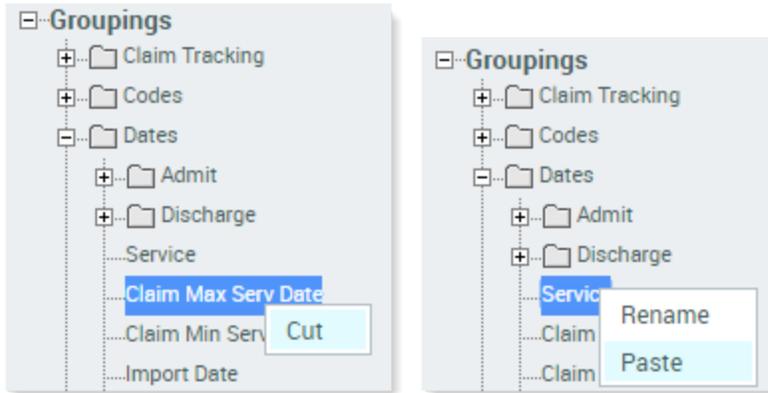
1. Click the selected folder.
2. At the top of the tab, click **Delete**.
3. In the confirmation dialog, click **OK**.

NOTE: You cannot delete a folder with contents. Delete or move the folder's contents and then delete the folder.

To move data elements between folders, do either of the following:

- Drag-and-drop the data element from its current location to the new folder.

- Right-click the data element, and click Cut. Then right-click on the new folder location, and click Paste to move the data element.



About drill-down report fields

The following fields are used in drill-down reports.

▶ Groupings

These fields display as a grouping of rows in the report, in column format. All information requested in the report is totaled by the selected Grouping. In a report, the first grouping displays as the first column. Any additional groupings selected are a subgroup of the first grouping picked.

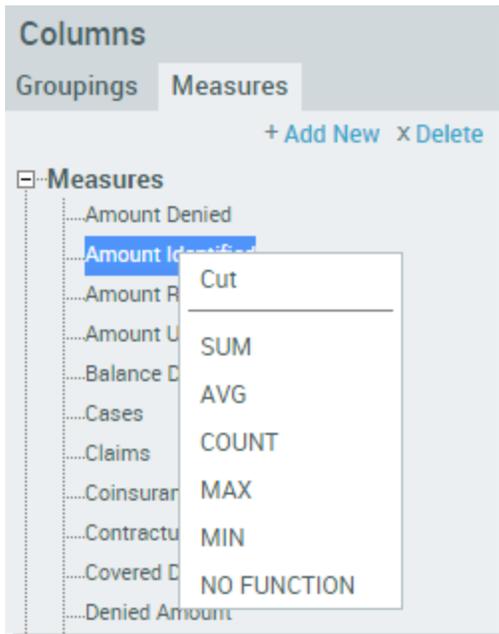


▶ Measures

These fields display as columns in the report.



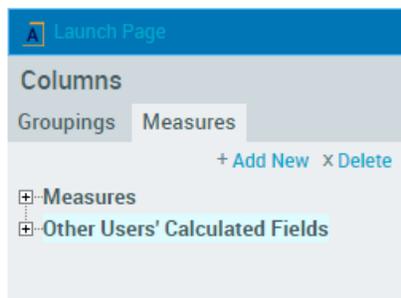
Three main functions are available to calculate a measure: sum, average, and count. You can also choose to display the maximum or minimum value for the field.



Measure names displayed in black text are standard measures in the system. Measure names in blue text are user-defined calculated fields, as shown in the following example.



Calculated fields are listed alphabetically beneath the standard measures in the folder they are saved in. You automatically see calculated fields in your display. Calculated fields created by other users default to the folder "Other Users' Calculated Fields," which is a subfolder of Measures.

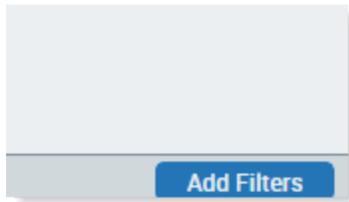


Calculated fields are used to create custom measures in the system. For instructions on creating calculated fields, see [Add calculated fields to a report](#).

► Add Filters

Use the Add Filters button to select specific criteria from the database to incorporate into a report. Note that a filter is not required to run a report. However, if no filters are applied, the entire database is queried.

The Add Filters button displays on the bottom right of the page when you open a drill-down report or edit or create a drill-down report.

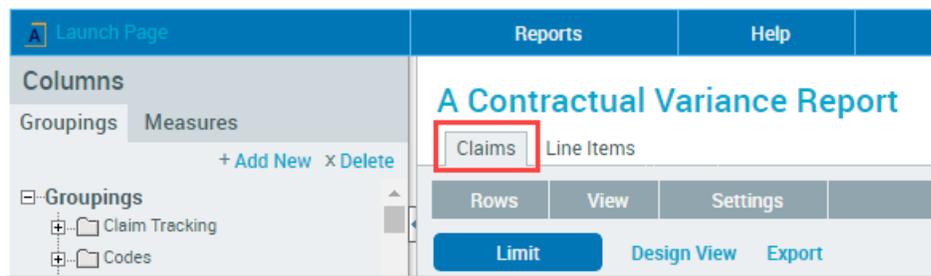


See [Apply filters to a drill-down report](#) and the section on [Editing and filtering drill-down reports](#) for more information.

► Claims tab

The Claims tab pertains to all information found on a claim. This information is only available for claims filed and subsequently imported into Axiom Contract Management. The available Groupings and Measures are provided in the Columns panel on the left side of the page.

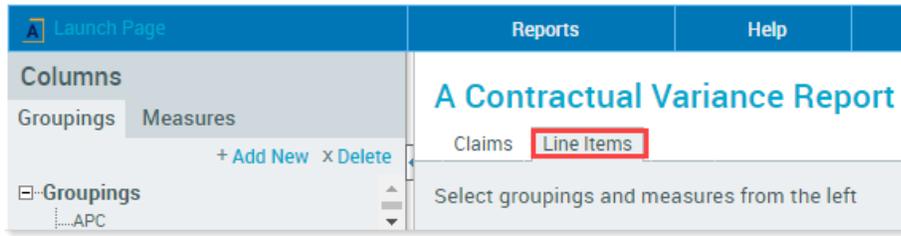
Use the Claims tab to report claim and contract information. You can generate reports to analyze actual contract performance as well as expected profitability using expected payment information. You can generate Detailed Tracking Reports to track underpayment recoveries by payer.



► Line Items tab

The Line Items tab provides details from the claim form at the line item level. Only patients whose claims were filed and subsequently imported into Axiom Contract Management are available. The available Groupings and Measures are listed in the Columns panel on the left side of the page.

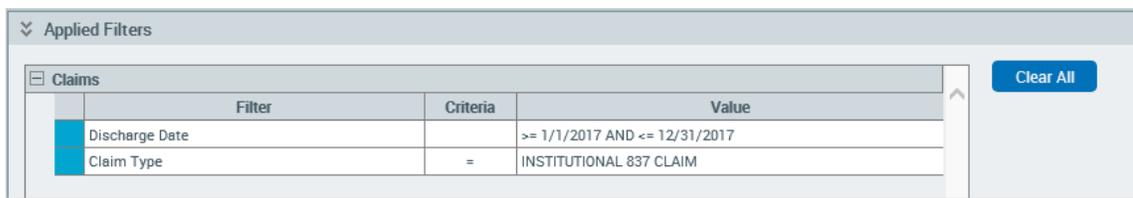
Use the Line Items tab to report on data at the line item level, including Revenue Code, Service Date, and Quantity detail.



▶ Applied Filters

The Applied Filters button is located at the bottom left of the page. The Applied Filters dialog displays all of the filters applied to the current report.

- To display all the filters from the Claims and Line Items tabs that you selected to apply to the current report (see the following example), click the up arrows on the **Applied Filters** button.



- To delete a single filter, click to the left of the value, and press the **Delete** key.
- To remove all filters, click **Clear All** on the right of the page. If no filters are attached to a report, the system will search the entire database for results.

Viewing drill-down reports

All saved reports are available when you first open Drill-Down Reports. The Category section on the left side of the page contains the folders in which saved reports are stored.

▶ Open a saved report

To open a saved report:

1. In the **Categories** panel, click the folder where the report is stored.
2. Hover your cursor over the report name, and click **View**.



The report generates and opens.

After generating the report, you can edit it, change the design view, or export it to Excel. Building and editing reports is covered in [Building reports](#).

3. When finished viewing the report, to return to the main Drill-Down Reports page, in the menu bar, click **Reports > Open**.

To open a saved report while working elsewhere in Drill-Down Reports:

1. In the menu bar at the top of the page, click **Reports > Open**.

You are taken back to the Drill-Down Reports opening page.

2. Click the folder in which the report is stored.
3. Hover your cursor over the name of the report, and click **View**.

▶ **Open and close the Columns panel**

When you open a saved report, the system generates the report and displays the results using the full page. In this view, you do not see the Groupings and Measures tabs in the Columns panel because the panel is minimized.

To maximize the panel, click the arrow to the left of the results. In the following images, the one on the right shows the bar the arrow resides on in blue. You can click anywhere on this bar to maximize and minimize Columns panel.

Launch Page Reports

Claims Tab Contract by version charge

Claims Line Items

Rows View Settings

Limit Design View Export

Contract ^	Contract Version	SUM Total Charges
AETNA	1 - 7/1/2009 to 12/3	150,405.85
CIGNA PPO	5 - 1/1/2013 to 12/3	258,831.19
KHA MANAGED CAP	1 - 1/1/2012 to 12/3	18,842.70
ORG1 - BCBS	5 - 1/15/2013 to 1/1	56,122.78
ORG1 - BCBS	4 - 1/15/2012 to 1/1	11,726.10
ORG1 - BCBS State	3 - 1/15/2013 to 1/1	412,609.35
ORG1 - BCBS State	2 - 1/15/2012 to 1/1	209,574.68
ORG1 - Humana Gold	5 - 10/1/2012 to 9/3	845,179.49
ORG1 - Managed Me	5 - 10/1/2012 to 9/3	321,033.81
ORG1 - Medicaid	5 - 10/1/2012 to 9/3	2,299,417.73
ORG1 - Medicaid SN	4 - 10/1/2012 to 9/3	76,501.02
ORG1 - Medicare	5 - 10/1/2012 to 9/3	10,893,041.14
ORG1 - Medicare Co	3 - 10/1/2012 to 9/3	58,889.85
ORG1 - Medicare HM	3 - 10/1/2012 to 9/3	352.00
ORG2 - BCBS	7 - 1/15/2013 to 1/1	308,741.06
ORG2 - BCBS	6 - 1/15/2012 to 1/1	270,742.81
ORG2 - BCBS State	3 - 1/15/2013 to 1/1	42,182.68
ORG2 - BCBS State	2 - 1/15/2012 to 1/1	17,568.43

Launch Page Reports

Claims Tab Contract by version charge

Claims Line Items

Rows View Settings

Limit Design View Export

Contract ^	Contract Version	SUM Total Charges
AETNA	1 - 7/1/2009 to 12/3	150,405.85
CIGNA PPO	5 - 1/1/2013 to 12/3	258,831.19
KHA MANAGED CAP	1 - 1/1/2012 to 12/3	18,842.70
ORG1 - BCBS	5 - 1/15/2013 to 1/1	56,122.78
ORG1 - BCBS	4 - 1/15/2012 to 1/1	11,726.10
ORG1 - BCBS State	3 - 1/15/2013 to 1/1	412,609.35
ORG1 - BCBS State	2 - 1/15/2012 to 1/1	209,574.68
ORG1 - Humana Gold	5 - 10/1/2012 to 9/3	845,179.49
ORG1 - Managed Me	5 - 10/1/2012 to 9/3	321,033.81
ORG1 - Medicaid	5 - 10/1/2012 to 9/3	2,299,417.73
ORG1 - Medicaid SN	4 - 10/1/2012 to 9/3	76,501.02
ORG1 - Medicare	5 - 10/1/2012 to 9/3	10,893,041.14
ORG1 - Medicare Co	3 - 10/1/2012 to 9/3	58,889.85
ORG1 - Medicare HM	3 - 10/1/2012 to 9/3	352.00
ORG2 - BCBS	7 - 1/15/2013 to 1/1	308,741.06
ORG2 - BCBS	6 - 1/15/2012 to 1/1	270,742.81
ORG2 - BCBS State	3 - 1/15/2013 to 1/1	42,182.68
ORG2 - BCBS State	2 - 1/15/2012 to 1/1	17,568.43

Likewise, while working with a report, you can minimize the Columns panel by clicking on the same bar, as shown in the following example.

The screenshot shows the Axiom Contract Management interface. On the left is a 'Columns' sidebar with 'Groupings' and 'Measures' tabs. Under 'Groupings', there are folders for 'Claim Tracking', 'Codes', 'Dates', 'ICD Codes', and 'User Defined'. A red arrow points to the 'Contract' field in the 'User Defined' group. The main area displays a report titled 'Claims Tab Contract by version charge' with tabs for 'Claims' and 'Line Items'. Below the report title are buttons for 'Limit', 'Design View', and 'Export'. The report table has three columns: 'Contract', 'Contract Version', and 'SUM Total Charges'. The table contains 18 rows of data.

Contract ^	Contract Version	SUM Total Charges
AETNA	1 - 7/1/2009 to 12/3	150,405.85
CIGNA PPO	5 - 1/1/2013 to 12/3	258,831.19
KHA MANAGED CAR	1 - 1/1/2012 to 12/3	18,842.70
ORG1 - BCBS	5 - 1/15/2013 to 1/1	56,122.78
ORG1 - BCBS	4 - 1/15/2012 to 1/1	11,726.10
ORG1 - BCBS State	3 - 1/15/2013 to 1/1	412,609.35
ORG1 - BCBS State	2 - 1/15/2012 to 1/1	209,574.68
ORG1 - Humana Gol	5 - 10/1/2012 to 9/3	845,179.49
ORG1 - Managed Me	5 - 10/1/2012 to 9/3	321,033.81
ORG1 - Medicaid	5 - 10/1/2012 to 9/3	2,299,417.73
ORG1 - Medicaid SN	4 - 10/1/2012 to 9/3	76,501.02
ORG1 - Medicare	5 - 10/1/2012 to 9/3	10,893,041.14
ORG1 - Medicare Co	3 - 10/1/2012 to 9/3	58,889.85
ORG1 - Medicare HM	3 - 10/1/2012 to 9/3	352.00
ORG2 - BCBS	7 - 1/15/2013 to 1/1	308,741.06
ORG2 - BCBS	6 - 1/15/2012 to 1/1	270,742.81

Building drill-down reports

Use the New Report page in Drill-Down Reports to create new drill-down reports. To update existing reports, see [Editing and filtering drill-down reports](#).

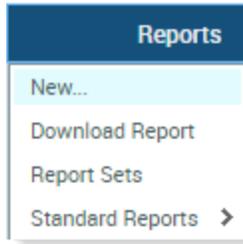
Build a new drill-down report

Use these instructions for building a new drill-down report. Creating a report that has filters, and saving it in the drill-down interface, saves the advanced filter.

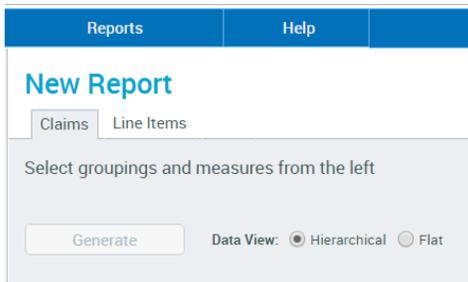
To build a new report:

1. [Navigate to the Drill-Down Reports page](#).
2. Do one of the following:

- Near the top of the page on the right, click **Create New Report**.
- In the header menu, click **Reports > New**.



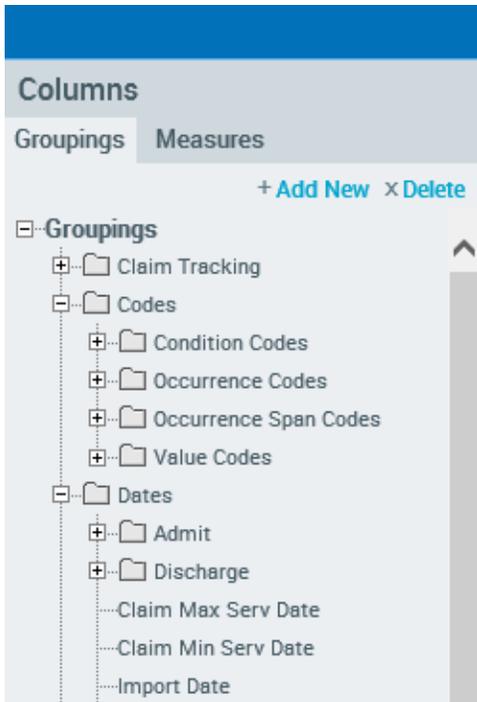
3. Of the tabs on the right side of the page, click the tab for the type of data being retrieved. The Claims and Line Items tabs contain information found on the patient's UB04 or 837 claim forms, and reside within Axiom Contract Management.



On the left side of the page are two tabs, Groupings and Measures.

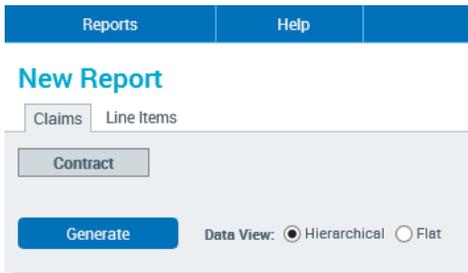
NOTE: You must select at least one parameter from both tabs to generate and display a report.

4. On the left side of the page, in the **Groupings** tab, click the plus sign (+) to expand any folders as needed to locate report groupings options.

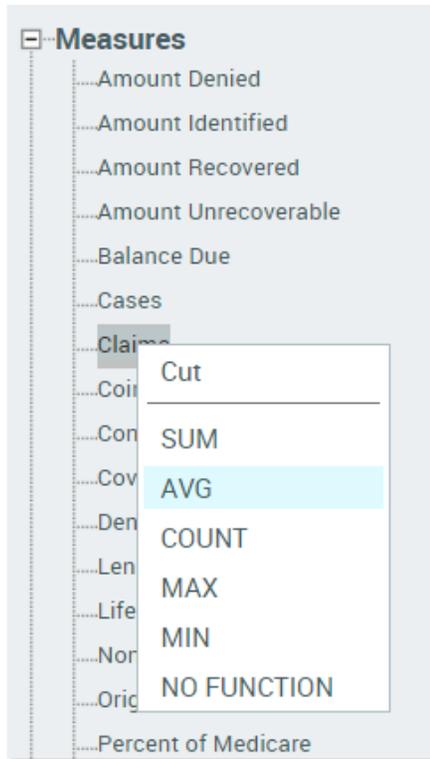


5. Double-click a groupings option to add it to the report. When added, that option displays on the right side of the page above the Generate button, as shown in the following example. Select more row groupings if desired.

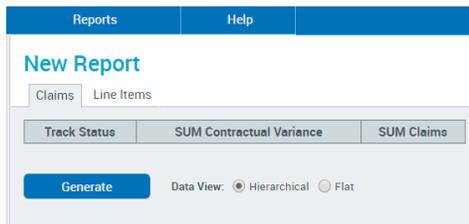
NOTE: If you select more than three groupings, only the first three display when you generate the report in hierarchical view. All groupings display when you generate a report in flat view.



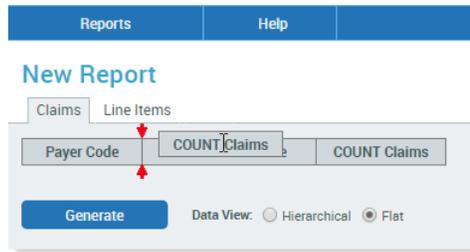
6. Click the **Measures** tab, expand any folders as needed, and then double-click the desired measures, one at a time, to add them to the report. If you do not see the measure you need, you can create one. See [Add calculated fields to a report](#).
 - To add a measure to the report as SUM of that measure, double-click the measure.
 - To add a different calculation, right-click the measure, and select a calculation option from the menu as shown in the following example.



When you chose the calculation option for the desired measure, the selected measure displays to the right of the selected grouping. This is the order in which the columns in the report display. You can [rearrange them or delete a grouping or measure](#) before or after you generate the report if you change your mind.



- To remove any selected options from the report before generating, right-click the option, and select **Delete**.
- To rearrange report columns, drag and drop the columns to the desired order. In the following example, the user drags the measure COUNT claims to the middle row. The red arrows show where the measure label will start, which in this example, is after Payer Code:



7. In the **Data View** section to the right of the Generate button, select the report grid type:
 - **Hierarchical** – Select this option to display the report with grouping columns arranged in a hierarchy.
 - **Flat** – Select this option to display the report with grouping columns arranged side-by-side.
8. Click **Generate**.
9. If desired, [save the report](#) so you can use it later.

Add calculated fields to a report

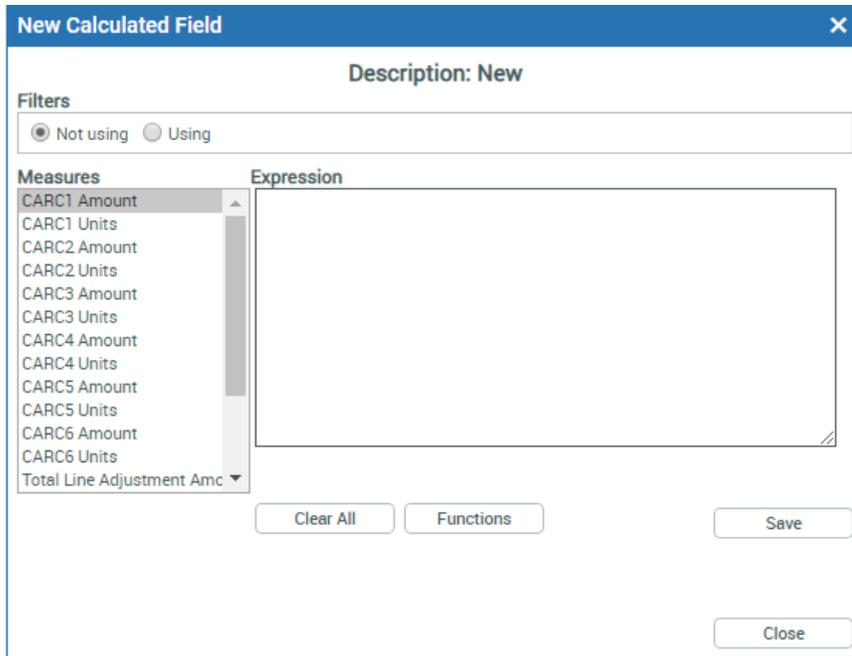
If you need a measure that does not exist, you can build a calculated field. You create calculated fields by choosing current measures and creating expressions with mathematical functions to calculate the desired results.

To create a calculated field:

1. Open the drill-down report to which you want to add a calculated field. If you are creating a new report, select the tab for the type of report (e.g., Claims or Line items).
2. In the menu bar at the top of the page, click **Reports > Create Calculated Field**.

The New Calculated Field dialog opens.

NOTE: You cannot use a calculated field in an equation for another calculated field.



3. Do one of the following:

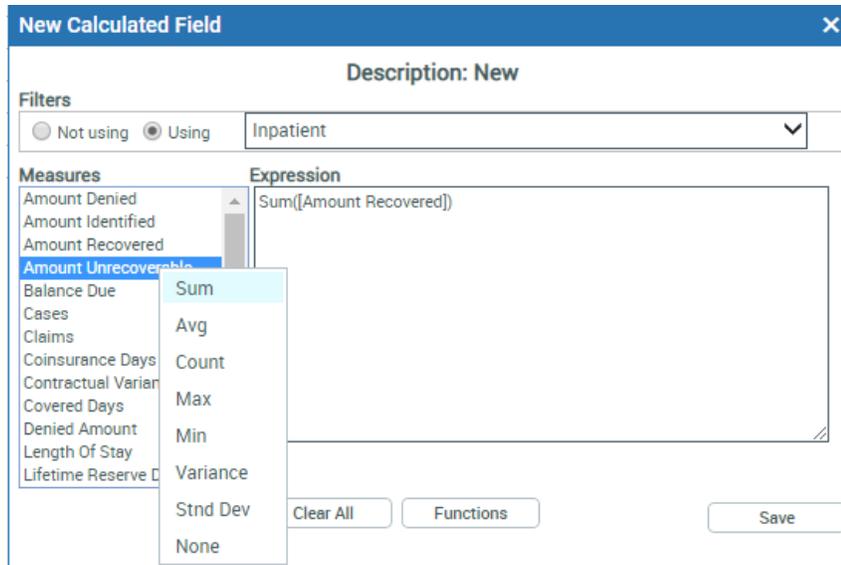
- To use filters from a saved report, click the **Using** option and then select a report from the drop-down list. Reports available in this list are based on the tab that you are on when building the calculated field. A calculated field on the Claims tab can use only the filters from other Claim reports.

NOTE: Using the filters option limits the calculated field to only the claims found in the selected saved report. For example, to compare pediatric claims to all claims, you need to create a calculated field for SUM(claims) with a filter from a report limited to pediatric claims. You can select only one report to apply as a filter to a calculated field. However, the report used for the calculated field can contain as many filters as you need.

- If you do not want to use a filter, leave the default **Not using** selected.

4. Build the expression by selecting measures from the Measures list on the left:

- a. Click the desired measure, and select the desired function from the list of available functions. The measure is added to the Expression box. Now you need to add an operator or mathematical symbol.



- b. Click the **Functions** button to select the desired operator, or, for a mathematical equation, use the mathematical symbols on your keyboard (+ - / *) for add, subtract, divide, and multiply, between your measures to string them together.

NOTE: Do not use special characters, such as dashes and slashes, in a calculated field name.

TIP: If you make a mistake with the expression, click **Clear All** and start over.

- c. Add the next measure and symbol, as needed, until your expression is complete.

TIP: If you know the complete expression, you can type it into the Expression box manually instead of selecting Measures and Functions from the menus.

- d. Click **Save**.
- e. In the **Save As** dialog, select a location to store the measure on the Measures tab, and then in the **Name** field, type a name for it.
- f. Click **Save and Return**.

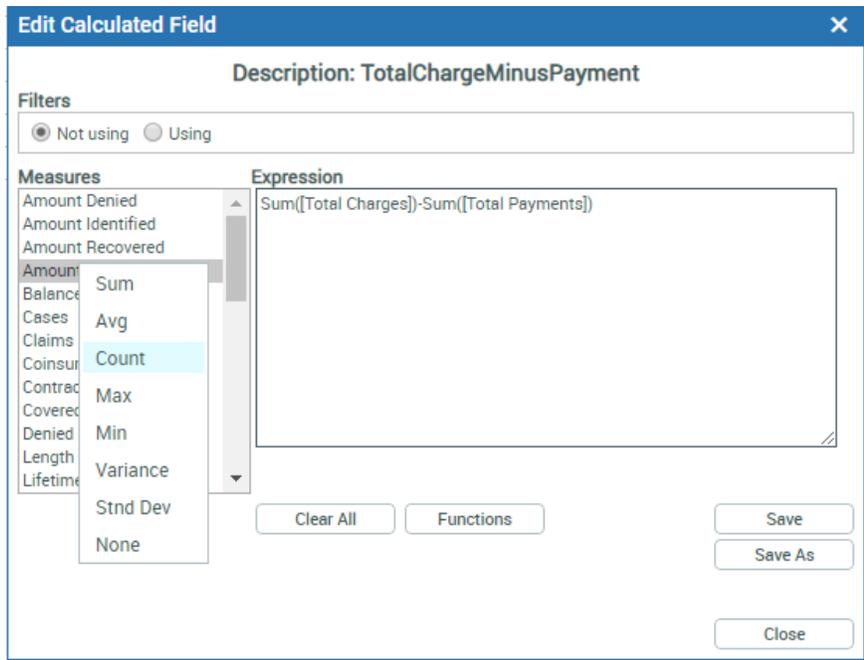
The new measure name displays in blue text on the Measure tab in the folder you selected. The name becomes a column header when added to a report.

Edit or delete a calculated field

Use these instructions for managing your calculated fields.

To edit a calculated field:

1. In the **Columns** panel, click the **Measures** tab.
2. In the **Measures** list, right-click the desired calculated field, and select **Edit Calculated Field**.
3. In the **Edit Calculated Field** dialog, do any of the following as desired:
 - To clear the entire expression in the **Expression** box, click **Clear All** and then rebuild the expression.
 - To replace part of the expression, use the backspace key to remove the part you want.
 - To add a measure, in the **Measures** list, click the desired measure, and select the calculation type from the pop-up menu.
 - To add an operator between measures, type a mathematical symbol (+ - * /) or click the **Functions** button, and select a function.



4. Do one of the following:
 - To save the measure as a new measure, click **Save As** and then, in the **Save As** dialog, select a location for the measure. In the **Name** field, type a new name. Click **Save and Return**.
 - Click **Save**.

To move a calculated field:

1. Right-click the calculated field, and select **Cut**.
2. Select the desired location / folder in the **Measures** tab, right-click and select **Paste**.

TIP: You can also drag and drop calculated fields to different locations in the Measures tab.

To delete a calculated field:

1. In the **Measures** tab, right-click the calculated field, and select **Delete**.
2. In the confirmation dialog, click **OK**.

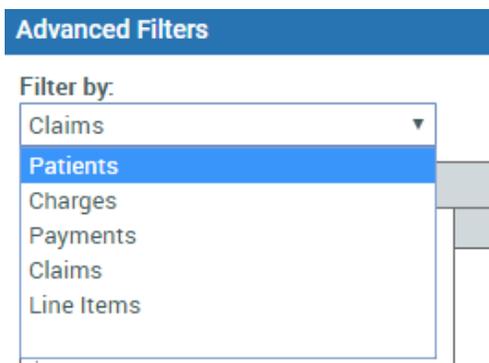
NOTE: You cannot delete calculated fields that are attached to a report.

Apply filters to a drill-down report

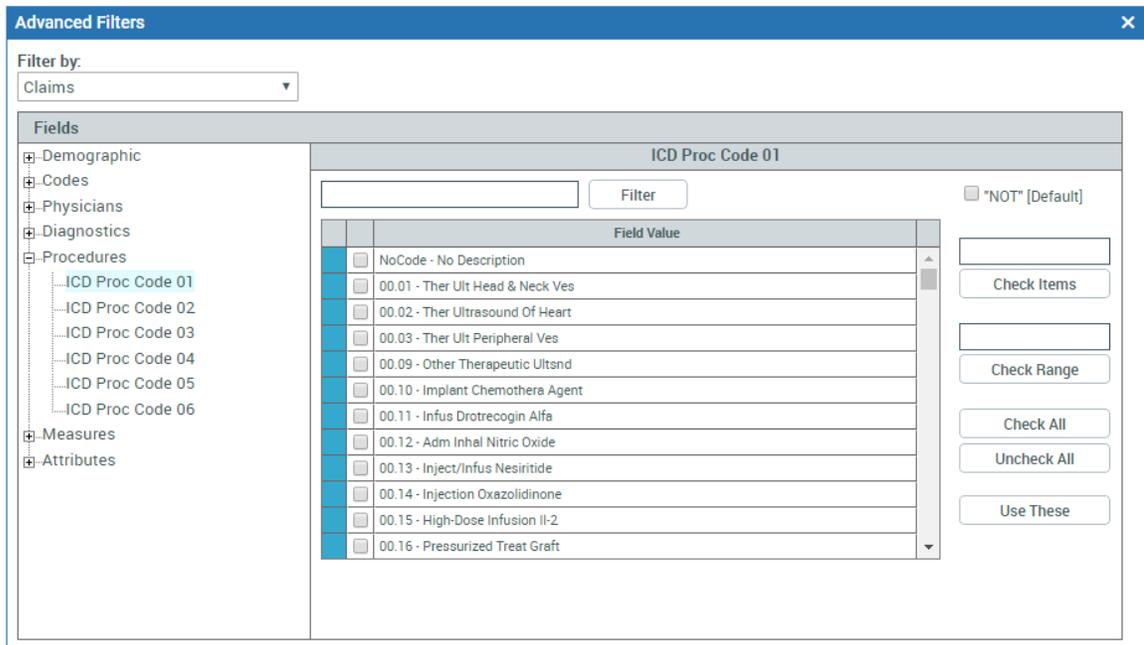
Use these instructions for applying filters while building a drill-down report. Filters enable you to more precisely select data from the database for your reports.

To apply filters:

1. On the bottom right of the page, click **Add Filters**.
2. To change the type of filter you are applying, click the **Filter by** drop-down, and make a selection (see the following example). Each type has an underlying folder structure that groups together similar data elements.

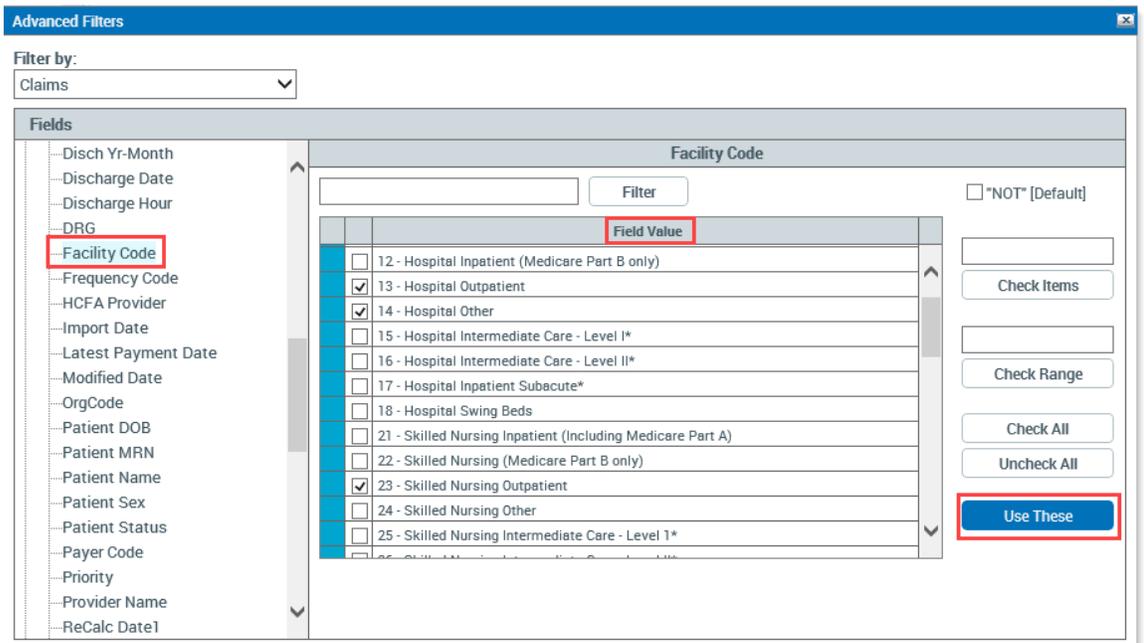


3. In the **Fields** section, click the plus symbol (+) next to the type of field you want, to view the fields available in that folder.

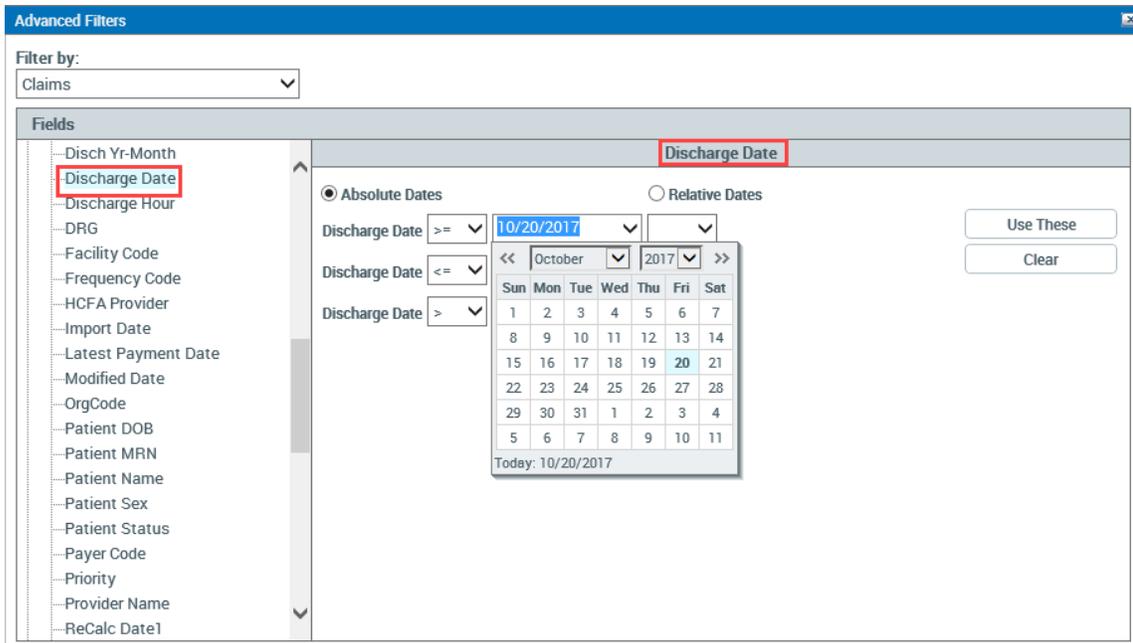


4. To select a filter to apply to the report, click the filter name.

For some filters, a list displays of the data values you can select for that filter.

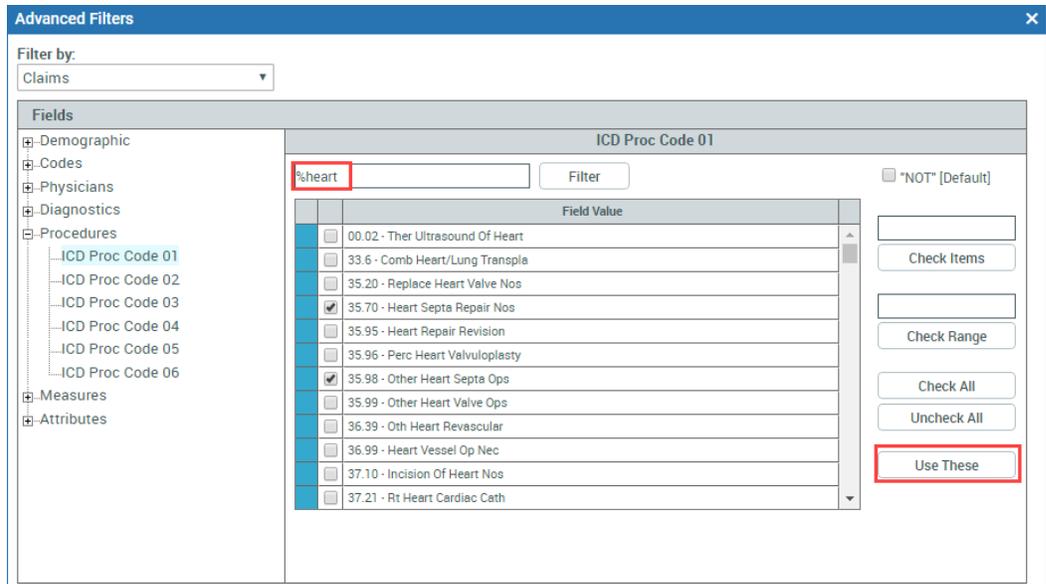


For other filters, a drop-down list provides selection options:

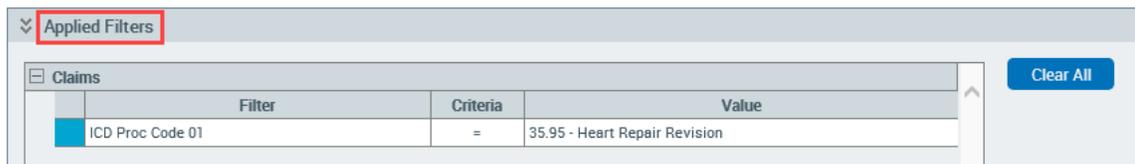


► To search for filter values:

- Do one of the following:
 - Scroll down the entire list until you find the desired value, then click the check box next to the value, and click the **Use These** button on the right to save the value.
 - If you know the exact value to filter with, type it into the box, and then click **Filter**. The system displays this value. Click the box and then click **Use These** to apply the filter.
 - Use the wild card feature. If you do not know the exact value for the filter but you know some or part of the value, type the percent (%) symbol in the field along with a known portion of the number/text, and click **Filter**. This shortens the list of values to search from. For example, to find a certain ICD Procedure number that relates to the heart, type "%heart." The system provides all the ICD Procedure codes that include the word "heart" in the description. Select the desired value(s), and click **Use These**.



- Additionally, you can select more than one filter value by selecting multiple check boxes.
 - To select all of the values except one, click **Check All**, which selects all of the filter values. Then, you can simply uncheck the values that you do not want to use in the report. Remember to click **Use These** to set the filter.
5. Each time you select a filter, click **Use These** to set this filter for the report.
 6. After selecting the desired filters, at the bottom left of the page, click **Applied Filters** to view the filters and confirm the selected criteria.



7. After adding all of the groupings and measures to the design view and applying the filters, click **Generate** to view the results. The results of the report display.

Claims		Line Items		
Rows	View	Settings		
Limit		Design View	Export	
	Contract	SUM Cases	SUM Total Charges	SUM Contractual Variance
<input type="checkbox"/>	ORG1 - Medicaid	1,627	7,219,909	-667,567
<input type="checkbox"/>	ORG1 - Medicare	1,934	12,147,566	-348,088
<input type="checkbox"/>	ORG2 - Medicare	342	1,421,388	-275,704
<input type="checkbox"/>	ORG2 - Medicaid	774	1,623,800	-39,848
<input type="checkbox"/>	ORG1 - BCBS State	65	426,854	-14,008
<input type="checkbox"/>	ORG2 - BCBS State	22	86,225	-12,933
<input type="checkbox"/>	ORG2 - BCBS	44	136,320	-6,544
<input type="checkbox"/>	ORG4 - Medicare HMO Other	168	707,892	51,697
<input type="checkbox"/>	ORG1 - Humana Gold Choice	217	867,323	84,349

Save a drill-down report

Saving a drill-down report saves all of the selected groupings, measures and filters, and any changes to the report format or layout.

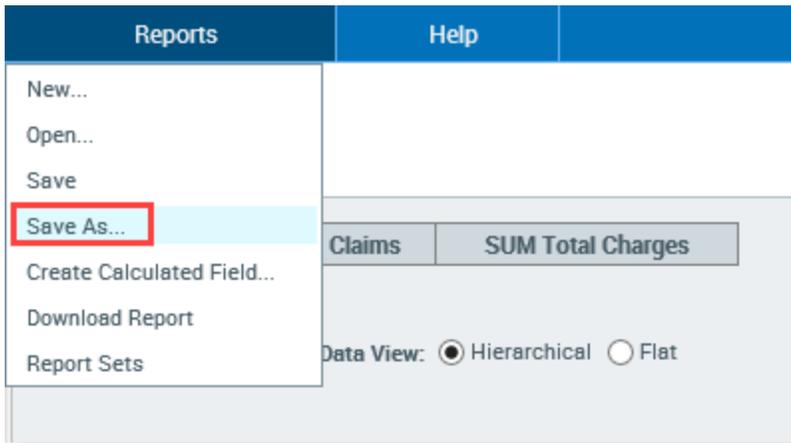
We recommend that you save the report while viewing the report layout. This ensures that the report is saved as the correct type (Claims or Line Items).

Reports		Help		
New Report				
Claims		Line Items		
Rows	View	Settings		
Limit		Design View	Export	
Admit Source ^	Admit Type	BillCode	SUM Claims	SUM Total Charges
9 - Information Not Available	2 - Urgent	131	30.00	8,473.94
9 - Information Not Available	2 - Urgent	132	4.00	1,177.00
9 - Information Not Available	2 - Urgent	111	6.00	106,079.30
9 - Information Not Available	1 - Emergency	851	149.00	104,694.95
9 - Information Not Available	1 - Emergency	857	1.00	583.31
9 - Information Not Available	2 - Urgent	187	1.00	10,370.10
9 - Information Not Available	2 - Urgent	851	3.00	833.00
9 - Information Not Available	2 - Urgent	141	57.00	11,953.00
9 - Information Not Available	2 - Urgent	133	24.00	8,883.00
9 - Information Not Available	2 - Urgent	134	4.00	785.00
9 - Information Not Available	1 - Emergency	137	15.00	26,220.92
9 - Information Not Available	1 - Emergency	141	63.00	12,392.00
9 - Information Not Available	1 - Emergency	132	2.00	429.00
9 - Information Not Available	1 - Emergency	111	3.00	24,485.16

Report layout view

To save the report:

1. In the menu header at the top of the **Drill-Down Reports** page, click **Reports > Save**.



The Add New Report dialog opens. The Tab field defaults to the Report tab that you were on when you saved the report.

2. In the **Folder** field, select the folder in which to save the report.
3. In the **Name** field, type a unique name for the report. Give the report a name you can easily remember and identify later.

NOTE: When naming a report, do not use special characters such as dashes or slashes.

4. If desired, in the **Description** field, type a detailed description of the report.

Add New Report [X]

Tab: Line Items

Folder: Line Items [v]

Name: Rev Code line items

Description: Rev code line items charge

Save Cancel

5. Click **Save**.

You can continue to work on the report and either save the changes or select **Save As** to save as a new report with a new name.

Export a drill-down report

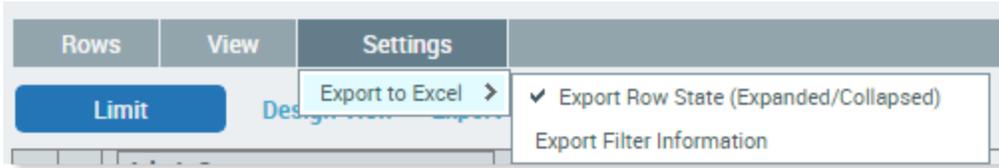
Use these instructions to export a copy of drill-down report results to Microsoft Excel, which transfers the report into an Excel spreadsheet.

The system defaults to Export Row State (Expanded or Collapsed) and Export Filter Information. If you do not want to export any of these features, highlight and click the desired setting to clear the check mark.

To export a drill-down report:

1. Generate the report.
2. In menu header above the report results, click **Settings > Export to Excel**, and then select the following as desired:
 - To include the ability to expand entire row levels at a time, click **Export Row State (Expanded/Collapsed)**.
 - To include a list of filters applied to the report in the report results, click **Export Filter Information**.

- To verify your selections, click **Settings > Export to Excel**. The option(s) you selected should have a check mark to the left, as shown in the following example:



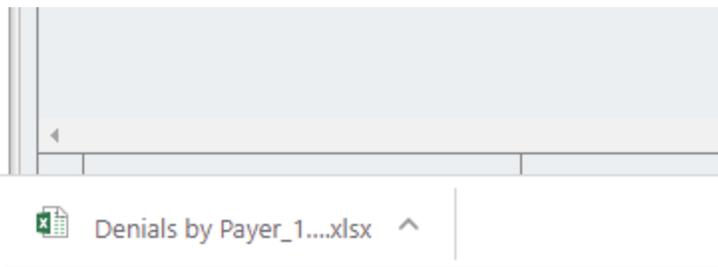
- Below the dark gray menu header, click the blue **Export** link.

 A screenshot of the application interface showing a table with columns for 'Admit Source', 'SUM Claims', and 'SUM Total Charges'. The 'Export' button in the top navigation bar is highlighted with a red box.

		Admit Source	SUM Claims	SUM Total Charges
+	<input type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
+	<input type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16
+	<input type="checkbox"/>	4 - Transfer From Hospital	3,647.00	38,759,838.81
+	<input type="checkbox"/>	5 - Transfer From SNF	3,338.00	11,237,691.09
+	<input type="checkbox"/>	6 - Transfer From Another Facility	256.00	2,366,410.08
+	<input type="checkbox"/>	7 - Emergency Room	16,924.00	77,407,543.86

The report generates. This may take several minutes if the report is long.

The report file downloads to your computer, and a link to the file displays in the bottom left corner of the page, as shown in the following example.



- At the bottom of the page, click the Excel file to open it.

The following example shows a report generated in hierarchical view that was exported with the options **Export Filter Information** and **Export Row State (Expanded/Collapsed)** selected.

The applied filters export as a collapsible list above the report results, for reports in flat view and in hierarchical view (see list outlined in red in the following example).

Each report level has its own expand/collapse button (+) to the left, which you can use to expand and collapse report sections.

On the left, above the list of filters, is a row of numbered squares (outlined in blue in the following example). Use these buttons to expand/collapse all rows of the level that corresponds to each button.

Disch Yr-Month	SUM Cases	SUM Total Charges	SUM Total Expected Payment1	SUM Balance Due	Patient Responsibility	SUM Contractual Variance
2013-10Oct	166	968,514	222,700	42,216	(35,266)	(6,951)
Denial Reason Code	SUM Cases	SUM Total Charges	SUM Total Expected Payment1	SUM Balance Due	Patient Responsibility	SUM Contractual Variance
N3 Missing Consent Form	7	68,652	18,077	13,736	(51,078)	37,342
BillID Number	SUM Cases	SUM Total Charges	SUM Total Expected Payment1	SUM Balance Due	Patient Responsibility	SUM Contractual Variance
C921703145	1	11,566	3,418	3,308	(10,580)	7,272
C921691306	1	11,365	2,630	2,630	(11,365)	8,735
C921780193	1	10,634	2,630	2,630	(10,634)	8,004
C921552677	1	9,506	2,598	2,508	(8,926)	6,417
C921579384	1	9,893	2,630	29	0	(29)
C921555618	1	9,573	2,630	2,630	(9,573)	6,943
C921391452	1	6,115	1,540	0	0	(0)
	7	68,652	18,077	13,736	(51,078)	37,342
N30 Patient Ineligible for this	12	60,815	15,648	4,997	2,028	(7,025)
MA66 Invalid Principle Proced	5	2,110	539	198	0	(198)
MA130 Incomplete or Invalid i	56	559,270	103,172	(5,196)	7,686	(2,489)
MA30 Invalid Type of Bill	1	2,525	772	772	(2,525)	1,752
M51 Invalid Procedure Code	85	275,141	84,491	27,709	8,624	(36,333)
	166	968,514	222,700	42,216	(35,266)	(6,951)
2013-11Nov	163	772,733	217,764	51,617	15,806	(67,423)
2013-12Dec	86	430,233	128,534	52,897	5,391	(58,289)
2014- 1Jan	96	604,691	172,658	47,708	(8,275)	(39,432)
2014- 2Feb	48	378,538	87,006	27,406	(15,605)	(11,801)
2014- 3Mar	53	486,149	146,742	53,421	(6,857)	(46,564)
	612	3,640,857	975,404	275,266	(44,806)	(230,460)

5. To view report details, do any of the following:

- To expand/collapse individual rows, click that row's buttons (+ / -).
- To expand all level 1 sections, click the second square (2) in the row.
- To expand all levels, click the last square in the row, which is the third square (3) in the example.
- To collapse all expanded sections, click the first square (1).

Editing and filtering drill-down reports

Drill-down reports are interactive, allowing you to filter the report to display only what you want.

Report filtering options

Several buttons, icons, and drop-down menus display in rows above the gray shaded field names on a generated report. These functions allow you to further edit the report.

▶ Limit button

The Limit button sets additional report filters. For example, to display results for Emergency and Urgent only, select the check boxes to the left of their names, and click Limit.

Rows	View	Settings		
<div style="display: flex; justify-content: space-between; align-items: center;"> Limit Design View Export </div>				
		Admit Source	SUM Claims	SUM Total Charges
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16
<input type="checkbox"/>	<input type="checkbox"/>	4 - Transfer From Hospital	3,647.00	38,759,838.81
<input type="checkbox"/>	<input type="checkbox"/>	5 - Transfer From SNF	3,338.00	11,237,691.09
<input type="checkbox"/>	<input type="checkbox"/>	6 - Transfer From Another Facility	256.00	2,366,410.08
<input type="checkbox"/>	<input type="checkbox"/>	7 - Emergency Room	16,924.00	77,407,543.86
<input type="checkbox"/>	<input type="checkbox"/>	8 - Court/Law Enforcement	8.00	21,433.31
<input type="checkbox"/>	<input type="checkbox"/>	9 - Information Not Available	3,745.00	10,073,750.45
<input type="checkbox"/>	<input type="checkbox"/>	A - Transfer From CAH	6.00	108,206.35
<input type="checkbox"/>	<input type="checkbox"/>	D - NO DESCRIPTION	90.00	854,005.39

This sets these Admit Type selections as an additional filter. They will be the only results displayed:

Rows	View	Settings		
<div style="display: flex; justify-content: space-between; align-items: center;"> Limit Design View Export </div>				
		Admit Source	SUM Claims	SUM Total Charges
<input type="checkbox"/>	<input type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
<input type="checkbox"/>	<input type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16

To remove applied limits, see [Remove an applied filter](#).

▶ Rows menu

Use the Rows menu to make selections from the results. For example, if you sorted charges in descending order to reveal the Admit Sources with the most charges and you are only interested in the top five Admit Source, click **Rows > Select > First 5**, which selects the first five names displayed.

Rows		View	Settings		
Select		All	View	Export	
Expand All		First 5			
Collapse All		Next 5			
		None			
		Inverse			
<input type="checkbox"/>	1 - Physic			SUM Claims	SUM Total Charges
<input type="checkbox"/>	2 - Clinic			511,574.00	1,132,928,386.57
<input type="checkbox"/>	4 - Transfer From Hospital			7,191.00	4,446,587.16
<input type="checkbox"/>	5 - Transfer From SNF			3,647.00	38,759,838.81
<input type="checkbox"/>	6 - Transfer From Another Facility			3,338.00	11,237,691.09
<input type="checkbox"/>	7 - Emergency Room			256.00	2,366,410.08
<input type="checkbox"/>	8 - Court/Law Enforcement			16,924.00	77,407,543.86
<input type="checkbox"/>	9 - Information Not Available			8.00	21,433.31
<input type="checkbox"/>	A - Transfer From CAH			3,745.00	10,073,750.45
				6.00	108,206.35

- To display the top ten, go back to Rows > Select > Next 5, which selects the next five Admit Sources listed.
- To display only the top four Admit Sources:
 - Select Rows > Select > None; this clears all of the selected Admit Sources.
 - Manually click the top four in the report. When all desired Admit Sources are selected, click Limit to remove all of the non-selected Admit Sources from the view, displaying only those selected.

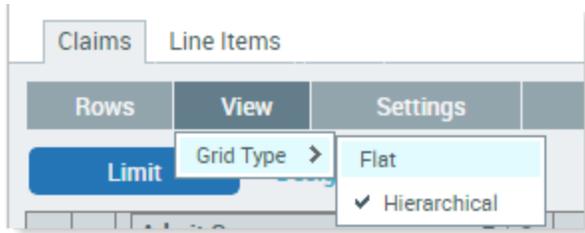
Rows		View	Settings		
Limit		Design View	Export		
<input type="checkbox"/>	Admit Source			SUM Claims	SUM Total Charges
<input type="checkbox"/>	1 - Physician Referral			511,574.00	1,132,928,386.57
<input type="checkbox"/>	2 - Clinic Referral			7,191.00	4,446,587.16
<input type="checkbox"/>	4 - Transfer From Hospital			3,647.00	38,759,838.81
<input type="checkbox"/>	5 - Transfer From SNF			3,338.00	11,237,691.09

NOTE: When you select and limit rows of data from the results, this information is set as a filter, which is then visible in the Applied Filters dialog. If you make an error, open the Applied Filters dialog, and [remove the new filter](#).

You can also use the Rows menu to expand and collapse sub-grouped rows when a report uses multiple groupings.

▶ View menu

Change the grid type between Hierarchical and Flat. This is the same as selecting Flat view or Hierarchical view when viewing the report in design view.



For examples of how to use these views, see [Add a grouping as a subtotal](#).

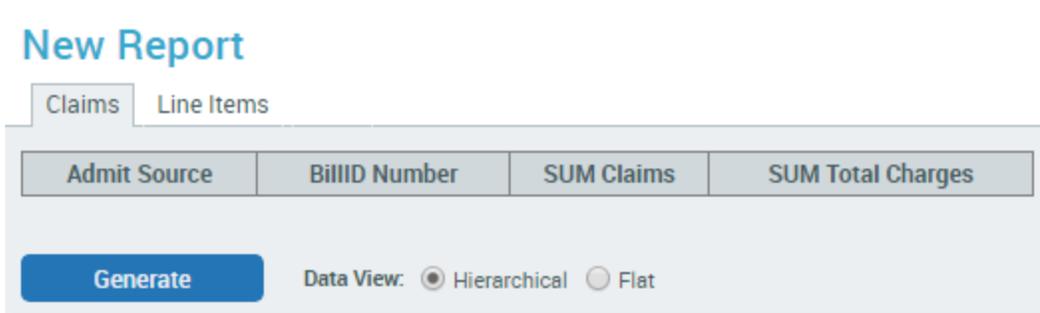
▶ Settings menu

Use this menu to set the formatting for reports exported to Excel.

For instructions on exporting a report using this menu, see [Export a drill-down report](#).

▶ Design View

Design View is report-building view. In Design View, you can add, delete, or rearrange the groupings and measures in a report. Although the following example shows a new report, you can edit existing reports in Design View. For instructions, see [Change report column order](#).



Groupings and measures are added to the system in the order they were selected, with groupings placed before measures. However, you can change the order of groupings and measures at any time (groupings still order together before measures). For instructions, see [Change report column order](#).

Sort report columns and rows

When building a report, you can easily sort and rearrange report columns.

After generating a report, you can [modify the results using various functions](#). For example, you can alter or sort data, add or delete additional rows or columns, or continue to drill down into the report to view more specific results.

As an example, the following image displays partial report results using the following criteria:

- **Filter:** DRG = 291, 292, 293
- **Grouping:** Admit Source
- **Measures:** Sum Claims, Sum Total Charges

Rows	View	Settings	
<div style="display: flex; justify-content: space-between; align-items: center;"> Limit Design View Export </div>			
	Admit Source	SUM Claims	SUM Total Charges
<input type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
<input type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16
<input type="checkbox"/>	4 - Transfer From Hospital	3,647.00	38,759,838.81
<input type="checkbox"/>	5 - Transfer From SNF	3,338.00	11,237,691.09
<input type="checkbox"/>	6 - Transfer From Another Facility	256.00	2,366,410.08
<input type="checkbox"/>	7 - Emergency Room	16,924.00	77,407,543.86
<input type="checkbox"/>	8 - Court/Law Enforcement	8.00	21,433.31
<input type="checkbox"/>	9 - Information Not Available	3,745.00	10,073,750.45
<input type="checkbox"/>	A - Transfer From CAH	6.00	108,206.35
<input type="checkbox"/>	D - NO DESCRIPTION	90.00	854,005.39
<input type="checkbox"/>	E - NO DESCRIPTION	5.00	41,978.11
<input type="checkbox"/>	F - NO DESCRIPTION	5.00	2,173.00
<input type="checkbox"/>	NoCode - No Description	197.00	56,017.27

To sort report columns:

- Click one of the gray report column headings. A small up or down arrow displays to the right of the column name to indicate the column is sorted in either ascending or descending order.

Rows	View	Settings	
<div style="display: flex; justify-content: space-between; align-items: center;"> Limit Design View Export </div>			
	Admit Source	SUM Claims	SUM Total Charges
<input type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
<input type="checkbox"/>	7 - Emergency Room	16,924.00	77,407,543.86
<input type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16

- You can also sort columns by right-clicking a column heading and selecting Sort, and then from the pop-up menu, selecting Ascending or Descending.

Rows	View	Settings		
Limit		Design View	Export	
	Admit Source	SUM Claims	SUM Total Charges	
<input type="checkbox"/>	1 - Physician Referral			7
<input type="checkbox"/>	7 - Emergency Room			6
<input type="checkbox"/>	2 - Clinic Referral			4,446,587.16
<input type="checkbox"/>	9 - Information Not Available	3,745.00		10,073,750.45
<input type="checkbox"/>	4 - Transfer From Hospital	3,647.00		38,759,838.81
<input type="checkbox"/>	5 - Transfer From SNF	3,338.00		11,237,691.09
<input type="checkbox"/>	6 - Transfer From Another Facility	256.00		2,366,410.08
<input type="checkbox"/>	NoCode - No Description	197.00		56,017.27
<input type="checkbox"/>	D - NO DESCRIPTION	00.00		854,005.30

- Right-click a measure heading to get the same options, and to select a decimals option which, when highlighted, lets you adjust the number of decimal places displayed in your data, as shown in the following example.

Rows	View	Settings		
Limit		Design View	Export	
	Admit Type	SUM Claims	SUM Total Charges	
<input type="checkbox"/>	1 - Emergency	91,000.00		6,545,087.21
<input type="checkbox"/>	2 - Urgent	23,000.00		09
<input type="checkbox"/>	3 - Elective	428,000.00		01
<input type="checkbox"/>	4 - Newborn	2,856.00		14

Add a grouping as a subtotal

When you build a report with more than one grouping, the system subtotals the second grouping underneath the first. For example, to see all of the Bill IDs associated with each Admit Source, double-click the **Bill ID** field in the **Groupings** tab. The system displays the following:

Admit Source	BillID Number	SUM Total Charges	SUM Claims
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Generate Data View: Hierarchical Flat

After generating, the report displays a plus symbol (+) to the left of the check box in each row:

Rows	View	Settings		
Limit		Design View	Export	
		Admit Source	SUM Total Charges	SUM Claims
<input type="checkbox"/>	<input type="checkbox"/>	1 - Physician Referral	1,132,928,386.57	511,574.00
<input type="checkbox"/>	<input type="checkbox"/>	2 - Clinic Referral	4,446,587.16	7,191.00
<input type="checkbox"/>	<input type="checkbox"/>	4 - Transfer From Hospital	38,759,838.81	3,647.00
<input type="checkbox"/>	<input type="checkbox"/>	5 - Transfer From SNF	11,237,691.09	3,338.00
<input type="checkbox"/>	<input type="checkbox"/>	6 - Transfer From Another Facility	2,366,410.08	256.00
<input type="checkbox"/>	<input type="checkbox"/>	7 - Emergency Room	77,407,543.86	16,924.00
<input type="checkbox"/>	<input type="checkbox"/>	8 - Court/Law Enforcement	21,433.31	8.00

To display all of the rows that subtotaled under a field value, click the plus symbol (+). You can sort or delete these subtotaled rows, as well as sort the columns.

Rows	View	Settings		
Limit		Design View	Export	
Admit Source ^	BILLID Number ^	SUM Total Charges	SUM Claims	
1 - Physician Referral		4,887,309.99	1,460.00	
+ C921371776		2,400.00	1.00	
+ C921372266		4,035.30	1.00	
+ C921372549		3,714.48	1.00	
+ C921372876		2,414.00	1.00	
+ C921372910		3,398.29	1.00	
+ C921373280		4,719.82	1.00	
+ C921373920		4,842.79	1.00	
+ C921374071		4,647.63	1.00	
+ C921374832		2,967.28	1.00	
+ C921375331		4,452.93	1.00	
+ C921375941		4,367.00	1.00	
+ C921375966		3,993.03	1.00	
+ C921376241		4,166.78	1.00	
+ C921376507		4,788.81	1.00	
+ C921376830		3,475.00	1.00	
+ C921378303		4,381.72	1.00	
+ C921379512		2,508.82	1.00	
+ C921380490		3,189.44	1.00	
+ C921380586		3,031.00	1.00	
+ C921380904		2,829.31	1.00	
		4,887,309.99	1,460.00	

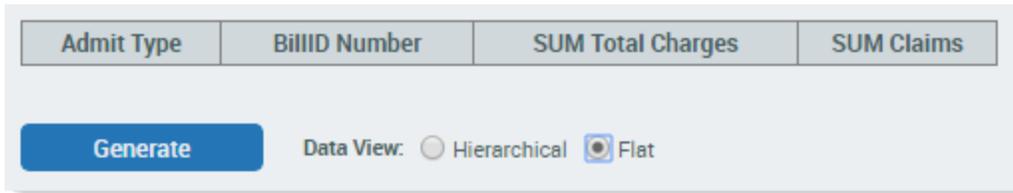
When building reports with multiple groupings, the system defaults to the Hierarchical view as seen in the previous image. This is one of two views available for displaying data. The other is the Flat view. The Flat view displays groupings side-by-side, as shown in the following example.

Rows	View	Settings			
Limit		Design View	Export		
Admit Source ^	BILLID Number	Disch Fiscal Yr-Month	SUM Total Charges	SUM Claims	
1 - Physician Referral	C921387567	FY2010- 8Aug	2,400.00	1.00	
1 - Physician Referral	C921387164	FY2010- 7Jul	2,123.00	1.00	
1 - Physician Referral	C921386995	FY2010- 8Aug	4,183.20	1.00	
1 - Physician Referral	C921388294	FY2010- 7Jul	4,337.05	1.00	
1 - Physician Referral	C921387914	FY2010- 8Aug	3,637.33	1.00	
1 - Physician Referral	C921387896	FY2010- 7Jul	4,113.58	1.00	
1 - Physician Referral	C921385112	FY2010- 8Aug	4,556.65	1.00	
1 - Physician Referral	C921383862	FY2010- 7Jul	3,720.72	1.00	
1 - Physician Referral	C921383415	FY2010- 7Jul	2,149.18	1.00	
1 - Physician Referral	C921386390	FY2010- 9Sep	2,880.00	1.00	
1 - Physician Referral	C921385992	FY2010- 7Jul	4,000.00	1.00	
1 - Physician Referral	C921385974	FY2010- 8Aug	2,838.00	1.00	

NOTE: Reports with more than three groupings must be run in the flat view. Also, while the hierarchical view subtotals the groupings, the flat view does not provide totals.

To change from the default Hierarchical view to the Flat view, do one of the following:

- Before clicking Generate to run the report, instead, for **Data View**, click the **Flat** option.



- After the report is generated, from the **View** menu, select **Grid Type > Flat**.

Notice that in the following example, Hierarchical is the view being displayed. Likewise, if the results display as Flat, you can follow the same steps to change it to Hierarchical.

The screenshot shows a report grid with a 'View' menu open. The menu has 'Grid Type' selected, with 'Flat' and 'Hierarchical' (checked) as options. The grid has columns for Admit Type, SUM Total Charges, and SUM Claims. The data is as follows:

Rows	View	Settings	Admit Type	SUM Total Charges	SUM Claims
+			1 - Emergency	216,545,087.21	91,687.00
+			2 - Urgent	294,001,418.09	23,964.00
+			3 - Elective	762,462,974.01	428,479.00
+			4 - Newborn	5,294,542.14	2,856.00

Change groupings

After building and generating a report in hierarchical data view, you can change groupings without having to delete the field, add the new grouping, and regenerate the report. You can use the drop-down arrow immediately to the right of the first grouping to select the new field.

When a report is in hierarchical view, the first grouping is a drop-down selectable field, which makes it easy to change it to a different grouping.

To change the first grouping for a report displayed in hierarchical data view:

- In the first column heading, click the drop-down arrow to the right of the column name, then locate and click a different grouping.

Claims		Line Items	
Rows	View	Settings	
Limit		Design View	Export
	Admit Source	SUM Claims	SUM Total Charges
<input type="checkbox"/>	1 - Physician Referral	511,574.00	1,132,928,386.57
<input type="checkbox"/>	2 - Clinic Referral	7,191.00	4,446,587.16
<input type="checkbox"/>	4 - Transfer From Hospital	3,647.00	38,759,838.81

First grouping with drop-down arrow outlined in red

Claims		Line Items	
Rows	View	Settings	
Limit		Design View	Export
	Admit Source	SUM Claims	SUM Total Charges
<input type="checkbox"/>	Admit Date	511,574.00	1,132,928,386.57
<input type="checkbox"/>	Admit Day of Week	7,191.00	4,446,587.16
<input type="checkbox"/>	Admit Fiscal Qtr	3,647.00	38,759,838.81
<input type="checkbox"/>	Admit Fiscal Year	3,338.00	11,237,691.09
<input type="checkbox"/>	Admit Fiscal Yr-Month	256.00	2,366,410.08
<input type="checkbox"/>	Admit Fiscal Yr-Qtr	16,924.00	77,407,543.86
<input type="checkbox"/>	Admit Hour	8.00	21,433.31
<input type="checkbox"/>	Admit Month		

Selecting a different grouping from the list

The report regenerates with the new data, as shown in the following example:

Rows	View	Settings	
Limit		Design View	Export
	Admit Day of Week	SUM Claims	SUM Total Charges
<input type="checkbox"/>	1-Sunday	74,960.00	178,893,494.76
<input type="checkbox"/>	2-Monday	89,882.00	196,824,540.30
<input type="checkbox"/>	3-Tuesday	77,697.00	181,525,915.71
<input type="checkbox"/>	4-Wednesday	78,142.00	185,255,714.65
<input type="checkbox"/>	5-Thursday	77,126.00	181,853,853.48
<input type="checkbox"/>	6-Friday	74,800.00	177,790,645.07
<input type="checkbox"/>	7-Saturday	74,379.00	176,159,857.48

Notice that the data have changed in the two measure columns because the measures now apply to the new grouping.

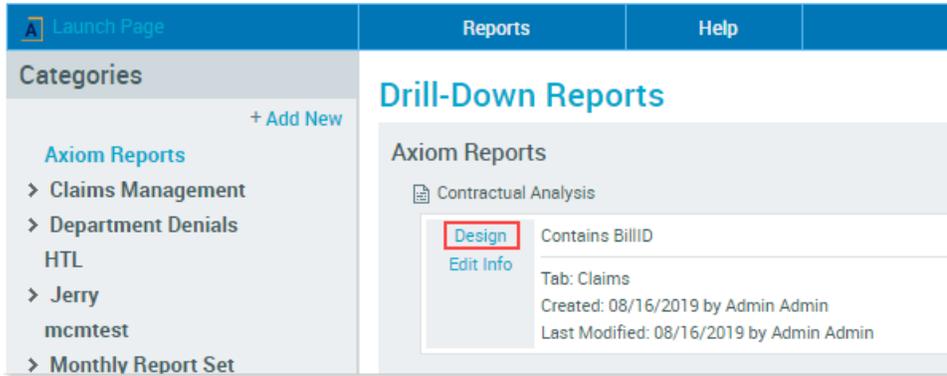
Change report column order

Use design view to change the order of a report's groupings and measures columns before or after generating the report. You can also remove groupings and measures from your report in design view.

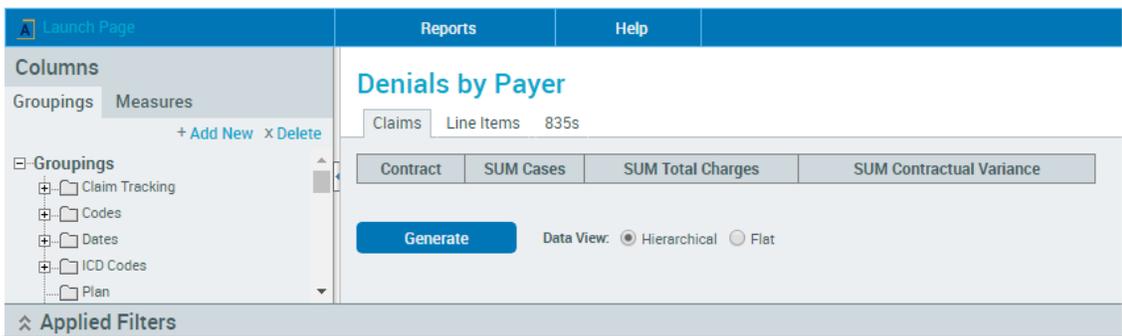
NOTE: Groupings always precede measures in report layout, regardless of how you order them. You can re-order groupings within a report's set of groupings, and re-order measures within the report's set of measures. You cannot put a measure before any grouping, however. Even if you do, when the report generates, the measure will be grouped with the other measures in the report.

To access design view without opening the report:

1. On the main **Drill-Down Reports** page, in the **Categories** panel, click the folder where the report is saved.
2. On the right side of the page, click the name of the report to open the report summary information box.
3. On the left side of the summary information box, click **Design**.

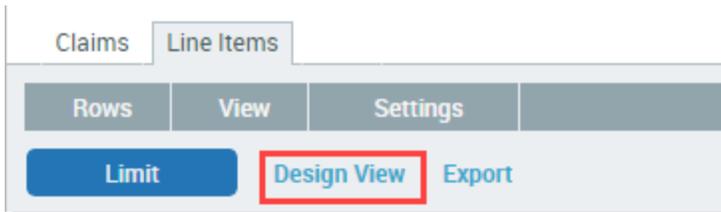


The design view of the report opens on the right.



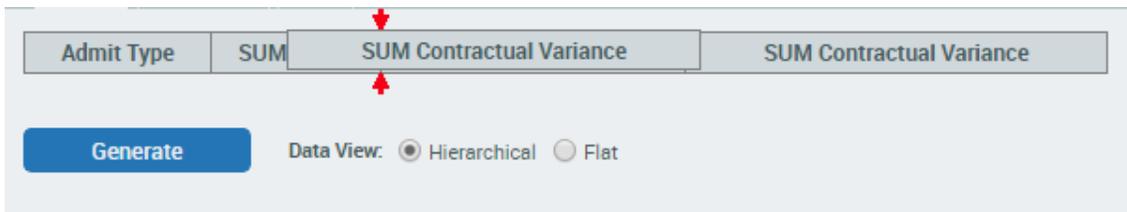
To access Design View from an open report:

- Above the report, click Design View.



To change the order of groupings or measures:

1. Click the grouping or measure to move and drag it to its new location.
2. When the two red arrows display in the desired position, release the mouse button.



The measure columns are now in the new order:



To remove groupings or measures from the report:

- Right-click the measure or grouping to remove, and click **Delete**.



Remove an applied filter

When filtering drill-down report results, you may apply a filter that you later want to remove rather than recreate the report.

To remove an applied filter:

1. At the bottom left of the page, click the arrows to the left of **Applied Filters**.



The Applied Filters dialog opens, showing the filters currently applied to the report.

2. To clear a single filter, click the blue box to the left of the filter, and then press the **Delete** key. The filter is removed.
3. To clear all filters, click **Clear All**.

To close the filter box, click the arrows to the left of **Applied Filters**.

Applied Filters

Filter	Criteria	Value
DRG	=	291
DRG	=	292
DRG	=	293
Admit Source	=	7 - Emergency Room
Admit Source	=	1 - Physician Referral
Admit Source	=	4 - Transfer From Hospital
Admit Source	=	5 - Transfer From SNF

Clear All

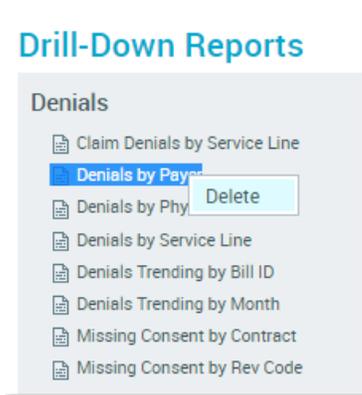
When the filter box closes, the report automatically regenerates with the updated filters.

Delete a saved drill-down report

You can delete reports you no longer need.

To delete a drill-down report:

1. On the main Drill-Down Reports page, locate the desired report.
2. Right-click the report, and then select **Delete**.



3. In the confirmation dialog, click **OK**.

IMPORTANT: If you accidentally confirmed a deletion, you need to recreate the report; a deleted report cannot be retrieved.

Reporting across tabs

Reporting across tabs allows you to create multi-sided reports and conduct multi-dimensional analysis. For example, to see the admit source of claims that include a specific administered drug, you need to include Line Item filters in your claim report. The drug code is stored with the charge data, while Admit Source is a reportable field on the Claims tab. From the Claims tab, you can also find the number of claims and their associated charges, and payments, (see following example). This methodology works for the other tabs as well.

To report across tabs, you create a multi-tab report, as explained in the following section.

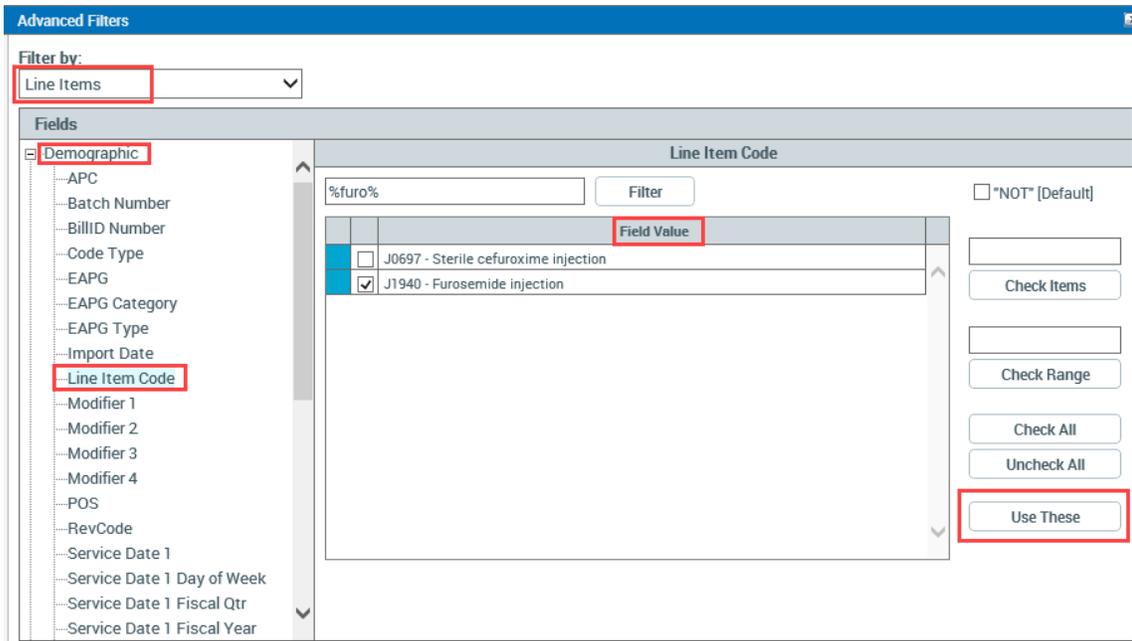
▶ Create a multi-tab report

The following example uses a Claims tab report. The steps are outlined from the perspective of using the Claims tab only. However, you can add filters from any tab.

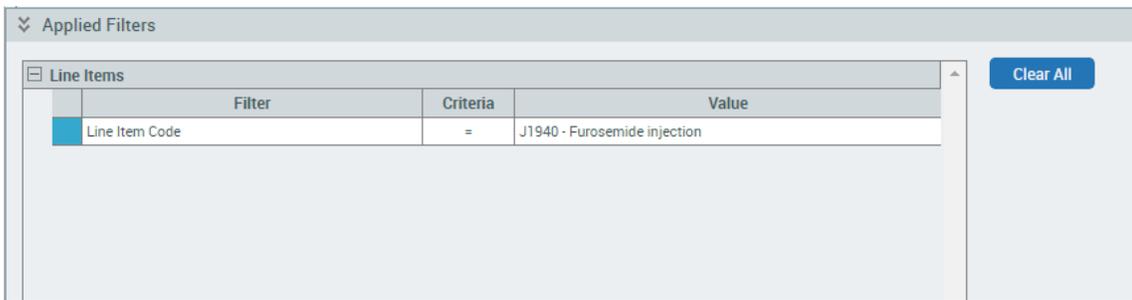
To build a multi-tab report:

1. Open an existing report or [create a new one](#).
2. At the bottom right of the page, click **Add Filters**.
The Advanced Filters dialog opens.
3. From the **Filter by** drop-down, select **Line Items**. This sets a Line Items tab filter without your needing to switch tabs.
4. In the **Fields** panel, expand the **Demographic** folder, and select **Line Item Code**. In the right side of the dialog, Line Item Code values display with their descriptions.
5. Click the check box for each Line Item Code filter to apply to the report, and then click **Use These**.

In the following example, the user searched for a certain kind of drug by using the wildcard search “%furo%”, which returned two kinds of injection drug.



6. Close the Advanced Filters dialog.
7. To confirm your selected filter(s), at the bottom left of the page, click **Applied Filters**. In the Applied Filters dialog, review the applied filter(s).



Setting a Line Items filter causes the system to automatically filter through the database so that only claims information related to the criteria selected from Line Items is accessible.

8. Close the Applied Filters dialog by clicking the arrows to the left of **Applied Filters**.
9. In the **Columns** panel, on the **Groupings** tab, double-click **Admit Source**.
10. Click the **Measures** tab.
11. Double-click the following: **Claims**, **Total Charges**, and **Total Payments** to add them to the report, calculated as SUM.

Claims Line Items

Admit Source SUM Claims SUM Total Charges SUM Total Payments

Generate Data View: Hierarchical Flat

12. After selecting all desired fields, click **Generate**.

The results show the Admit Source and the number of claims that have administered the selected drug, along with all associated charges and payments.

Rows	View	Settings			
Limit			Design View	Export	
	Admit Source	SUM Claims	SUM Total Charges	SUM Total Payments	
<input type="checkbox"/>	1 - Physician Referral	1,774.00	25,654,914.39	9,251,337.68	
<input type="checkbox"/>	2 - Clinic Referral	3.00	38,103.22	26,088.76	
<input type="checkbox"/>	4 - Transfer From Hospital	74.00	2,546,496.78	1,050,277.27	
<input type="checkbox"/>	5 - Transfer From SNF	21.00	541,599.24	183,485.50	
<input type="checkbox"/>	6 - Transfer From Another Facility	6.00	120,831.71	53,887.66	
<input type="checkbox"/>	7 - Emergency Room	455.00	13,111,602.24	5,346,719.72	
<input type="checkbox"/>	9 - Information Not Available	2.00	16,522.86	5,145.06	
<input type="checkbox"/>	D - NO DESCRIPTION	5.00	66,405.54	32,658.13	

NOTE: If you add a new filter that limits the Admit Source on the Claims tab, the Applied Filters tab shows the filters from both the Claims and Line Items tabs, separating them by filter type.

Applied Filters

Claims			
Filter	Criteria	Value	
Admit Source	=	7 - Emergency Room	

Line Items			
Filter	Criteria	Value	
Line Item Code	=	J1940 - Furosemide injection	

Clear All

► Save a multi-tab report

You use the same process to save a multiple-tab report as when saving a single-tab report. However, it is important to note the tab you are on when you save the report. The Applied Filters from each tab is saved; however, the report will only save the Rows/Columns of the tab you are viewing at the time that you save the report.

In the previous example, if you switched to the Line Items tab before saving, saving the report while on the Line Items tab would save only the filters, not the selected Admit Source, Claims, Charges, and Payments from the Claims tab. However, saving from the Claims tab will save the Row/Columns you selected and all filters applied to the report, regardless of the tab they are associated with.

Improve variance reporting with Posting subcategories

When running drill-down reports on payment and adjustment posting totals, you can break out these items into subcategories for more detailed reporting. In addition to Total Payment and Total Contractual fields, there are 10 payment and 10 adjustment fields available in the Measures column for the Claims tab in Drill-Down reports. These fields allow you to break out payment and adjustment posting totals by type for improved contractual variance reporting. You can use these fields to report on refunds, bad debt adjustments, etc. The new drill-down report fields for adjustments are A1-A10. The new fields for payments are P1-P10.

NOTE: To take advantage of this postings breakout feature, you need to provide a posting file with category breakouts for payments and adjustments imported using Axiom ETL. This import can be in addition to or part of the Axiom Contract Management Full Import job.

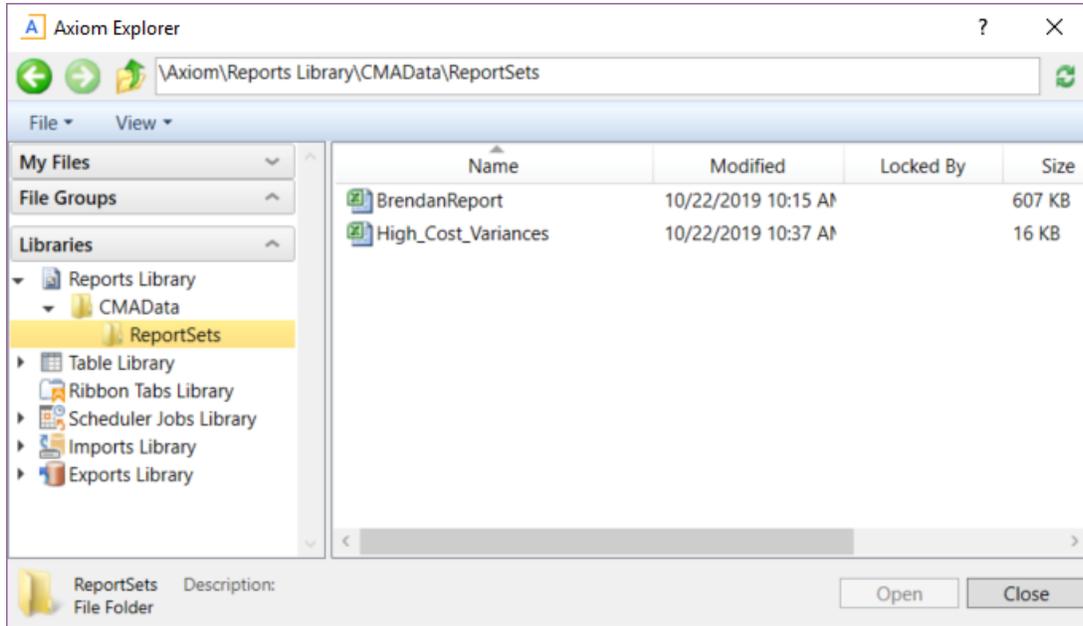
In the example below, adjustment fields A1 and A2 are used to break out primary contractual and facility adjustments:

	A	B	C	D	E	F	G	H
1		axiom software	Contractual Review					
2								
3	Filters							
8								
9		Contract ClauseDesc	SUM Cases	SUM Total Charges	SUM Total Expected Contractual	SUM Total Primary Contractual (A1)	SUM Total Facility Adj (A2)	SUM Contractual Variance
10		ALL OTHER OP	31	26,199	2,620	2,620	939	(0)
11		CARDIOLOGY	5	19,808	1,981	1,900	15	81
12		EMERGENCY CARE	54	94,717	9,472	10,472	246	(1,000)
13		IMAGING SERVICES	30	37,963	3,796	3,291	505	505
14		IMPLANTS	10	19,460	1,946	2,057	111	(111)
15		LAB	68	23,744	2,374	2,374	0	0
16		OBSERVATION	3	22,197	2,220	2,210	10	10
17		PT/OT/ST	15	8,504	850	1,000	150	(150)
18		RADIATION THERAPY	8	64,505	6,485	6,490	5	(5)
19		RADIOLOGY SERVICES	6	2,786	279	279	0	(0)
20		SURGICAL	9	104,189	10,419	15,867	534	(5,448)
21			239	424,073	42,441	48,560	2,515	(6,119)

Using report sets

The Report Sets feature allows you to create single or multi-report workbooks and to [schedule them to run automatically](#), one time or on a regular basis.

When you run reports from the Report Sets dialog, the generated reports are automatically exported to Excel and saved to a selected directory accessible from the Axiom Desktop Client. The default directory is Axiom > Reports Library > CMADData > ReportSets. From this directory, you can [view](#), [save](#), [export](#), and [delete](#) reports.



Create a report set

Use these instructions to create set of drill-down reports.

To create a Report Set:

1. In the main menu header, click **Reports > Drill-Down Reports**.
2. On the **Drill-Down Reports** page, click **Reports > Report Sets**.
3. At the bottom left of the **Report Sets** dialog, click **Add New Report Set**.

A new row displays at the bottom of the Report Set grid.

4. In the **Name** column of the new row, type a name for the new report set. The name of the report set will also be the name of the report file that exports.

NOTE: Do not use any spaces or special characters in the report name. Limit the title to 15 characters because this is used for the workbook name.

5. If desired, click in the **Description** column for the new row and enter a description of the report set. Spaces and special characters are allowed in the Description field.

The Last Run At column displays the last time the report ran through the Scheduler.

6. To enable the report set to be scheduled to run at a set time, select the **Enabled** checkbox.
7. At the right end of the new report row, click **Save**.
8. In the confirmation dialog, click **OK**.

The Report Set saves to the grid in alphabetical order.

Name	Description	Last Run At	Enabled	Upd	Del	Run
BrendanReport			<input type="checkbox"/>	Upd	Del	Run
BRFLinkReports			<input type="checkbox"/>	Upd	Del	Run
CFO	Report Set for Upper Management		<input type="checkbox"/>	Upd	Del	Run
ClaimDemo			<input type="checkbox"/>	Upd	Del	Run
DenialsByPayer	Report set for denials		<input type="checkbox"/>	Upd	Del	Run
DeptHead	Department Head Revenue Reports	08/03/2018 8:00 AM	<input checked="" type="checkbox"/>	Upd	Del	Run
GeosReport	Report Set Test for Geo		<input type="checkbox"/>	Upd	Del	Run
HBIReports			<input type="checkbox"/>	Upd	Del	Run
HTLTest	Test		<input type="checkbox"/>	Upd	Del	Run
HTLTest2	Test2		<input type="checkbox"/>	Upd	Del	Run
HTLTest3	Test3 Lile		<input type="checkbox"/>	Upd	Del	Run
ImportCheck	Import Check Report Set	07/30/2018 8:00 AM	<input checked="" type="checkbox"/>	Upd	Del	Run
KRDTest1	Test		<input type="checkbox"/>	Upd	Del	Run
MonthlyReport			<input type="checkbox"/>	Upd	Del	Run
NameWithNoSpace			<input type="checkbox"/>	Upd	Del	Run
RPCTest	Patient, Charge, and Payment 373	04/24/2007 10:05 AM	<input type="checkbox"/>	Upd	Del	Run
ServiceLine			<input type="checkbox"/>	Upd	Del	Run
TraingDay2			<input type="checkbox"/>	Upd	Del	Run
VarianceAnalysis	Monthly Variance Analysis Report		<input type="checkbox"/>	Upd	Del	Run
zzJHFReportSet	Report set for moving to Axiom		<input type="checkbox"/>	Upd	Del	Run

Add New Report Set

9. Next, [add reports to the report set](#).

Add reports to a report set

Use these instructions to add drill-down reports to an existing report set, and to set up headers and footers for the generated reports.

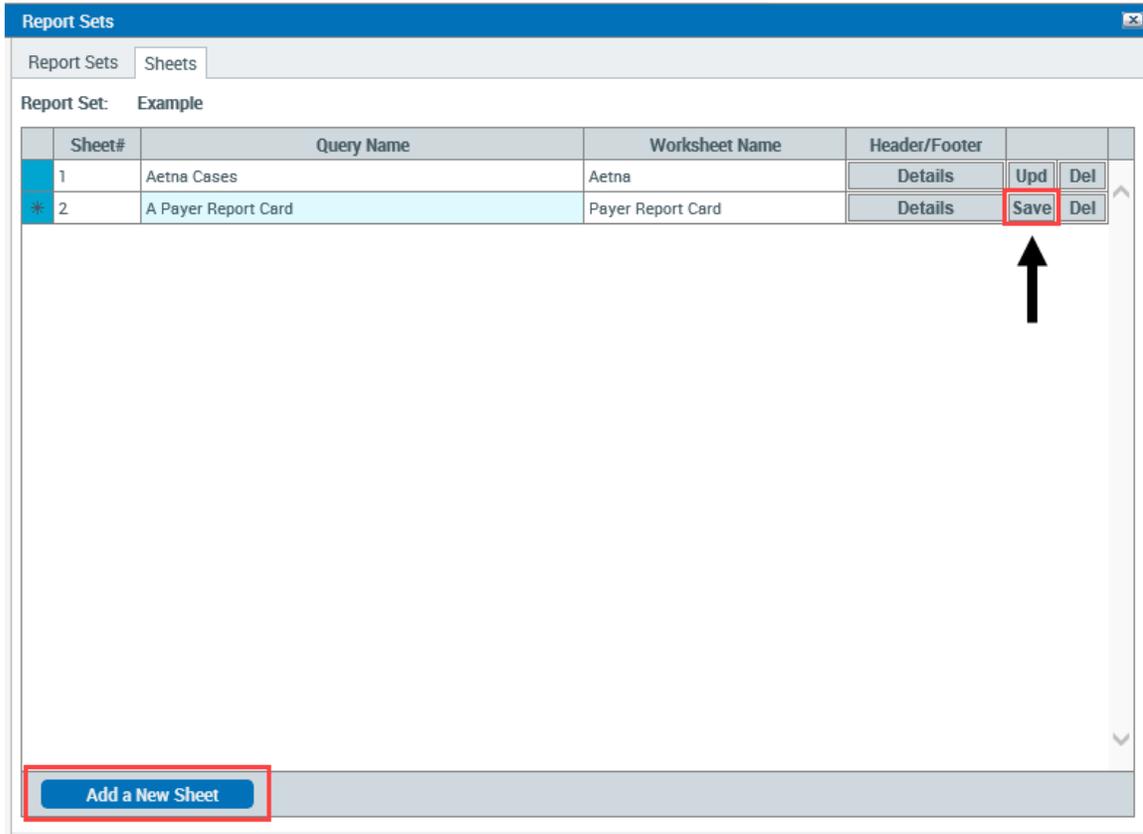
To add reports to the report set:

1. In the **Report Set** table, find and select the report set.
2. At the top of the **Report Sets** dialog, click the **Sheets** tab.
3. On the **Sheets** tab, at the bottom left, click **Add New Sheet**. A new row is added to the **Sheets** table.
4. Click in the **Query Name** field, and then from the drop-down menu, select the drill-down report to

add.

5. In the **Worksheet Name** field, type a name for the worksheet. Worksheet names become the names of the tabs used in the generated report.

All reports, regardless of type (Claims or Line Items), are listed here alphabetically. Each added report will be an additional sheet in the report set Excel workbook.



6. Near the right end of the new row, click **Save**.
7. If desired, you can add header and footer information to the sheet. See the following instructions "Add headers and footers to reports in the set."
8. [Run and view the report](#), or [schedule the report set to run at another time](#).

► Add headers and footers to reports in the set

To add header and footer information to the sheet:

1. In the **Header/Footer** column for the new sheet row, click **Details**.
2. In the **Header Details** section, type the desired information into the fields that corresponds to the section of the header where you want the text to display.

Report Sets

Report Sets Sheets

Report Set Sheet Details for: DenialsByPayer (Sheet 1)

Arial 11px B I U   

Header Details

Left	Center	Right
KH Medical		

Footer Details

Left	Center	Right

Back to Sheets Submit Details

3. In the **Footer Details** section, type the desired information into the fields corresponding to the footer sections (Left, Center, Right) where you want to place text. To add page numbers and a time stamp of when the report was created, do the following:
 - a. Click in the field where you want the page number to populate; then, in the formatting menu at the top of the dialog, click the page number button ().
 - b. Click in the field where you want to put the date and time that the report was created, then, in the formatting menu, click the date button () and then click the time button ().

Footer Details

Left	Center	Right
&[Page]		&[Date] &[Time]

Example of page number and report time stamp set in the footer

4. At the bottom of the dialog, click **Submit Details**.

Run and view a report set

Use these instructions to generate and view a set of drill-down reports.

NOTE: Before you run reports from the Report Sets dialog, confirm that your reports have been built, that they run correctly, and that they have been saved. Otherwise, you may receive an error when attempting to run the set.

1. Open the Report Sets dialog:
 - a. In the main menu header, click **Reports > Drill-Down Reports**.
 - b. On the **Drill-Down Reports** page, in the menu header, click **Reports > Report Sets**.
2. In the **Report Sets** tab, in the row for the desired report set, click **Run**.
3. In the confirmation dialog, click **OK**.
4. Open the **Desktop Client**.
5. In the **Axiom Explorer**, navigate to **Libraries > Reports Library > CMADData > ReportSets** and locate your report.
6. Double-click the report to open and view it.

Drill through the report by clicking the plus buttons on the left, as shown in the following example.

	Contract	SUM Cases	SUM Total Charges	SUM Total Cost	SUM Total Payments	SUM Total Contractual	Total Expected Payme	Contractual Variance
8	AETHA	83.00	164,641.87	48,079.41	121,298.90	31,444.73	148,143.48	(14,945.34)
224	KHA MANA	46.00	120,749.87	36,874.08	100,307.77	18,787.09	106,259.89	(4,297.11)
871	ORG1 - BCBS	641.00	1,069,250.44	337,640.78	778,700.06	265,980.63	3,335.00	799,934.81
885	ORG1 - BCBS	5.00	41,103.49	30,195.29	14,328.90	31,734.59	25,463.07	(16,094.17)
929	ORG1 - BCBS State	26.00	86,646.69	24,717.11	68,475.38	18,821.15	69,144.42	681.12
929	ORG1 - BCBS State	22.00	242,101.54	111,311.13	160,256.80	73,891.47	818,655.19	(650,445.13)
966	ORG1 - Humana Gold Choice	302.00	797,080.24	274,140.73	232,596.02	583,752.46	223,536.99	(10,209.21)
1280	ORG1 - Managed Medicare	151.00	474,862.80	171,827.17	141,411.87	340,353.77	116,691.45	17,817.58
1443	ORG1 - Medicaid	858.00	2,419,464.82	936,487.56	441,350.91	2,050,516.09	634,124.81	(265,176.08)
2325	ORG1 - Medicaid SNF	10.00	85,208.93	65,832.78	43,220.71	41,534.22	39,390.30	4,284.41
2344	ORG1 - Medicare	4,616.00	11,077,883.99	4,066,820.44	3,428,836.37	8,134,808.75	3,193,947.27	(250,872.03)
7059	ORG1 - Medicare Contract	100.00	624,399.69	434,488.66	334,390.59	255,644.13	359,450.20	9,305.37
7165	ORG1 - Medicare HMO Other	3.00	1,593.15	2,590.40	1,258.97	254.18	1,991.44	(652.47)
7174	ORG2 - BCBS	223.00	360,265.15	141,640.73	206,350.05	112,756.02	259,384.97	(11,875.84)
7463	ORG2 - BCBS State	49.00	81,476.80	30,093.00	46,648.93	26,773.00	57,639.63	(2,935.83)
7548	ORG2 - Humana Gold	50.00	139,252.64	57,709.75	45,667.58	54,527.63	42,800.21	41,924.80
7607	ORG2 - Managed Medicare	28.00	63,903.15	34,115.86	23,761.40	39,216.47	25,611.16	(924.48)
7644	ORG2 - MedCost	20.00	55,879.70	30,143.84	43,675.00	8,746.16	47,218.35	(84.81)
7694	ORG2 - Medicaid	303.00	309,628.69	122,706.09	89,705.98	223,614.31	117,572.83	(31,558.45)
8009	ORG2 - Medicare	961.00	2,119,475.06	1,036,341.31	833,511.48	1,526,515.31	830,593.34	(237,633.59)
8982	ORG2 - Medicare HMO	37.00	67,198.03	23,608.17	24,458.31	39,269.76	25,596.76	2,331.51
9028	ORG4 - Medicare HMO Other	123.00	484,580.14	181,998.46	133,045.35	335,317.69	156,234.12	(6,971.67)
9166	UNASSIGNED	1,627.00	3,087,812.83	1,021,958.89	1,972,747.06	762,698.14	511,894.69	1,813,220.00
10799	UNITED	228.00	399,722.95	130,950.50	285,381.85	108,352.04	305,336.64	(13,965.73)
11096	Miscellaneous Plan Codes	719.00	1,533,749.88	536,061.53	974,288.00	440,014.97	0.00	1,093,734.91
11821		11,231.00	25,909,932.54	9,888,333.68	10,545,674.24	15,525,324.76	8,120,016.18	2,264,591.60
11822								

7. After viewing the report, do any of the following:
 - Close the report. When prompted to save, select to save it.
 - Close the report and export it. To export the report, right-click it and select **Export**.

- Close the report and delete it. To delete the report, right-click it and select **Delete**.

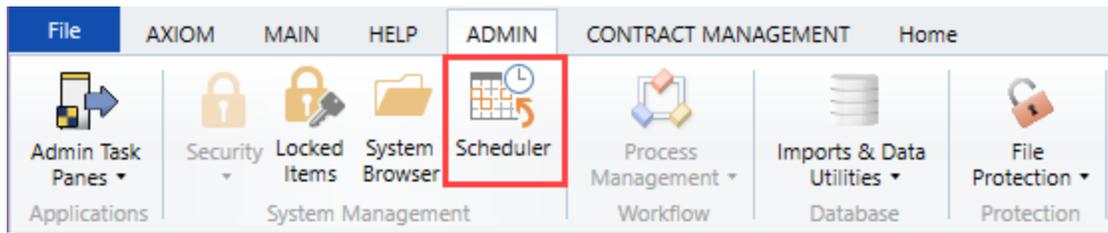
Schedule a report set to run

Use these instructions for scheduling the running of drill-down report sets. You can schedule reports to run once or on a regular basis. To schedule reports, you need to have CMA Scheduler permissions.

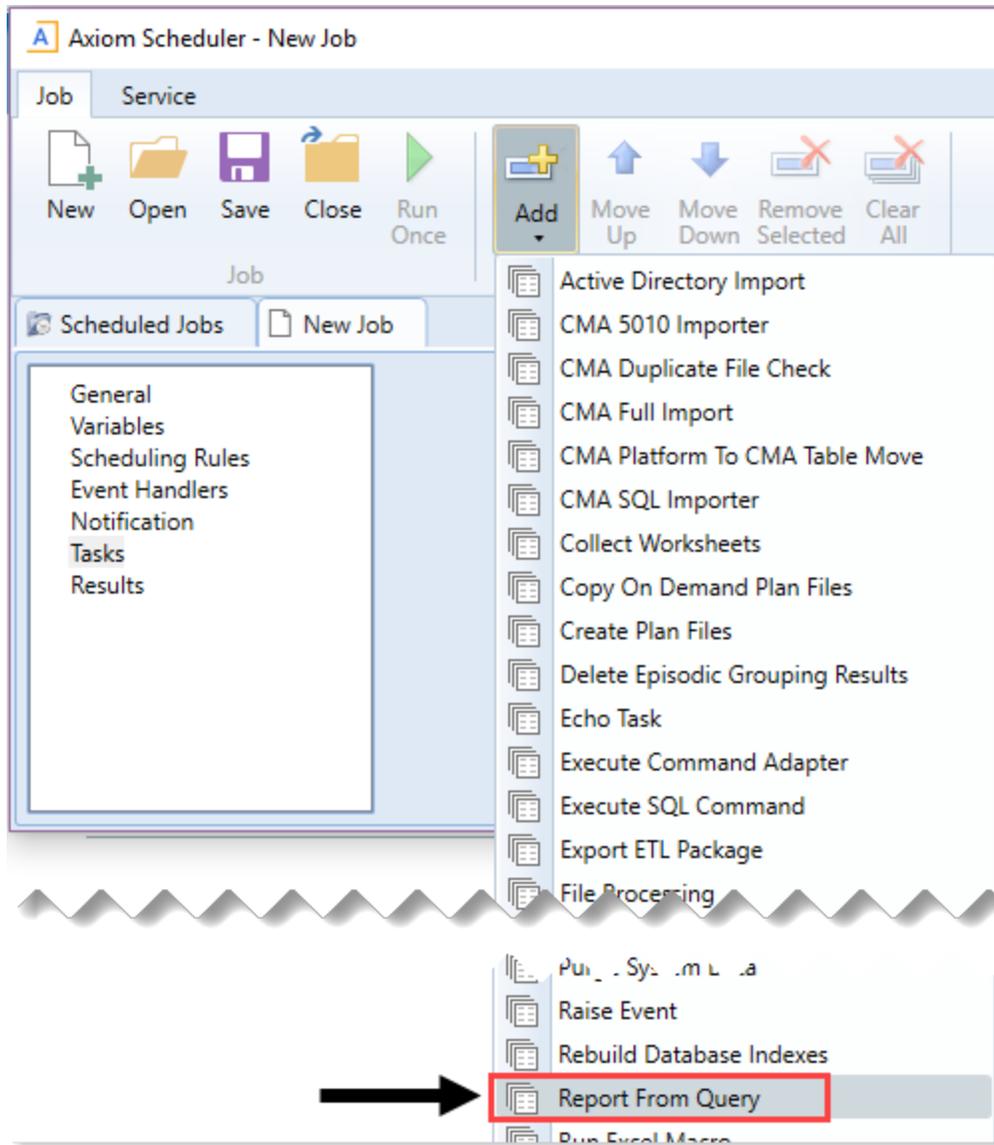
NOTE: Before scheduling a report set, confirm that the reports in the set have been built, that they run correctly, and that they have been saved.

To schedule and run a report set:

1. Open the Report Sets dialog:
 - a. In the main menu header, click **Reports > Drill-Down Reports**.
 - b. On the **Drill-Down Reports** page, in the menu header, click **Reports > Report Sets**.
2. In the **Report Sets** tab, in the row for the desired report set, ensure the **Enabled** box is checked.
3. Open the **Desktop Client**.
4. In the **Admin** ribbon tab, click **Scheduler**.

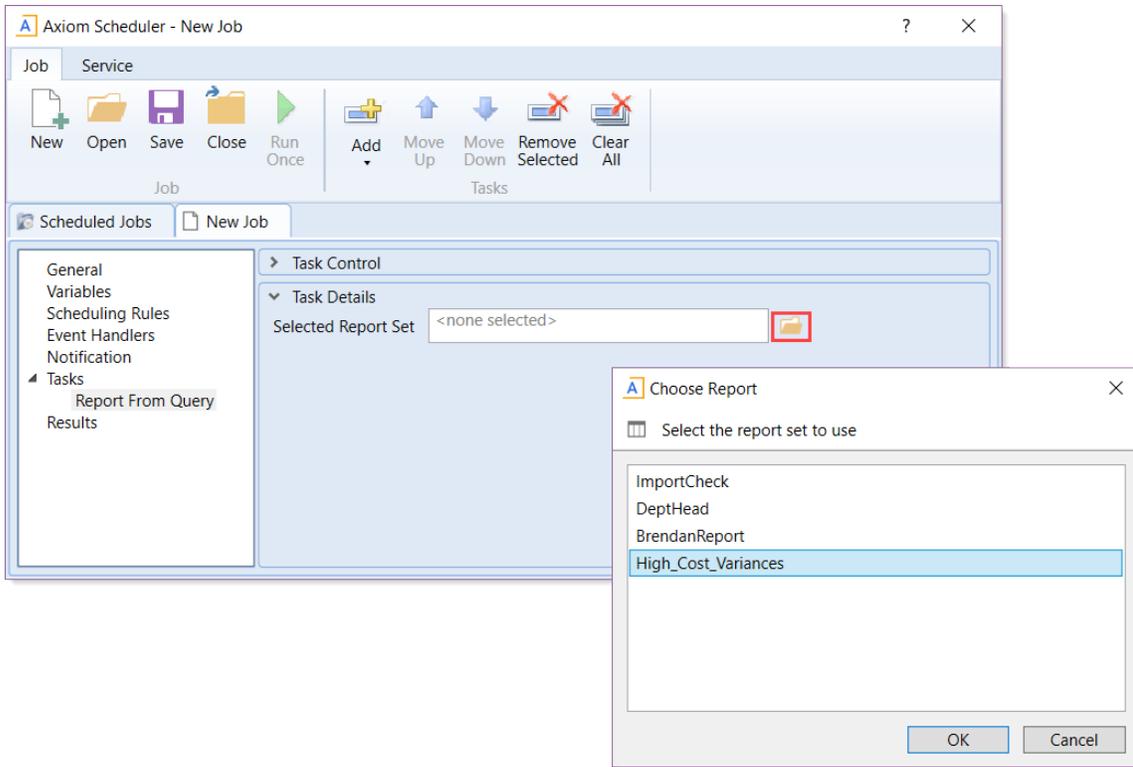


5. In the **Scheduler** dialog, on the **Job** tab, click **New**.
6. Click the **Add** button and select **Report from Query**.

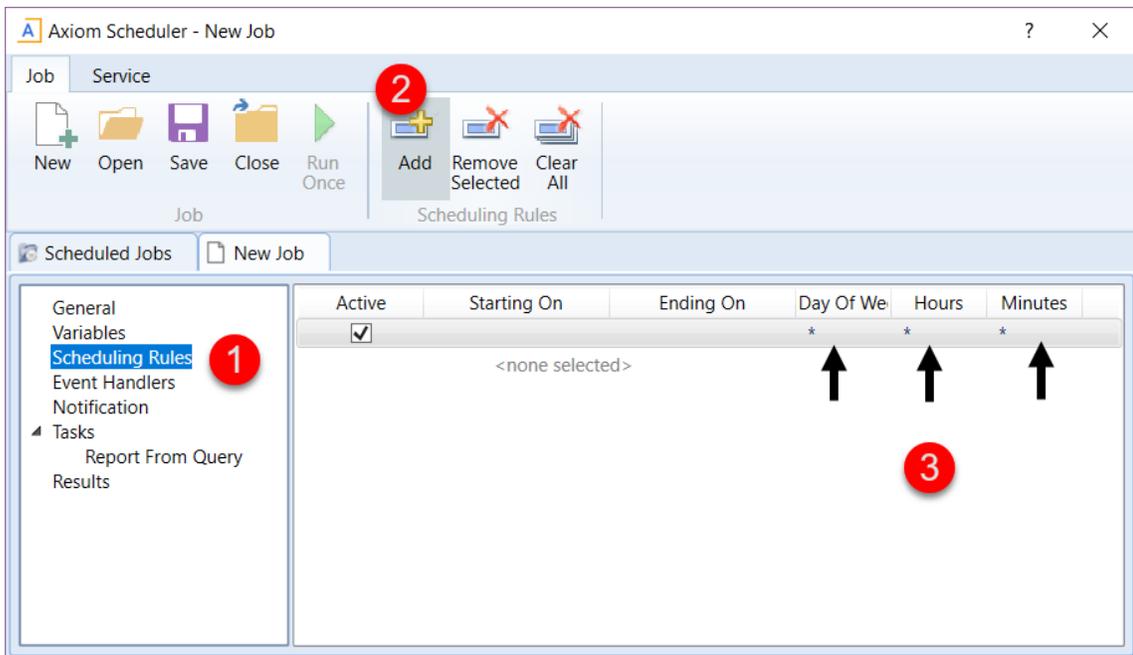


7. In the **New Job** tab, on the right of the **Selected Report Set** field, click the open folder icon to view available reports.
8. In the **Choose Report** dialog, select the report to be scheduled, and then click **OK**.

NOTE: Only report sets that are enabled for scheduling display in the Choose Report dialog. For details, see [Create a report set](#).



- In the **New Job** tab on the left, click **Scheduling Rules**, and then click **Add**. A new rule is added to the right side of the dialog.



- Set the run day and time:

- a. Under **Day Of Week**, double-click near the asterisk to activate the cell and then enter a selection:
 - * (Default): The job will be run on all days within the start / end range.
 - 0-6: The job will run on the specified day(s), where 0 is Sunday and 6 is Saturday. Use a comma or a hyphen to separate multiple days (hyphen if the days are contiguous, commas if not). For example, you can enter 1,3,5 for Monday, Wednesday, and Friday, or enter 1-5 for Monday through Friday.
- b. Under **Hours**, specify the time of day (hours) that you want the job to run, in relation to the specified days:
 - * (Default): The job will be run on all hours.
 - 0-23: The job will be run on the specified hour or hours, where 0 is midnight and 23 is 11:00 PM. Use a comma or a hyphen to separate multiple hours (hyphen if the hours are contiguous, commas if not). For example, you can enter 0,12 to run at midnight and noon, or enter 0-12 to run every hour from midnight to noon.
- c. Under **Minutes**, specify the time of day (minutes) that you want the job to run, in relation to the specified hours:
 - * (Default): The job will be run on all minutes (essentially the job is run continuously, once per minute).
 - 0-59: The job will be run on the specified minute or minutes of the hour, where 0 is the first minute of the hour and 59 is the last minute of the hour. Use a comma or a hyphen to separate multiple minutes (hyphen if the hours are contiguous, commas if not). For example, you can enter 0,30 to run at the top of the hour and the half hour, or enter 0-30 to run every minute from the top of the hour to the half hour.

NOTE: If you specify an hour, then in most cases you should also specify a minute (such as 0 to run the job at the top of the specified hour). If you enter an hour but leave the minutes at the default asterisk, then the job will run every minute in that hour.

11. If desired, schedule email notification to alert users when the report is available for viewing:
 - a. In the **New Job** tab on the left, click **Notification**.
 - b. On the right, select the desired settings and specify message content.
12. Click **Save** and then name and save the schedule in the Contract Management or Product Line Management folder.

Advanced Filtering

The Advanced Filtering feature can provide more refined results within a report. For example, use advanced filters to isolate claims that share similar characteristics or to provide detail on more specific scenarios.

You can access advanced filtering from Reporting, Drill-Down Reports, and Claims Tracking.

Access advanced filters

You can access advanced filtering from Standard Reporting, Drill-Down Reporting, or Claim Tracking. Previously built filters remain in the system, so you can access them at any time while using the reporting and claim tracking tools.

► From Standard Reports

- To use advanced filtering while building a standard report, click **Advanced**; the Advanced Parameters section opens.
- To build a new filter, click **Build Filter**.
- To use previously built advanced filters, in the **Advanced Parameters** section, select one from the drop-down **Filter** menu.

The screenshot displays the 'Reports' section of the Axiom Contract Management system. The top navigation bar includes 'Launch Page', 'Contracts', 'Claims', 'Import Data', 'Reports', and 'Help'. The 'Reports' sub-menu is open, showing 'Report List', 'View/Edit', and 'New' options. The main form area contains fields for 'Report Name', 'Report Type' (set to 'Clause Stats - Institutional'), and 'Save To' (set to '/Reports'). Below these is the 'Parameters' section, with the 'Advanced' tab selected. The 'Advanced Parameters' section includes fields for 'Start Discharge Date' (3/6/2019), 'End Discharge Date' (3/6/2019), 'Simulation' (Live), and 'Contract'. At the bottom of this section, there is a 'Filter' dropdown menu and three buttons: 'Build Filter', 'Delete Filter', and 'Clear'. A red arrow points to the 'Build Filter' button.

► From Drill-Down Reporting

- To build a new advanced filter while working with drill-down reports, in the bottom right corner of the page, click **Add Filters**.

NOTE: The Add Filters button displays in all drill-down report pages except the report selection page.

- For more information on using advanced filters with drill-down reports, see [Apply filters to drill-down reports](#).

► From Claim Tracking

- To build a new filter, in the **View Tracking** tab, click the **Use Existing Filter** option, and then click **Build Filter**.
- To use an existing filter, in the **View Tracking** tab, click the **Use Existing Filter** option, and then, from the **Select existing filter** drop-down, select a filter.

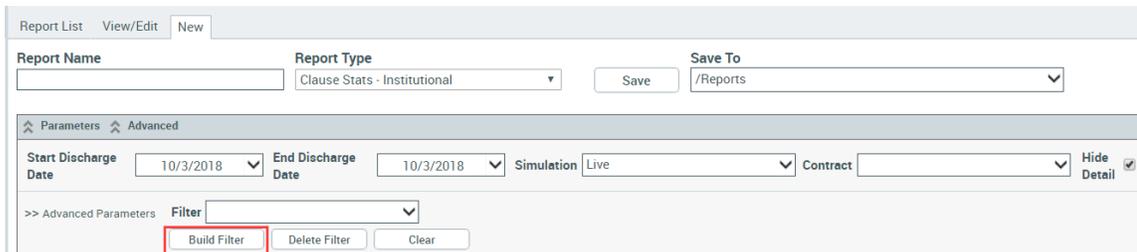


Build an advanced filter

Use these instructions for building advanced filters while working with standard reports and claim tracking.

To build a new advanced filter:

1. Click **Build Filter**, as shown in the following example.



Example shows Advanced Parameters section in the New tab in Reporting

The Advanced Filters dialog opens.

2. In the **Query Name** field in the upper left corner of the dialog, type a name for the filter. Use a concise, yet descriptive name so that you can easily identify the filter later.

NOTE: After saving a filter, you cannot view its makeup until you view a report with that filter applied. To view applied filters, click the **Applied Filters** button while viewing the report. Descriptive naming helps remove guessing which filters will be returned when you make a selection.

TIP: Since using advanced filters lets you select claims using a large number of criteria, it is best to know exactly what you want. Identify the criteria to use on this filter before assigning them.

3. In the **Filter by** drop-down, select one of the following:

- **Claims** – Select this to filter by whole claim
- **Line Items** – Select this to filter on specific line items.

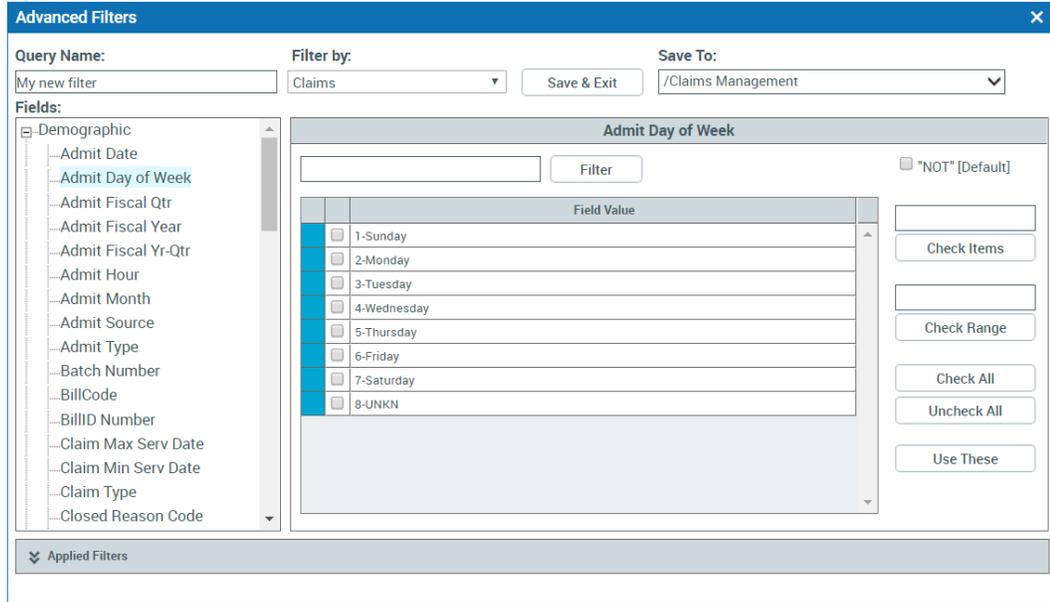
The following example shows claims selected in the Filter by option.

The screenshot shows the 'Advanced Filters' dialog box. At the top, there are three fields: 'Query Name' with the value 'My new filter', 'Filter by' with a dropdown menu set to 'Claims', and 'Save To' with a dropdown menu set to '/Claims Management'. Below these fields is a 'Fields' section with a list of categories: Demographic, Codes, Physicians, Diagnostics, Procedures, Measures, and Attributes. Each category has a plus sign to its left. At the bottom of the dialog, there is a section labeled 'Applied Filters' which currently shows the 'Claims' filter.

4. In the **Fields** section, expand the filter fields as needed by clicking the plus symbol (+) to the left of each category to see every possible filtering option.
5. From within the expanded field, click a desired criterion.
Depending on the criterion selected, the page displays either an option bank or a drop-down menu, as shown in the following examples.

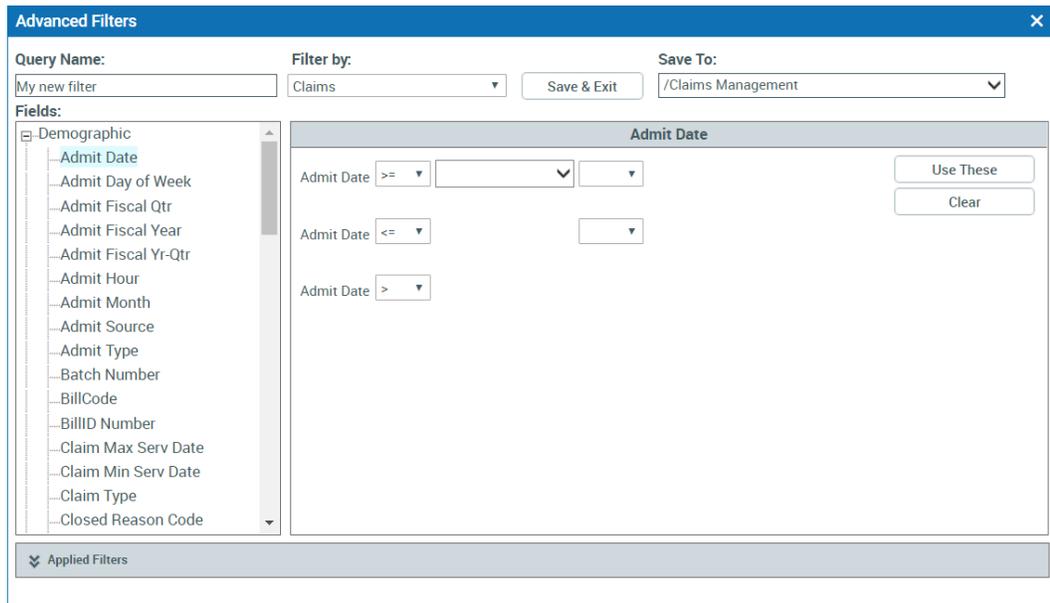
► **Option bank**

- Option banks allow you to select from all records of that type in the database, as in the following example:



► Drop-Down parameters

- Drop-down menu containing parameters to set (four inequality signs and an equal sign).

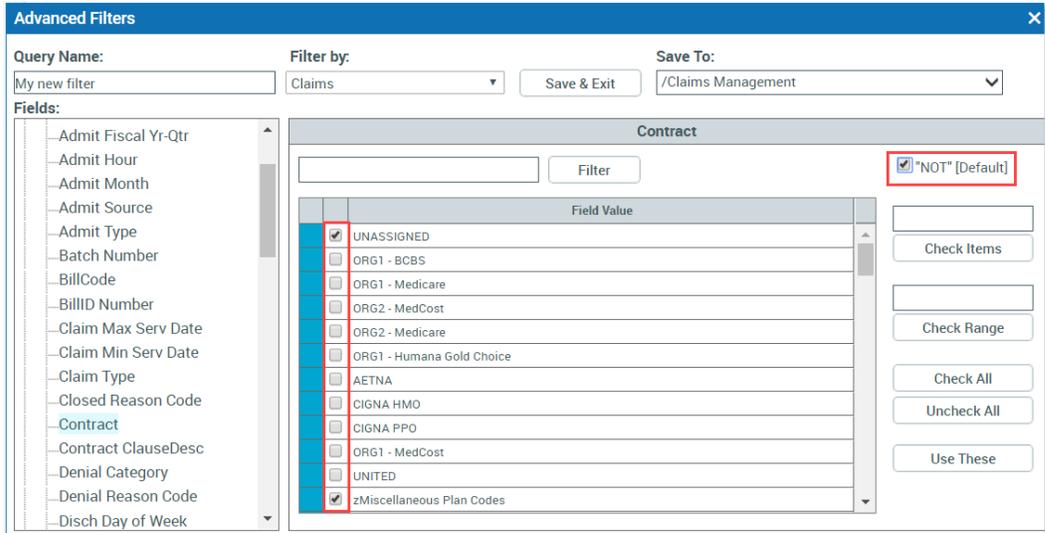


6. Select options or parameters, as appropriate:

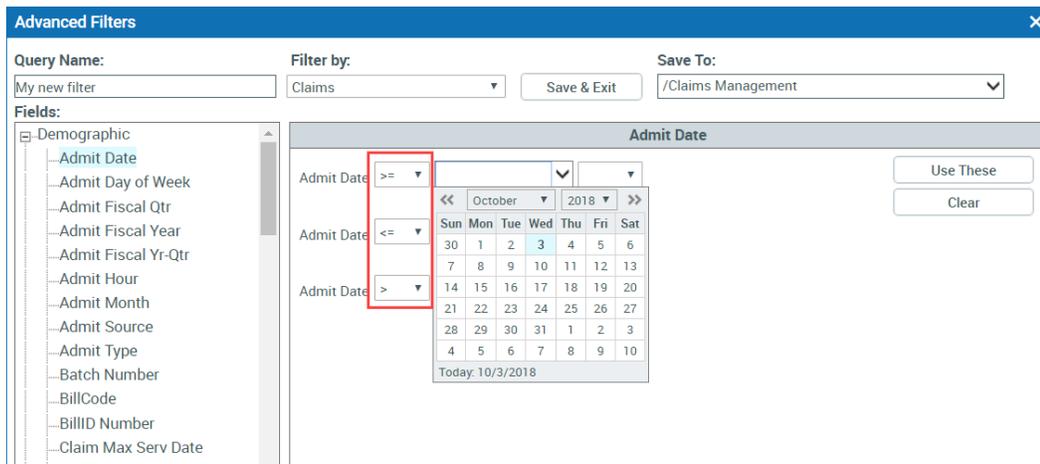
- If presented with an option bank, click the check box to the left of each item to include that item in the filter.
 - If the selection list is long and consists of numbers, you can filter to the data range rather than scrolling through the list. Type the number range into the **Check Range**

field and then click **Check Range**.

- To select the majority of the options and exclude only a few choices, select the **“NOT” [Default]** box and then select the ones to exclude, as shown in the following example.



- If presented with parameters to set, as shown in the following example, select the direction of the equality/inequality, and then from the drop-down menu, select the value on which the inequality is based.
- Selecting AND/OR allows for another set of parameters on the following line.



More complex filters contain a few different sub-filters, such as Discharge Date, Latest Payment Date, and Total Expected Payments.

- To build a complex filter, repeat Steps 5 and 6 as necessary to add multiple filter selections.
7. After making selections, click the **Use These** button to the right.

NOTE: More complex filters may add time to report processing. Also, discharge date and contract are already part of your basic report parameters. No additional filtering is needed unless you require a specific payer code or you are building a filter for Claim Tracking.

8. To verify all filters were properly selected, in the bottom left corner of the **Advanced Filters** dialog, click the **Applied Filters** drop-down. Expand the selection to see all filters chosen. If any are missing, repeat Steps 5 and 6 and 7.
9. When finished adding criteria, click **Save & Exit**.

Scheduler Overview

Using Scheduler, you can schedule certain Axiom Contract Management tasks to be processed on a Scheduler server at a specific date and time. For example, you can schedule plan file processing or data imports.

Processing tasks using Scheduler has advantages over manual processing, such as:

- Leverages the server's processing power and frees up your computer's resources.
- Enables recurring scheduling of ongoing tasks.
- Allows tasks to be scheduled during "off hours," during periods of low network and system activity.
- Allows tasks to be performed in batch, including enforcing task dependencies.

Scheduler processes tasks using jobs. Each job is a scheduled unit that can contain one or more tasks. The tasks in a job can be processed sequentially or concurrently as appropriate.

Only system administrators and users with the **Scheduled Jobs User** security permission can access Scheduler.

Most Scheduler setup activities can only be performed in the Desktop Client (Excel or Windows Client). Therefore, the Desktop Client Scheduler is the primary focus of this document. However, some job management activities can be performed in the Web Client, such as monitoring the job schedule, viewing job results, and running jobs manually on demand. For more information, see [Web Scheduler](#).

About Scheduler

This section contains conceptual information about the Scheduler feature in Axiom Contract Management.

► Scheduler jobs and tasks

The primary unit of Scheduler processing is a *job*. Each Scheduler job can contain one or more *tasks* to be performed as part of that job.

Each Scheduler job defines the following basic properties:

- The tasks to perform for the job and the properties of those tasks

- The schedule of the job, including recurrence (if any)
- The priority of the job
- The notification options for the job

The tasks define the actual activities to be performed by the job, such as importing data or processing plan files. Some Scheduler tasks correspond to existing features that can also be processed manually (such as Process Plan Files), while other tasks are Scheduler-specific and can only be processed via Scheduler. Each task has a unique set of options that are specific to that task and to the activity to be performed. For more information on the available task types, see [Scheduler Task Reference](#).

The tasks in a job can be processed sequentially or concurrently as appropriate. Tasks can be dependent on other tasks in the job as needed—for example, you can configure a job so that if a task fails, the job stops and does not process the next task. Tasks can also be processed iteratively, to perform the same task repeatedly over a defined set of values.

The Scheduler jobs in your system fall into the following basic categories:

- **Client-created:** You can create Scheduler jobs as needed to perform tasks in your system.
- **System jobs:** Axiom Contract Management provides a set of [system jobs](#) to perform necessary system tasks.
- **Product-controlled:** When a product is installed, it may include one or more Scheduler jobs to support the use of that product. Generally speaking, these jobs should not be changed unless the product documentation says customization is allowed, or as advised by Axiom Support.

► How Scheduler jobs are run

Once a Scheduler job has been created, it can be run using any of the following options:

- The job can be scheduled for execution at a future date and time using a scheduling rule. Scheduling rules can be one-time only, or recurring.
- The job can be run "one time" manually as needed through Scheduler.
- The job can be triggered for execution using an event handler. This allows Scheduler jobs to be triggered in various ways, such as by clicking a button in an Axiom form.

Scheduler jobs are processed by one or more servers running the Scheduler service. For Axiom Cloud systems, the Scheduler service is part of your cloud system and managed by Axiom Support. For on-premise systems, the Scheduler service is installed on one or more servers in your environment. The Scheduler service polls the Axiom Application Server periodically to check for any jobs that are ready to be run. Eligible jobs are then executed on the server, based on their [processing priority](#).

When a job is executed by Scheduler, it is run using a particular user identity. In order for a job to be executed successfully, the user must be an active user defined in Axiom Contract Management security, and the user must have the appropriate security permissions to perform the tasks in the job. The user identity for a job is determined as follows:

- If a job is a system job, then it is run as the system-managed identity of **System** instead of a user identity.

- If a job is run by using **Run Now**, then it is run as the user who placed the job on the schedule.
- If a job is run by an active scheduling rule, then it is run as the *job owner*. The job owner is the user who last saved the job.
- If a job is run via an event handler, then the job may be run as either the job owner, or the job requester (the user who raised the event).

▶ System jobs

System jobs are automatically created by Axiom Contract Management to support necessary system functionality. Some system jobs are created as part of the initial installation and are intended to run on an ongoing basis, while other system jobs are created on-demand in response to system events. Only administrators can edit these system jobs.

System jobs have two defining characteristics:

- System jobs are run using the system-managed identity of **System** instead of a user identity. The System identity has full rights to the system as necessary to perform system tasks.
- System jobs are run by the default System Scheduler service. For on-premise systems, this service is created and started automatically on the Axiom Application Server, and does not require a separate installation. This service is exclusively for running system jobs.

Axiom Cloud systems may or may not have a separate System Scheduler service, depending on the system configuration (as determined by Axiom Support). If your cloud system does not have a System Scheduler service, then your system jobs are run using the available Scheduler services for the cloud system.

In the Scheduler dialog (Desktop Client), the System Scheduler service is listed on the **Servers** tab using the following naming convention: **<ServerName>-System**.

If necessary, a product-controlled or client-created job can be flagged as a system job, so that it can be run using the System identity instead of a user identity. To designate a job as a system job, enable **Mark as System Job** in the **General** job properties. The following rules apply to manually-created system jobs:

- Only system administrators can designate a job as a system job.
- The job cannot contain any tasks that are designated as “non-system” tasks. Non-system tasks are any tasks that might involve spreadsheet processing, such as Process Plan Files.

▶ Processing priority for scheduled jobs

Once a job reaches its start time, it is eligible to be processed by Scheduler and joins the processing queue. For scheduled jobs, the start time is based on the scheduling rule that placed it on the schedule. For other jobs, the start time is the time that the job was placed on the schedule using **Run Once** or triggered by an event handler.

Each Scheduler service has a configured number of *threads* that are used to process jobs. As a Scheduler thread becomes available, it takes the next job in the processing queue. The priority of jobs in the processing queue is determined by the combination of the job's priority category, and its **Priority Elevation** setting.

Each job has a priority category, based on how the job execution was initiated. The priority categories are as follows:

1. **Manual:** The job was executed manually.
2. **Event Handler:** The job was executed by a Scheduler event handler.
3. **Scheduled Job:** The scheduled instance of the job results from an active scheduling rule.
4. **Subordinate Job:** The job was generated as a subordinate job, from a currently executing job.

Manual jobs are highest priority and are processed first, and subordinate jobs are lowest priority and are processed last. Within each category, jobs are processed according to their **Priority Elevation** setting.

For example, imagine that Scheduler has 2 available threads and the following jobs are eligible to be processed:

Job	Priority Category	Priority Elevation
A	Manual	Default
B	Event Handler	Default
C	Scheduled	Default
D	Scheduled	Elevated

- Scheduler will execute jobs A and B first, because those are the highest priority jobs based on their priority category.
- When the next thread becomes available, Scheduler will execute job D. Although job C may have entered the queue first, and the two jobs have the same priority category, job D's priority elevation is set to **Elevated** so it takes precedence within the category. If instead both jobs were set to **Default**, then job C would be executed first if it entered the queue before job D.
- When the next thread becomes available, Scheduler will execute job C.

NOTE: If a job's **Priority Elevation** is set to **Interrupt**, then it is run as soon as it is eligible, regardless of its priority category and regardless of whether any Scheduler threads are currently available to process the job. If no Scheduler threads are available, a new one is created to process the job, even if this temporarily exceeds the number of configured threads for the server.

The Scheduler dialog

The **Scheduler** dialog is used to create and manage Scheduler jobs.

To access Scheduler:

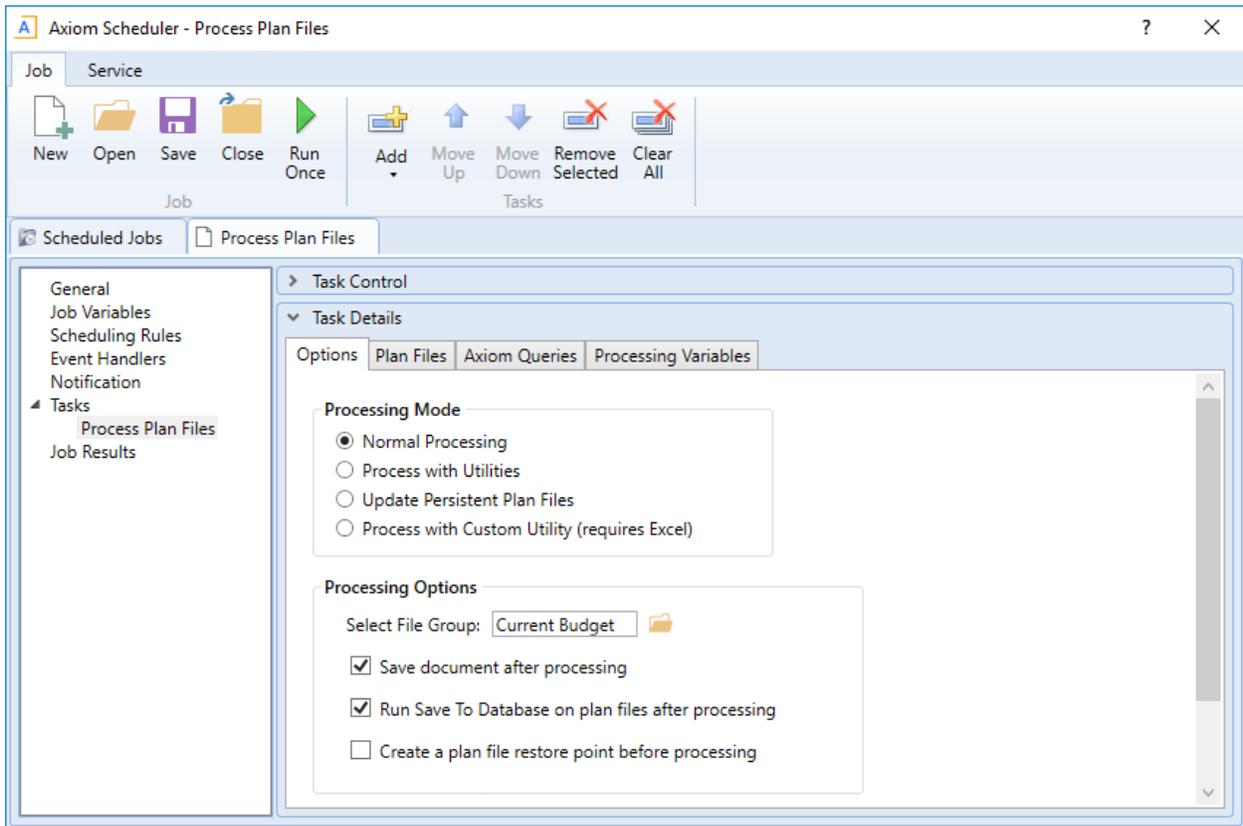
- On the **Axiom** tab, in the **Administration** group, click **Manage > Scheduler**.

NOTE: In systems with installed products, this feature may be located on the **Admin** tab. In the **System Management** group, click **Scheduler**.

The top section of the **Scheduler** dialog contains a ribbon-style toolbar with two tabs: **Job** and **Service**.

- On the **Job** tab, you can create, run, and edit jobs.
- On the **Service** tab, you can manage scheduled jobs, view job results, and perform other Scheduler management activities.

As you perform actions on the **Job** and **Service** tabs, additional tabs are opened in the navigation pane of the dialog. For example, clicking the **Scheduled Jobs** button on the **Service** tab opens the **Scheduled Jobs** tab in the navigation pane. You can move between any open tab in the navigation pane, regardless of which tab is selected in the ribbon. The ribbon updates to show the related commands for the selected item.



Example Job tab

ID	Job	User	Status	Server	Priority	Start Time	Due In
4559790	System.ProcessNotification	System	Pending		Scheduled Job	7/11/2018 17:01	44.42 minutes
4559766	System.SystemDataPurge	System	Pending		Scheduled Job	7/12/2018 01:00	8.72 hours
4559769	System.IndexMaintenance	System	Pending		Scheduled Job	7/12/2018 05:15	12.97 hours
4559792	Process Plan Files	admin	Pending		Scheduled Job	7/12/2018 16:05	23.81 hours

Example Service tab

When you right-click a tab in the dialog's navigation pane, you can close or save items as follows:

- For all items, you can **Close**, **Close All**, or **Close All But This**.
- For jobs, you can **Save** or **Save As**. Selecting **Save As** allows you to save a copy of the job to the **Scheduler Jobs Library** in the Axiom Contract Management file system.

The **Scheduler Jobs Library** is also accessible via Axiom Explorer.

Scheduler Job Setup

To perform Axiom Contract Management tasks using Scheduler, you must create jobs. Each job can execute one or more tasks. This section discusses how to set up jobs, including how to schedule jobs for future execution and how to be notified when a job has been completed.

Managing Scheduler jobs and tasks

Using the **Axiom Scheduler** dialog, administrators can create and edit Scheduler jobs. To access this dialog:

- On the **Axiom** tab, in the **Administration** group, click **Manage > Scheduler**.

NOTE: In systems with installed products, this feature may be located on the **Admin** tab. In the **System Management** group, click **Scheduler**.

This section discusses how to create, edit, and delete jobs and tasks, not how to manage the Scheduler queue once jobs have been placed on the schedule. If you need to stop or reschedule a scheduled job, see [Managing scheduled jobs](#).

Scheduler jobs are saved as XML files and are stored in the Axiom Contract Management file system at `\Axiom\Scheduler Jobs Library`.

▶ Creating a Scheduler job

You can create a new Scheduler job to perform one or more tasks.

To create a new job:

1. In the **Scheduler** dialog, on the **Job** tab, click **New**.

A new tab appears in the navigation pane, labeled **New Job**. The left-hand side of the job lists sections for which you can define various job settings. When you click a section name, the settings for that section display in the right-hand side of the job.

2. In the **General** section, define general job settings as desired.

For detailed information on the available settings for a job, see [Job properties](#).

3. In the **Scheduling Rules** section, specify scheduling details for the job.

You can schedule the job for future execution, for one time or on a recurring basis.

NOTE: If you are always going to run the job manually, and do not need to schedule it for future execution, then you do not need to define scheduling rules.

For more information, see [Defining scheduling rules for a job](#).

4. In the **Notification** section, specify email notification options for the job.

You can send email notifications every time the job completes, or only when the job experiences errors. By default, the job is configured to notify on completion.

For more information, see [Setting up notifications for jobs](#).

5. In the **Tasks** section, add one or more tasks to the job.

- a. On the **Job** tab of the ribbon, in the **Tasks** group, click **Add**. This brings up a list of available tasks. Select the task that you want to add.

The task is added to the **Tasks** section, and the settings for the task display in the right-hand side of the job.

- b. Complete the settings for the task as desired.

The **Task Control** section of the task contains standard task settings, and the **Task Details** section contains settings unique to the task type. For more information, see [Task Control properties](#).

If a required setting is not completed, the setting is highlighted in red and error text appears in the bottom of the dialog. Make sure to complete all required settings for the task before saving.

Repeat this process until you have added all desired tasks to the job. Tasks are processed in the order listed. If you need to change task order, select a task and then click **Move Up** or **Move Down**.

6. In the **Job** tab of the ribbon, click **Save**.
7. At the bottom of the **Save As** dialog, in the **File name** box, type a name for the job, and then click **OK**.

The job is saved as an XML file in the Scheduler Jobs Library.

If the job was saved with an active scheduling rule, Axiom Contract Management determines the next scheduled date of execution and schedules the job. You can view the job in the **Scheduled Jobs** list (on the **Service** tab of the ribbon, click **Scheduled Jobs**).

Advanced job settings

This procedure covers the basic steps of creating a job. Jobs also support the following advanced options:

- **Event handlers:** You can create event handlers for the purposes of running the job using the RunEvent function. This allows users to trigger job execution from within an Axiom file.
- **Job variables:** You can create job variables and then use those variables within certain job settings. You can then dynamically pass in values for those variables when using the RunEvent function to execute the job.

For more information, see [Advanced options](#), [Using job variables](#), and [Using RunEvent to execute a Scheduler job](#).

▶ Editing a job

You can edit a job at any time to change job settings, add or remove tasks, change scheduling rules, or change notification options.

This section describes the general process of opening a job for editing. For more details on the impacts of editing scheduling rules, see [Defining scheduling rules for a job](#).

To edit a job:

1. In the **Scheduler** dialog, in the **Job** tab, click **Open**.

The **Axiom Explorer** dialog opens, showing the Scheduler Jobs Library only.

2. Select the job and then click **Open**.

The job opens in the **Scheduler** dialog. Make sure the job is the active tab in the navigation pane (the most recently opened tab is the active tab by default).

3. Edit the job and task properties as desired.

For detailed information on the available settings for a job, see [Job properties](#). For detailed information on task settings, see [Task Control properties](#).

4. In the **Job** tab of the ribbon, click **Save**.

▶ Deleting a job

Deleting a job removes any scheduled executions of the job from the scheduled jobs list.

To delete a job:

1. In the **Scheduler** dialog, in the **Job** tab, click **Open**.

The **Axiom Explorer** dialog opens, showing the Scheduler Jobs Library only.

2. Navigate to the job that you want to delete, then right-click the job and select **Delete**.

You can also delete Scheduler jobs from Axiom Explorer or the Explorer task pane.

Defining scheduling rules for a job

Once a job has been created, you can run it on demand, or you can schedule it for future execution. Jobs can be scheduled to be run one time, or on a recurring basis. To schedule a job, you define scheduling rules for the job.

You can add, edit, and remove the scheduling rules for a job at any time using the **Scheduling Rules** section of the job properties. You can also flag a rule as active or inactive. If a job has no scheduling rules, or if all of its scheduling rules are inactive, then it will not be run unless it is run manually by a user.

If a job is saved with an active scheduling rule, then Axiom Contract Management determines the next scheduled instance of the job and places it in the scheduled jobs list. Once that instance has been processed, the next scheduled instance is determined and scheduled, and so on. Each time the job is run using an active scheduling rule, it is run as the current job owner (unless the job is a system job, in which case it is run as the Scheduler Service System identity).

If a job has multiple active scheduling rules, Axiom Contract Management evaluates all of the rules and schedules a single instance of the job, for the earliest time allowed by the rules. Multiple scheduling rules do not result in multiple scheduled instances of the job.

NOTE: If a time zone is listed on the Scheduling Rules section of the job, then the defined rules will be evaluated in the context of that listed time zone. Otherwise, scheduling rules are evaluated in the context of the local time zone for the Scheduler Server. If necessary, the system configuration setting **SchedulingBehaviorTimezone** can be used to specify a particular time zone for evaluating scheduling rules.

► Adding a Scheduling rule

You can add a scheduling rule to a job to schedule it for future execution, either one time or on a recurring basis.

If you only plan to run the job manually on demand, then you do not need to create a scheduling rule.

To add a scheduling rule to a job:

1. In the **Scheduler** dialog, open a job to edit or create a new job.
2. In the left-hand side of the job, select **Scheduling Rules**.

By default, this area is empty. You must add a rule in order to define scheduling for the job.

3. On the **Job** tab of the Scheduler ribbon, in the **Scheduling Rules** section, click **Add**.

A new row appears in the right-hand side of the job. By default, the new row is active, but does not have start / end dates or any specific recurrence settings.

4. Complete the following settings within the row as needed:

Item	Description
Active	<p>If you want the job to be placed on the schedule as soon as you save the job with the new scheduling rule, then you should leave this option checked.</p> <p>However, if you just want to save your schedule settings but you are not ready to begin scheduling the job, then you can clear the Active check box for the rule. The job will not be scheduled until it is saved with an active scheduling rule.</p>
Starting On Ending On	<p>Optional. These dates specify the time frame for the scheduling rule. The starting date defines the earliest point in time that the job can be scheduled, and the ending date defines the latest point in time that the job can be scheduled.</p> <p>If these dates are not defined (left blank), then the job will be perpetually scheduled according to the rule settings, as long as the rule is active.</p> <p>If you want to schedule a one-time job, then set the starting / ending dates to the same date and time.</p> <p>NOTE: Your system locale determines the format of dates.</p>
Day of Week	<p>Specify the day(s) of the week that you want the job to be run:</p> <ul style="list-style-type: none"> • * (Default): The job will be run on all days within the start / end range. • 0-6: The job will be run on the specified day or days, where 0 is Sunday and 6 is Saturday. Use a comma or a hyphen to separate multiple days (hyphen if the days are contiguous, commas if not). <p>For example, you can enter 1, 3, 5 for Monday, Wednesday, and Friday, or enter 1-5 for Monday through Friday.</p>
Hours	<p>Specify the time of day (hours) that you want the job to be run, in relation to the specified days:</p> <ul style="list-style-type: none"> • * (Default): The job will be run on all hours. • 0-23: The job will be run on the specified hour or hours, where 0 is midnight and 23 is 11:00 PM. Use a comma or a hyphen to separate multiple hours (hyphen if the hours are contiguous, commas if not). <p>For example, you can enter 0, 12 to run at midnight and noon, or enter 0-12 to run every hour from midnight to noon.</p>

Item	Description
Minutes	<p>Specify the time of day (minutes) that you want the job to be run, in relation to the specified hours:</p> <ul style="list-style-type: none"> • * (Default): The job will be run on all minutes (essentially the job is run continuously, once per minute). • 0-59: The job will be run on the specified minute or minutes of the hour, where 0 is the first minute of the hour and 59 is the last minute of the hour. Use a comma or a hyphen to separate multiple minutes (hyphen if the hours are contiguous, commas if not). <p>For example, you can enter 0, 30 to run at the top of the hour and the half hour, or enter 0-30 to run every minute from the top of the hour to the half hour.</p> <p>NOTE: If you specify an hour, then in most cases you should also specify a minute (such as 0 to run the job at the top of the specified hour). If you enter an hour but leave the minutes at the default asterisk, then the job will run every minute in that hour.</p>

If the Active check box for the rule is selected when the job is saved, then Axiom Contract Management will calculate the date and time of the first scheduled execution and will place the job on the schedule.

▶ Editing a scheduling rule

You can edit a scheduling rule at any time, to toggle between active and inactive, and to change the start / end dates and recurrence settings.

NOTES:

- If a pending instance of this job is currently on the schedule, and you edit the scheduling rule, the pending instance will be updated to match the new schedule.
- If you inactivate a scheduling rule, any currently scheduled instances of the job will be automatically removed from the schedule.

To edit a scheduling rule:

1. In the **Scheduler** dialog, open a job to edit or create a new one.
2. In the left-hand pane of the job, select **Scheduling Rules**.
The defined rules display in the right-hand pane of the job.
3. Make any desired changes directly within the scheduling rules grid.

► Deleting a scheduling rule

You can delete a scheduling rule at any time. If a job has no active scheduling rules, it will not be processed unless it is manually run.

To delete a scheduling rule:

1. In the **Scheduler** dialog, open a job to edit.
2. Select the **Scheduling Rules** section of the job, and then select the rule that you want to delete.
3. On the **Job** tab of the Scheduler ribbon, in the **Scheduling Rules** group, click **Remove Selected**.

Alternatively, if you want to delete all scheduling rules for the job, click **Clear All**.

Any jobs in the scheduled jobs queue that were related to the deleted rule(s) are also deleted.

► Scheduling rule examples

The following are some example schedules and the rules used to achieve them:

Schedule	Start/End	Day of Week	Hours	Minutes
Weekdays at 11:00 PM	<optional>	1,2,3,4,5	23	0
Every 15 minutes	<optional>	*	*	0,15,30,45
Mondays at 11:30 PM	<optional>	1	23	30
One time (6/30/2021) at 1:30 PM (Option 1)	Start: 06/30/2021 00:00 End: 07/01/2021 00:00	*	13	30
One time (6/30/2021) at 1:30 PM (Option 2)	Start: 06/30/2021 13:30 End: 06/30/2021 13:30	*	*	*
Every Wednesday in July at noon	Start: 07/01/2021 00:00 End: 08/01/2021 00:00	3	12	0
Continuous	<optional>	*	*	*

To schedule a job to execute monthly, create twelve active scheduling rules, one for each month. This is necessary because scheduling rules do not have a property for day of month, so it is not possible to use a single scheduling rule to create a monthly schedule. In the following example, the job will be executed on the first day of each month, at 3:30 AM:

Active	Starting On	Ending On	Day Of Week	Hours	Minutes
<input checked="" type="checkbox"/>	1/1/2021 00:00	1/2/2021 00:00	*	3	30
<input checked="" type="checkbox"/>	2/1/2021 00:00	2/2/2021 00:00	*	3	30
<input checked="" type="checkbox"/>	3/1/2021 00:00	3/2/2021 00:00	*	3	30
<input checked="" type="checkbox"/>	4/1/2021 00:00	4/2/2021 00:00	*	3	30

Example scheduling rules to execute a job monthly

When you save the job, the rules will be evaluated and the first scheduled execution will be placed on the schedule—in this example, the January 1 execution. Once that scheduled execution is complete, the rules will be evaluated again, which will cause the next scheduled execution (Feb 1) to be placed on the schedule, and so on.

Setting up notifications for jobs

Scheduler can be configured to send an email notification when a job completes, or when a job has errors. In order for an email notification to be sent for a particular job, the following must be set up:

- The job must be configured to send a notification on completion or error. The notification settings must include valid To and From email addresses (or use system variables).
- The System.SMTPMessageDelivery system job must be configured with a valid SMTP server for your environment. For more information, see [Scheduler setup](#).

When a job creates an email notification, the notification is first saved to the database. When notifications are detected in the database, the System.SMTPMessageDelivery system job is triggered to deliver the notifications.

NOTES:

- By default, all new Scheduler jobs are configured to send an email notification on completion, to the user who created the job. You only need to edit the notification settings if you want the job to use different notification behavior.
- Currently, it is not possible to configure a Scheduler job to send notifications within the application only, instead of by email. However, when a job is run manually, the user who ran the job may receive an in-application notification of the job status in addition to any configured email notifications. See [Application notifications for Scheduler jobs that are run manually](#).

To configure a job to send email notifications:

1. In the **Scheduler** dialog, open a job to edit or create a new job.
2. In the left-hand side of the job, select **Notification**.
3. In the **Job Notification Level** section, select one of the following:
 - **Send all email notifications:** (Default) An email notification is always sent when the job is executed, regardless of the job status (success, failure, aborted, etc.).
 - **Send email notification only when the job has errors:** An email notification is only sent if the job experiences errors. If the job completes successfully with no errors, no email notification is sent.
 - **None:** No email notifications are sent for this job. The only way to check the status of the job execution is to view the job history.

- **Send email notification to different email addresses when the job has errors or succeeds:** This option works the same way as **Send all email notifications**, except that a separate email address can be specified to receive the error notifications.

4. In the **Notification Message Content** section, complete the following for the notification email:

Item	Description
To	<p>The email address(es) to receive the notification email. Separate multiple addresses with a semicolon. For example:</p> <ul style="list-style-type: none"> • To send the email to two recipients, enter the addresses such as: jdoe@company.com;dsmith@company.com • To use a Scheduler job variable to define a notification recipient, enter the variable name with curly brackets. You can combine regular email addresses and variables, such as: {JobOwner.EmailAddress}; jdoe@company.com <p>By default, the notification is configured to be sent to the user who executed the job, using the variable {CurrentUser.EmailAddress}.</p> <p>The entries in the To field must be valid email addresses, or Scheduler job variables that will resolve to valid email addresses. Currently, it is not supported to list user or role names, or to look up email addresses from Axiom Security.</p> <p>NOTE: When using Send email notification to different email addresses when the job has errors or succeeds, this user will be notified if the job completes successfully (including partial success), but not if the job fails. Job failure notifications are sent to the To (on error) recipients.</p>
From	<p>The email address that the message is sent from. This can be something like axiomscheduler@company.com, so that the recipient can easily tell that the message has been generated by Scheduler.</p> <p>By default, this is set to the Scheduler "from" email address as defined in the system configuration settings, using the system variable {Scheduler.FromEmailAddress}.</p> <p>NOTE: For installations that are using subsystems, the system variable {Scheduler.FromEmailAddress} may resolve to a subsystem administrator email address instead of the Scheduler "from" email address.</p>
Subject	<p>The subject of the message. By default, this is set to "Axiom Scheduler Notification."</p>
User Message	<p>Optional body text for the email. This text is included in addition to the Scheduler auto-generated text regarding the job status.</p>

If **Send email notification to different email addresses when the job has errors or succeeds** is enabled, the following additional options are available:

Item	Description
To (on error)	<p>The email address(es) to receive the notification email when the job result is Failed. Separate multiple addresses with a semicolon.</p> <p>This user only receives a notification if the job fails. If the job result is Success or Partial Success, this user will not receive a notification (only the To user will).</p>
Subject (on error)	The subject of the job failure message. By default, this is set to "Axiom Scheduler Notification."

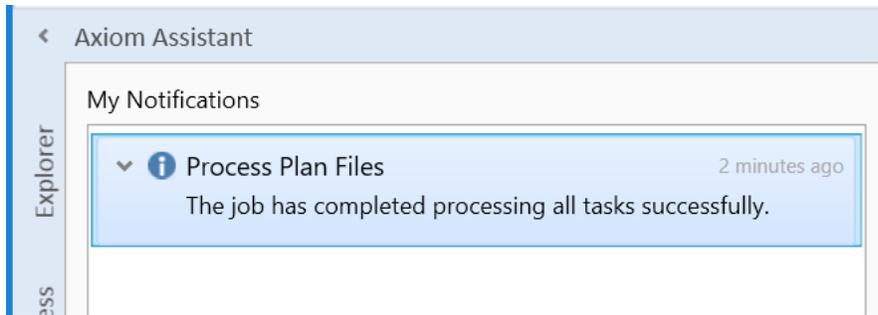
Job variables can be used in all notification settings.

► Application notifications for Scheduler jobs that are run manually

If you run a Scheduler job manually, you can receive a notification within the application to let you know the status of the job. This notification will display in the Notifications task pane of the Desktop Client, and in the Notifications panel of the Web Client. This notification works as follows:

- The in-application notification is only sent if the Scheduler job is run manually using the **Run Now** option in Scheduler (or by using an equivalent "run now" action within a product-specific web page). In-application notifications are *not* sent if the job is run via a scheduling rule or an event handler.
- The in-application notification honors the Notification settings defined for the job to determine whether the notification is sent. For example, if the job is set to **None**, then the in-application notification is not sent. If the job is set to **Send all email notifications**, then both an email notification and an in-application notification will be sent when the job completes.
- The in-application notification only reports the status of the job—success, failure, or partial success. It does not contain any error or success details, and does not include any messaging as defined in the Notification settings for the job. For more information, view the job results within the Scheduler dialog in the Desktop Client, or the Scheduler page of the Web Client.
- The in-application notification is always sent to the user who ran the job manually.

NOTE: If the job is configured to **Send email notification to different email addresses when the job has errors or succeeds**, this is treated as **Send all email notifications** for purposes of sending the in-application notification. The user who ran the job will be notified when the job is completed, regardless of the job status.



Example success notification

Job properties

This topic is a reference for the settings that can be defined for a Scheduler job.

► General

This section defines general settings for the job.

Item	Description
Description	<p>Optional. The description of the job.</p> <p>The job description can also be edited in Axiom Explorer, in the Scheduler Jobs Library.</p>
Job Restart Behavior	<p>Specifies whether and how the job should be restarted if it is interrupted prior to completion. Select one of the following:</p> <ul style="list-style-type: none"> • Do not reschedule this job. In this case, you must manually reschedule the job if it needs to be run before its next scheduled execution. • Restart the job from the first task. The entire job is run again, even if some of the tasks were completed successfully before the job was interrupted. • Resume the job beginning with the first uncompleted task. (Default) The job resumes and only the uncompleted tasks are run. <p>A job would be interrupted if the Scheduler server processing it was restarted, or if the Scheduler service on the server was stopped or restarted, or if the Scheduler server was disabled from the Servers tab (Service > Servers) of the Scheduler dialog.</p>

Item	Description
Job Results Cleanup	<p data-bbox="456 254 1284 285">Specifies whether historical job results are purged when the job is run.</p> <p data-bbox="456 310 699 342">To purge job results:</p> <ol data-bbox="496 359 1377 554" style="list-style-type: none"> <li data-bbox="496 359 1235 390">1. Select Purge historical job results whenever this job runs. <li data-bbox="496 415 1377 554">2. In Number of days to keep results for this job, specify the number of days to keep when purging results. By default this is set to 0, which means all job results will be purged except the result for the current job execution. <p data-bbox="456 590 1377 695">A day is counted as 24 hours from the time the cleanup task is executed. So if you specify 1 day, and the task is run at 11:00 PM on Tuesday, then all results prior to 11:00 PM Monday are purged.</p> <p data-bbox="456 720 1377 783">If this option is not selected, then historical job results remain in the database until the system's Purge System Data task is run.</p>
Priority Elevation	<p data-bbox="456 804 1357 877">Specifies the priority of the job in the scheduled jobs queue, within the job's priority category. Select one of the following:</p> <ul data-bbox="464 888 1401 1392" style="list-style-type: none"> <li data-bbox="464 888 1349 993">• Default: (Default) This job is run on a "first come, first served" basis. The total number of jobs that can be run at one time is determined by the configured number of Scheduler threads for the installation. <li data-bbox="464 1010 1401 1115">• Reduced: The job is designated as a low priority job, and remains at the bottom of the queue until other jobs with Default and Elevated priority have been run. <li data-bbox="464 1131 1365 1194">• Elevated: The job is designated as a high priority job, and is moved to the top of the queue to be run before Default and Reduced priority jobs. <li data-bbox="464 1211 1369 1392">• Interrupt: The job is run immediately, regardless of any jobs currently waiting in the scheduled jobs queue, and regardless of whether any Scheduler threads are currently available to run it. If no Scheduler threads are currently available, a new thread is created, even if this exceeds the configured thread limit for the installation. <p data-bbox="456 1409 1328 1472">Job execution order also depends on the priority category of a specific job execution. See Processing priority for scheduled jobs.</p>

Item	Description
Mark as System Job	<p>Specifies whether the job is run as a system job. Only administrators can edit this check box.</p> <p>If this check box is selected, the job is run under the "Scheduler Service" system identity instead of a user identity, and the job is run by the system Scheduler server which operates on the Axiom Application Server.</p> <p>Generally, this check box should only be selected for system "support" tasks that should not depend on individual user rights. This check box is not available if the job contains non-system tasks (generally, spreadsheet-related tasks).</p> <p>For more information, see System jobs.</p>
Put the system in 'admin only' mode during this job	<p>If this option is selected, then the system will be placed into administrator-only mode at the start of the job, and then placed back into full access mode when all tasks are completed (including any sub-jobs). This is the same behavior as going to Manage > Security > System Access and selecting Administrators Only.</p> <p>NOTES:</p> <ul style="list-style-type: none"> You should make sure that any jobs using admin-only mode do not overlap. For example, imagine that job A starts and places the system in admin-only mode. While job A is still running, job B starts and finishes. If job B also uses admin-only mode, then when job B finishes the system will be placed back into full access mode, meaning the remainder of job A will be processed in full access mode. Any job using admin-only mode must be run by an administrator. <p>Generally speaking, any job set to run using admin-only mode should be run at a time when no end users will be logged into the system and no other Scheduler jobs will be running.</p>

▶ Job Variables

This tab has two sections for job variables:

- In the **Job values** section at the top of the tab, you can manage user-defined variables for use in the current job.

To add or remove variables, use the **Add**, **Remove Selected**, or **Clear All** commands in the **Job Variables** group of the **Job** tab. This group is only available when you have selected the **Job Variables** section in the left-hand side of the job.

When creating user-defined variables, do not add curly brackets to the variable name. Curly brackets are only required when you use the variable in a job or task setting.

- In the **System defined values** section at the bottom of the tab, you can view the system variables available for use in the job.

You can right-click any variable in this section (user-defined or system-defined) and select **Copy variable name to clipboard**. You can then navigate to the setting where you want to use the variable, and then paste it. The variable will be pasted with the necessary curly brackets.

For more information, see [Using job variables](#).

► Scheduling Rules

Each row in this section defines a scheduling rule for the job. Jobs will be automatically scheduled according to the settings in this section.

To add or remove scheduling rules, use the **Add**, **Remove Selected**, or **Clear All** commands in the **Scheduling Rules** group of the **Job** tab. This group is only available when you have selected the **Scheduling Rules** section in the left-hand side of the job.

For more information, see [Defining scheduling rules for a job](#).

Item	Description
Active	Specifies whether the scheduling rule is active. If this check box is not selected, then the rule is ignored for purposes of scheduling the job.
Starting On	Optional. Specifies the earliest date and time for the scheduling rule to take effect. If you want the job to run one time only, set Starting On and Ending On dates to the same date/time.
Ending On	Optional. Specifies the expiration date and time for the scheduling rule. Once this date is past, no further executions will be scheduled for this rule.
Day of Week	Specifies the day(s) of the week that you want the job to be run: <ul style="list-style-type: none"> • * (Default): The job will be run on all days within the start / end range. • 0-6: The job will be run on the specified day or days, where 0 is Sunday and 6 is Saturday. Use a comma or a hyphen to separate multiple days (hyphen if the days are contiguous, commas if not).
Hours	Specifies the time of day (hours) that you want the job to be run, in relation to the specified days: <ul style="list-style-type: none"> • * (Default): The job will be run on all hours. • 0-23: The job will be run on the specified hour or hours, where 0 is midnight and 23 is 11:00 PM. Use a comma or a hyphen to separate multiple hours (hyphen if the hours are contiguous, commas if not).

Item	Description
Minutes	<p>Specifies the time of day (minutes) that you want the job to be run, in relation to the specified hours:</p> <ul style="list-style-type: none"> • * (Default): The job will be run on all minutes (essentially the job is run continuously, once per minute). • 0-59: The job will be run on the specified minute or minutes of the hour, where 0 is the first minute of the hour and 59 is the last minute of the hour. Use a comma or a hyphen to separate multiple minutes (hyphen if the hours are contiguous, commas if not).

► Event Handlers

If an event handler is associated with the job, it is listed here. There are two types of event handlers:

- System event handlers, for completing system-triggered tasks. See [Managing event handlers](#).
- User-defined event handlers, for running jobs via RunEvent. See [Advanced options](#).

To add or remove event handlers, use the **Add**, **Remove Selected**, or **Clear All** commands in the **Event Handlers** group of the **Job** tab. This group is only available when you have selected the **Event Handlers** section in the left-hand side of the job.

Item	Description
Active	Specifies whether the event handler is active or not within the current job. If inactive, then actions that trigger the event handler will ignore this job.
Event Name	<p>The name of the event handler.</p> <p>Multiple jobs can have an event handler with the same name; all those jobs will be affected when the event handler is triggered.</p>
Execute As	<p>The user identity under which the job will be run when the event handler is triggered.</p> <ul style="list-style-type: none"> • Owner: For system-managed event handlers, the owner is the system Scheduler identity. For user-defined event handlers, the owner is the user who last saved the job. • Requester: For all event handlers, the requester is the user who caused the event handler to be triggered.

► Notification

This section defines email notification settings for the job. For more information, see [Setting up notifications for jobs](#).

Job variables can be used in this section. For more information, see [Using job variables](#).

Item	Description
Job Notification Level	<p>Specifies when email notifications are sent for the job. Select one of the following:</p> <ul style="list-style-type: none"> • Send all email notifications (Default) • Send email notification only when the job has errors • None • Send email notification to different email addresses when the job has errors or succeeds <p>If anything other than None is selected, then you must complete the remaining fields.</p>
To	The email address(es) to receive the notification email. Separate multiple addresses with a semicolon.
To (on error)	The email address(es) to receive the notification email when the job fails. Separate multiple addresses with a semicolon. Only applies when Send email notification to different email addresses when the job has errors or succeeds is enabled.
From	The email address to use as the "From" address for the notification email.
Subject	The subject text for the notification email.
Subject (on error)	The subject text for the notification email when the job fails. Only applies when Send email notification to different email addresses when the job has errors or succeeds is enabled.
User Message	<p>Optional. The body text for the notification email.</p> <p>Text entered here will be appended to the body text generated by Scheduler.</p>

► Tasks

This section defines the tasks in the job. In the ribbon, task commands are available on the **Job** tab, in the **Tasks** group.

- To add a task, click **Add**.
- To change the order of tasks, select a task and then click **Move Up** or **Move Down**.
- To delete a task, select the task and then click **Remove Selected**.
- To delete all tasks, click **Clear All**.
- To copy a task, right-click the task and then click **Copy**. You can copy the task within the same job, or to another open job in the Scheduler window. Right-click any task (or the **Tasks** section header) and then select **Paste**. The job is pasted underneath the job you right-clicked (or at the end of the list if you right-clicked the **Tasks** section header).

- To rename a task, double-click the task name to make it editable, and then type the new name. For example, if you have a job with multiple File Processing tasks, then you may want to edit the name of each task so that you know which file each task relates to at a glance. (You can also right-click and select **Rename**.)

Tasks are processed in the order they are listed in the job. By default, when you add a new task to a job, it is placed at the bottom of the list. Make sure to move the new job if it should not be processed last.

Tasks can be processed concurrently instead of sequentially if they are configured to be run as a subordinate job within the parent job.

Each task type has its own unique settings in addition to the standard task settings. For more information, see [Scheduler Task Reference](#).

▶ Job Results

Displays historical results for the job. This section is blank if the job has never been run.

Job results may be purged periodically by using the **Job Results Cleanup** option for the job, or by the system **Purge System Data** task.

NOTE: Users with the **Scheduled Jobs User** security permission only see results for jobs that they executed. Administrators see results for all executions.

For more information on job results, see [Viewing job results](#).

Advanced options

Creating event handlers for a job

You can create user-defined event handlers in a job, for the purposes of automatically triggering the job for execution when the event name is called by another feature. Axiom Contract Management supports several features that can be used to raise an event:

- The RunEvent function and command
- File Group triggers
- The Raise Event Scheduler task

Event handlers are defined by name. Multiple jobs can have an event handler with the same name. When that event handler is called, it will affect all jobs that contain the event handler with the matching name.

To create an event handler in a job:

1. In the **Scheduler** dialog, open a job to edit or create a new job.
2. In the left-hand side of the job, select **Event Handlers**.

3. On the **Job** tab of the ribbon, in the **Event Handlers** group, click **Add**.

A new event handler is added to the job.

4. Double-click the **Event Name** field so that the field becomes editable, and then type the desired event handler name.

For example, if the event handler will be used to trigger Process Plan Files jobs, you might name the event handler ProcessPlanFiles.

This event name is the name that will be used in features such as RunEvent to trigger this job for execution.

5. In the **Execute As** field, select one of the following to determine the user identity that will be used to run the job when it is executed via the event handler:

- **Owner:** The job will be run under the identity of the job owner.

The job owner is the user who last saved the job. If you are not sure who the current job owner is, you can check the **Job Variables** tab. The current job owner is listed in the **System defined values** section.

- **Requester:** The job will be run under the identity of the user who triggered the event handler.

By default, event handlers are set to run as the **Owner**. You should carefully consider this option as it may affect whether the job can be run and how the job is run.

For example, if the event handler is set to **Requester**, but the user who triggered the job does not have access to the file group specified for a Process Plan Files task, then the task will fail.

This may be the desired outcome—you may want the job to be dependent on the user's rights, and therefore you should specify **Requester**. On the other hand, you may want the job to run in the same way every time, regardless of the user that triggers the job. In that case you should specify **Owner**.

By default, the event handler is set to **Active**, which means it will be found by any process that triggers the event handler. If you want to temporarily exclude this job from event handler processing, you can clear the Active check box.

► Associating an event handler with a file group

If a Scheduler job with an active event handler is stored in a file group Utilities folder, then the event handler is associated with that file group. When using RunEvent to trigger jobs for execution, you can optionally specify a file group context so that only event handlers associated with that file group (or no file group) are considered.

In order to store a Scheduler job within a file group, you must first create and save the job within the Scheduler Jobs Library. Then, you can use Axiom Explorer to move the job from the Scheduler Jobs

Library to the file group Utilities folder. If the file group and its utilities are later cloned using any process—such as regular file group cloning, scenario creation, or file group rollover—then the event handler is also cloned and will be associated with the new file group.

▶ Deleting an event handler

If you no longer need an event handler, you can delete it from the job. Select the event handler and then click **Remove Selected**. You can also **Clear All** to remove all event handlers from the job.

User-defined event handlers display along with the system event handlers in the **Event Handlers** tab (**Service > Event Handlers**). If you right-click a user-defined event handler in this location and select **Remove event handler**, it does not delete the event handler from any jobs that use it, but it does set the event handler to inactive.

Using job variables

You can use job variables within a Scheduler job, to define the value of the variable when the job is run. Job variables are managed in the **Job Variables** section of the job.

There are two types of variables:

- **User-defined variables:** You can create a variable and then use it within any job or task setting that supports variables, but only within that particular job. The primary use for user-defined variables is to run a job via RunEvent (either the function or the command), and pass in a variable value at that time.
- **System variables:** Axiom Contract Management provides a number of system variables that can be used within relevant job and task settings. For example, instead of specifying a "hard-coded" email address for the job notification, you can use a system variable to specify that whoever ran the job should receive the notification.

In all cases, to use a variable within a job or task, enter the variable name into the desired setting, enclosed in curly brackets. For example: {variable}

TIP: If you want to use a variable in a job, you can right-click the variable and then select **Copy variable name to clipboard**. Navigate to the setting where you want to use the variable, and then paste it into the setting (the curly brackets are added automatically).

At the job level, variables can be used in any of the **Notification Message Content** settings in the **Notification** tab. At the task level, in general, variables can be used in any task field that accepts typed user input.

When the job is run, the variable values used for the job display in the job results under **Job Values**, and also in the email notification (if applicable).

▶ User-defined variables

User-defined variables are created in the **Job Variables** tab. You define the name of the variable (without brackets), and if desired, define a default value for the variable.

When the job is run, the user-defined variable will be replaced with a value as follows:

- If the job was scheduled using RunEvent (function or command), and RunEvent sent a name / value pair that matches the name of the job variable, that value is used.
- If the job was scheduled as a result of a file group trigger, and the trigger has a defined variable that matches the name of the job variable, that value is used. Multiple values are returned as a comma-separated list.
- If the job contains a Process Document List task or a Process Plan Files task with a defined post-processing variable that matches the name of a job variable, that value is used after that task has been processed.
- Otherwise, the default value defined in the Job Variables tab is used.

If the value is blank, then the job or task setting using the variable will be evaluated as blank. If the setting cannot be blank, then an error will result when the job is executed.

▶ System variables

The available system variables are listed at the bottom of the **Job Variables** tab. Most of these variables relate to user names and addresses, for use within the job notification settings.

When the job is run, the system variable is replaced with the applicable system value.

The following values are available:

Variable	Description
<code>{CurrentUser.EmailAddress}</code>	Returns the current user's email address, login name, or full name.
<code>{CurrentUser.LoginName}</code>	
<code>{CurrentUser.FullName}</code>	The current user is the user identity under which the job is currently being run. Generally, this is the user who executed the job. If the job was executed via an event handler and the event handler is set to owner, then the current user will be the job owner.
<code>{JobOwner.EmailAddress}</code>	Returns the job owner's email address, login name, or full name.
<code>{JobOwner.LoginName}</code>	
<code>{JobOwner.FullName}</code>	The job owner is the user who last saved the job.

Variable	Description
<code>{Scheduler.ConfiguredFromEmailAddress}</code>	Returns the system's default "from" address, as defined in the system configuration settings.
<code>{Scheduler.FromEmailAddress}</code>	This returns a value as follows: <ul style="list-style-type: none"> • If the current user belongs to a subsystem, this returns the subsystem administrator's email address. • If the current user does not belong to a subsystem, this returns the default configured "from" address.
<code>{CurrentSubsystem.AdminEmailAddress}</code>	Returns the email address of the subsystem administrator for the subsystem that the current user belongs to. <ul style="list-style-type: none"> • If the subsystem has multiple administrators, the email is sent to the first administrator. • If the user belongs to multiple subsystems, the first returned subsystem for the user will be used. No specific logic is applied to determine the "correct" subsystem for any particular job. • If the user does not belong to a subsystem, then no email address is returned.
<code>{EventHandler.EventName}</code>	Returns the name of the event handler that caused the job to be scheduled, if applicable. Otherwise the variable returns blank.
<code>{NotificationAddress}</code>	Returns the notification address defined for the plan codes that triggered a Scheduler job. <p>This variable only applies when the job is executed as a result of a file group trigger, and only if the optional notification address settings are defined for the file group. Otherwise, no email address is returned.</p>

Variable	Description
<code>{Task.CurrentIterationValue}</code>	Returns the current iteration value and the current iteration number. These variables only apply when using the Iteration feature for a task.
<code>{Task.IterationNumber}</code>	
	For more information, see Using iterative task processing .

Processing tasks in parallel

Each Scheduler job can have multiple tasks. By default, each task in the job is processed sequentially, in the order that the tasks are listed in the job.

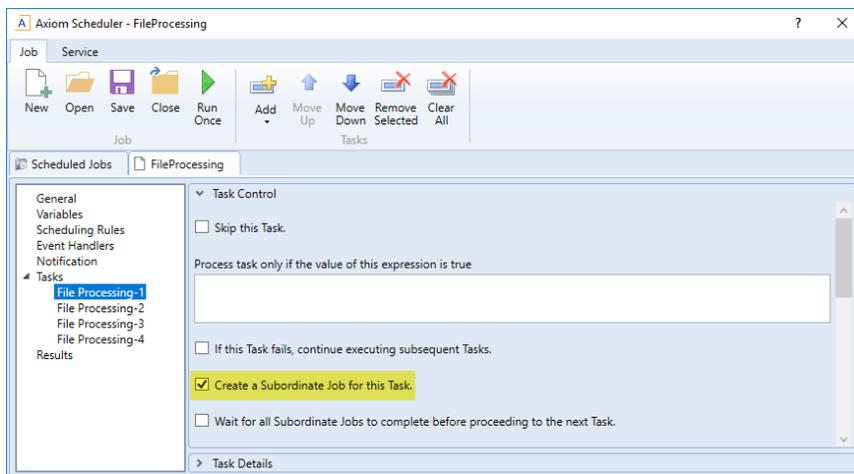
If desired, you can configure tasks so that they are processed concurrently (in parallel) instead of sequentially. If appropriate, this may speed up the processing of the job.

► Configuring tasks for parallel processing

In order to process tasks in parallel, the tasks must be configured to run as subordinate jobs (sub-jobs). To do this, edit the following settings in the **Task Control** section for each task:

- Select **Create a Subordinate Job for this Task**.
- Ensure that the following setting is *not* selected: **Wait for all Subordinate Jobs to complete before proceeding to the next Task**.

In the following example, if all four tasks are configured to be run as subordinate jobs, then they can be run in parallel (depending on the available Scheduler threads).



Scheduler task configured to run as a subordinate job to enable parallel processing

► How parallel processing works

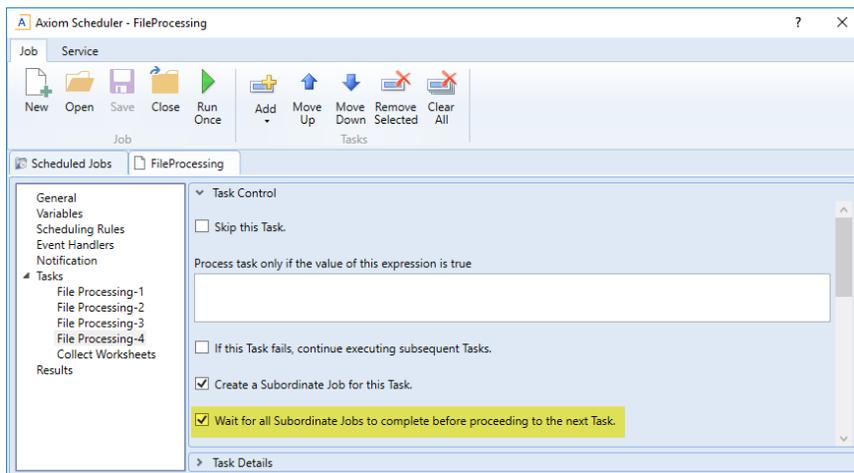
When a task is configured to execute as a subordinate job, then it is not processed within the "parent" job. Instead, a sub-job is created for the task. The sub-job joins the Scheduler queue and is eligible for processing according to the normal Scheduler processing rules. For more information, see [Processing priority for scheduled jobs](#).

For example, imagine that you have a job with four tasks, and these tasks are not dependent on each other. If you use the default settings, Scheduler takes the first task in the list and starts processing. The second task is not started until the first task is complete, and so on.

If instead you configure each task as a sub-job, then when the "parent" job is processed, it will create four sub-jobs. If two Scheduler threads are available for processing, then two of the sub-jobs are processed at the same time. If four Scheduler threads are available, then all four sub-jobs are processed at the same time. Once all of the sub-jobs are complete, the parent job is completed, and its status reflects the overall status of all of the sub-jobs.

If tasks are dependent on each other, then you should not process them as sub-jobs, or you should use the **Wait** setting as appropriate. For example, imagine that the first four tasks in the job can be run in any order, but the fifth task must be processed last. In that case, you can configure the first four tasks to run as sub-jobs, but on the fourth task you must enable **Wait for all Subordinate Jobs to complete before proceeding to the next Task**. This will cause Scheduler to wait for all sub-jobs to finish before it proceeds to the fifth, final task.

In the following example, the file processing tasks are configured as sub-jobs so that they can be run in parallel. The last file processing task is configured to wait, so that all of the file processing tasks will be finished before the file collection task begins.



Scheduler task configured to wait for all subordinate jobs to complete

Using iterative task processing

You can configure a Scheduler task to use iterative processing, so that the task is repeated multiple times using a designated list of values. Each iteration of the task uses a different item in the list, until all items have been processed.

When you enable iterative processing for a task, you define the list of values by specifying a table column and an optional filter. The task will then be processed for each unique item in the table column. You can reference the column values within the task properties by using a built-in Scheduler job variable. As each iteration of the task is processed, the variable is replaced with the column value for the current iteration. Using this approach, the task can dynamically change for each iteration.

For example, you may have an import that you want to perform for four different entities in your organization. The import configuration is exactly the same except that the source file or query is different for each entity. If the import uses entity as a variable, then you can set up a single import task and configure it to iterate over the list of entities. Each iteration uses a different entity name or code, which you can pass into the import variables so that the import uses the correct source file or query for the current entity.

► Enabling iterative processing

Iterative processing is enabled in the Task Control properties of the task. Select the task within the Scheduler job, then click **Task Control** to expand that section. Any task can use iterative processing, though it is more useful for certain task types such as Import ETL Package.

Complete the following properties in the **Iteration** section of the Task Control properties.

Item	Description
Iterate this Task	Specifies whether iterative processing is enabled for the task. If enabled, then the task will be performed N times, where N is the number of unique items in the specified iteration column. Job variables can be used to apply the current iteration value and iteration number to the task.
Create a Subordinate Job for each iteration	<p>Specifies whether each iteration is processed as a separate subordinate job. By default, this is disabled, which means that all iterations are processed sequentially within the overall subordinate job created to process the iterations.</p> <p>If enabled, then each iteration is processed as a separate subordinate job, enabling concurrent execution of multiple iterations. This option should only be enabled if the order of iteration processing is not important.</p>

Item	Description
Column	<p>The column that contains the values to iterate over. Use <code>Table.Column</code> syntax to specify the column. Multiple-level lookups can be used.</p> <p>For example, if you specify <code>Dept.Region</code>, then the task will be processed once for each unique region value in the column (after applying any filter to limit the list of values).</p>
Group By	<p>Optional. By default, the group by column is the same as the iteration column, so that the task is processed once for each unique value in the iteration column. However, if needed, you can specify a different grouping level.</p> <p>You can use any column or columns that would be valid as the "sum by" level for an Axiom query, where the primary table is the table specified for the iteration column.</p>
Order By	<p>Optional. By default, the values are sorted based on the iteration column, in ascending order. You can specify a different sort column, or use the same sort column but change the order to descending.</p> <p>The sort order is ascending unless the keyword <code>desc</code> is used to specify descending order. For example:</p> <pre>Dept.Dept desc</pre>
Filter	<p>Optional. A filter criteria statement to limit the list of values for the iterative processing. You can use any filter that is valid against the source table (the table of the iteration column).</p>

When iterative processing is enabled for a task, the iterations are always processed within a subordinate job. Therefore, enabling the Task Control option of **Create a Subordinate Job for this Task** is unnecessary.

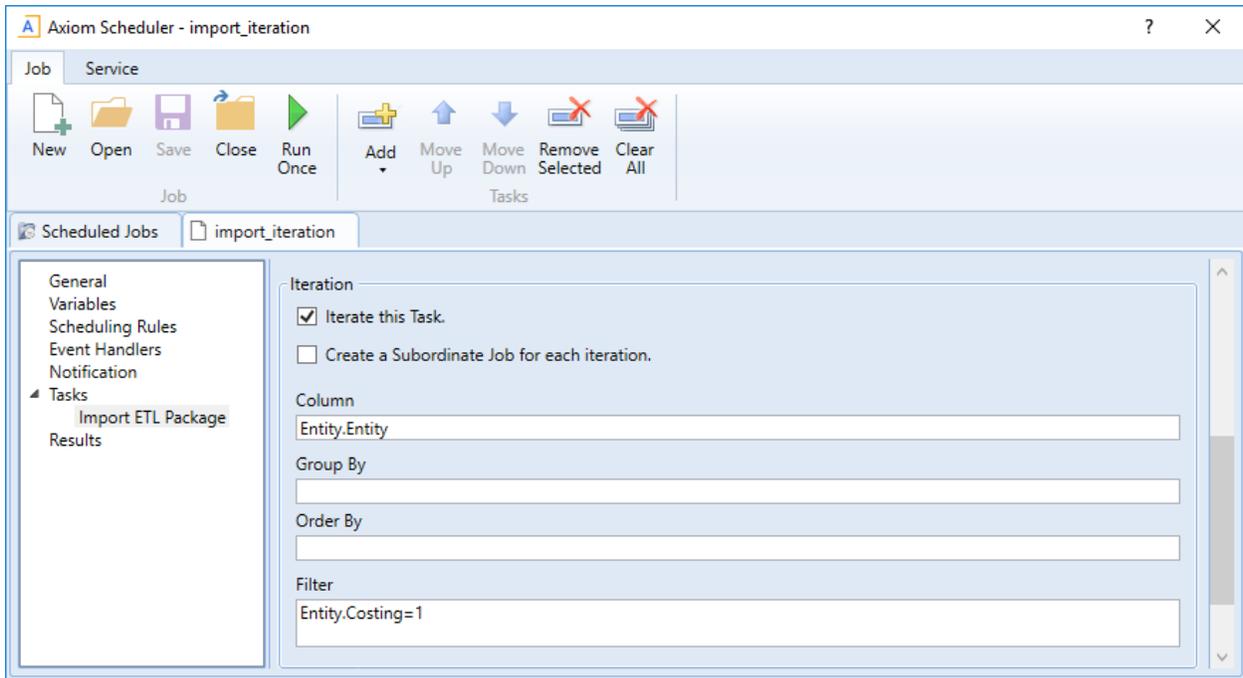
If your job has multiple tasks, and you want the tasks after the iterative task to wait for all iterations to complete before executing, then you must enable the following Task Control option for the iterative task: **Wait for all Subordinate Jobs to complete before proceeding to the next Task**.

► Configuring the task to change for each iteration

In order for the Scheduler task to apply the current iteration value to each iteration, you must use the built-in iteration variables within the task. These variables are job variables, and can be used like any other job variable. The following variables are available:

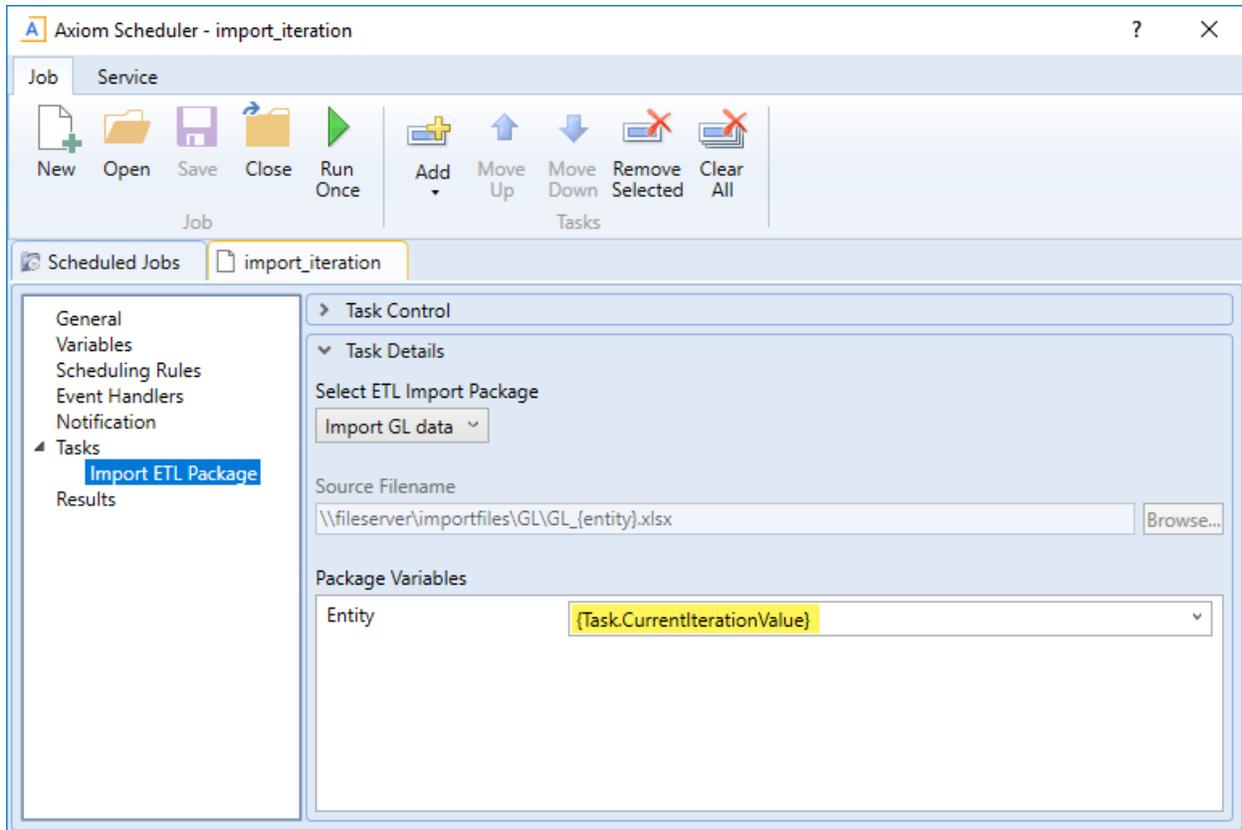
Variable	Description
<code>{Task.CurrentIterationValue}</code>	Returns the current value from the iteration list.
<code>{Task.IterationNumber}</code>	Returns the number of the current iteration.

To continue the previous example, imagine that you are setting up an import for iterative processing by entity. To define the list of entities, you set up the Iteration settings in the Task Control section like the following:



This example will iterate over the list of entities in the Entities column, limited to only those entities where the Costing column is set to True. If this resolves to 4 entities, then the task will be processed 4 times, once for each entity.

The import is configured with a variable `{Entity}`, which it uses to process the correct entity source file. In order to pass the current task iteration value to the import variable, you can use the job variable `{Task.CurrentIterationValue}` in the import task settings. For example:

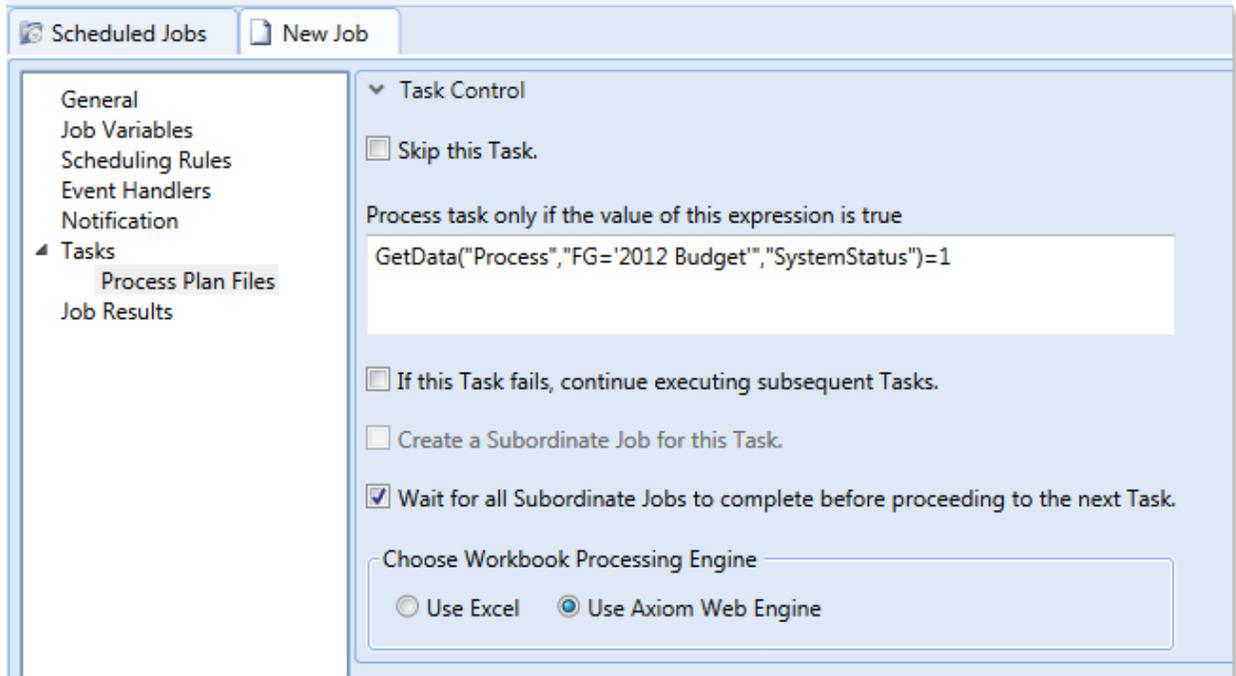


When the first iteration is performed, the `{Task.CurrentIterationValue}` will be resolved as `Entity_1`, so the import will be processed using `Entity_1` as the value for the `{Entity}` import variable. For the second iteration, the value `Entity_2` will be used, and so on. Using this approach, the import will be processed for all entities in the iteration column.

Conditionally processing tasks in a job

You can configure a task so that it is only processed if a particular condition is met. This feature is configured in the task settings, in the **Task Control** section, under **Process task only if the value of this expression is true**.

To enable conditional processing, you must specify a logical expression that will resolve to either true or false when the job is executed. If true, then the task is processed as normal. If false, then the task is skipped.



The logical expression is evaluated using an IF function on the Scheduler server as follows:

`=IF(Expression, 1, 0)`

You can enter any expression that would be valid in an IF function. You can use Excel functions, Axiom functions, and Scheduler job variables in the expression. If you use a job variable, it must be placed in quotation marks unless you expect the variable value to be resolved and evaluated as a number.

If the task is not processed because the condition resolves to false, this is not considered a failed task. If there are other tasks in the job, they will be processed. If you want an entire job to be conditional, you can do either of the following:

- Repeat the condition in each individual task settings. Keep in mind that the condition will be evaluated for each individual task, which means that if it is possible for the condition to change in between tasks, some tasks might be processed while others aren't.
- Use the condition on a Raise Event task that then triggers another job for processing. For more information, see [Raise Event task](#).

► Examples

The following are some example expressions for conditional processing:

`GetData("Process", "FG='2012 Budget'", "SystemStatus")=1`

If this GetData function returns 1, the expression resolves to true and the task is processed. If not, it is false and the task is skipped.

```
AND (" {EventHandler.EventName}"="ProcessPlanFiles", {Dept}=1000)
```

If this job was triggered for execution by the ProcessPlanFiles event handler, and if the job variable Dept resolves to 1000, then this expression is true and the task is processed. Note that in the first part of the expression, the event handler variable will return a string value so it must be placed in double quotation marks. In the second part of the expression, the department variable will return a number so it is not placed in quotation marks.

```
AND (Day (Now ()) <=7, Weekday (Now ()) =2)
```

This expression will return true if it is the first Monday of the month, otherwise it will return false.

Using RunEvent to execute a Scheduler job

Using RunEvent, you can trigger the execution of a Scheduler job from various contexts, such as within Axiom files, task panes, or Axiom forms. There are two different versions of RunEvent:

- **RunEvent function:** The RunEvent function can be used in Axiom files to trigger the execution of a Scheduler job from a spreadsheet.
- **RunEvent command:** The RunEvent command can be used in task panes or Axiom forms to trigger the execution of a Scheduler job.

Both the function and the command work in the same way and use similar parameters. Some limitations apply depending on the context where RunEvent is being used. It is assumed that an administrator (or a power user with the necessary rights) sets up the desired jobs within Scheduler, and then sets up RunEvent in the appropriate context so that end users can trigger it.

The end user who triggers the job using RunEvent does *not* need to have file permission to the job or any access to Scheduler. The job itself can be configured to execute its tasks using the permissions of the job owner or using the permissions of the end user who triggered the job (the requester). If the job is run as the requester, then the end user must have the appropriate permissions to the files impacted by the job (for example to the target file for File Processing, or to the target file group and plan files for Process Plan Files).

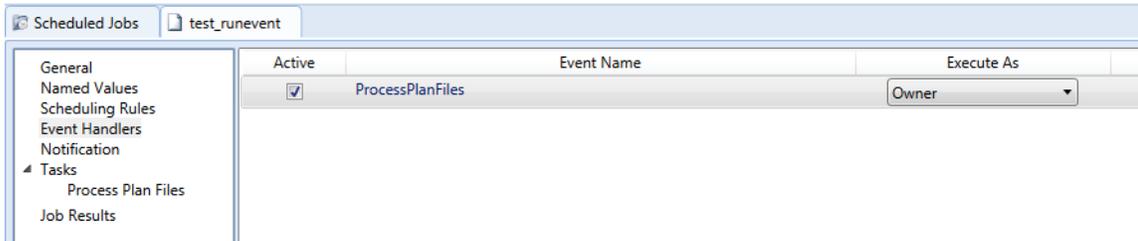
NOTE: You can also use the [Raise Event](#) Scheduler task to trigger the execution of a Scheduler job from a different Scheduler job. This works in a similar manner as the RunEvent features.

▶ Setting up a Scheduler job for RunEvent

All uses of RunEvent require the same job setup in Scheduler:

- The job that you want to execute via RunEvent must already be created within Scheduler. When setting up the job, consider items such as the notification settings. Do you want the notifications to go to the user that executed the job, or to the job owner, or both?

- The job must contain an event handler that will be used to trigger the job execution. When creating the event handler, consider whether you want the job to run as the job owner, or as the requester (the user who clicks on the RunEvent function). This may impact email notifications and determines the user rights under which the job will run.



For more information, see [Advanced options](#).

- Optionally, the job can use variables. Variable values can be defined in the RunEvent function or command and passed to the job. You would do this if aspects of the job need to be dynamic; for example, if you want to use a different filter depending on which user is running the job or based on a user selection in the file. For more information see the *Variable example* section below.

▶ Setting up RunEvent

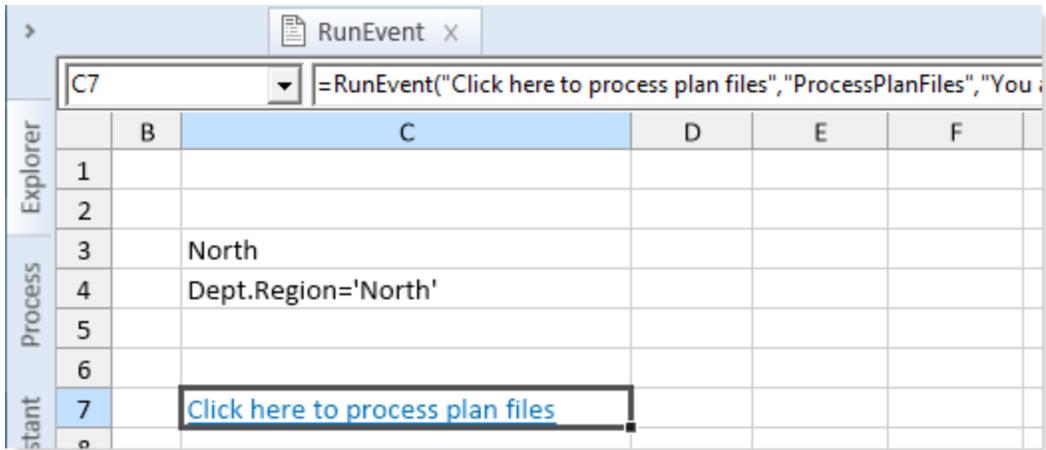
RunEvent uses the following properties to trigger Scheduler jobs:

- The event handler name that identifies the Scheduler job(s) to trigger for execution.
- An optional confirmation message to present to the user before proceeding with the event. Not available when using the command within an Axiom form.
- An optional success message to present to the user after the event has been raised.
- An optional file group context to target the job execution to only event handlers that are associated with a particular file group (or no file group). For the RunEvent command, this is an optional parameter. For the RunEvent function, the current file group context is automatically applied if the file with the function belongs to a file group.
- If variables are being used, one or more variable names and values to pass to the Scheduler job. This is available in all contexts, however, task panes do not currently support the ability to determine the variable values dynamically.

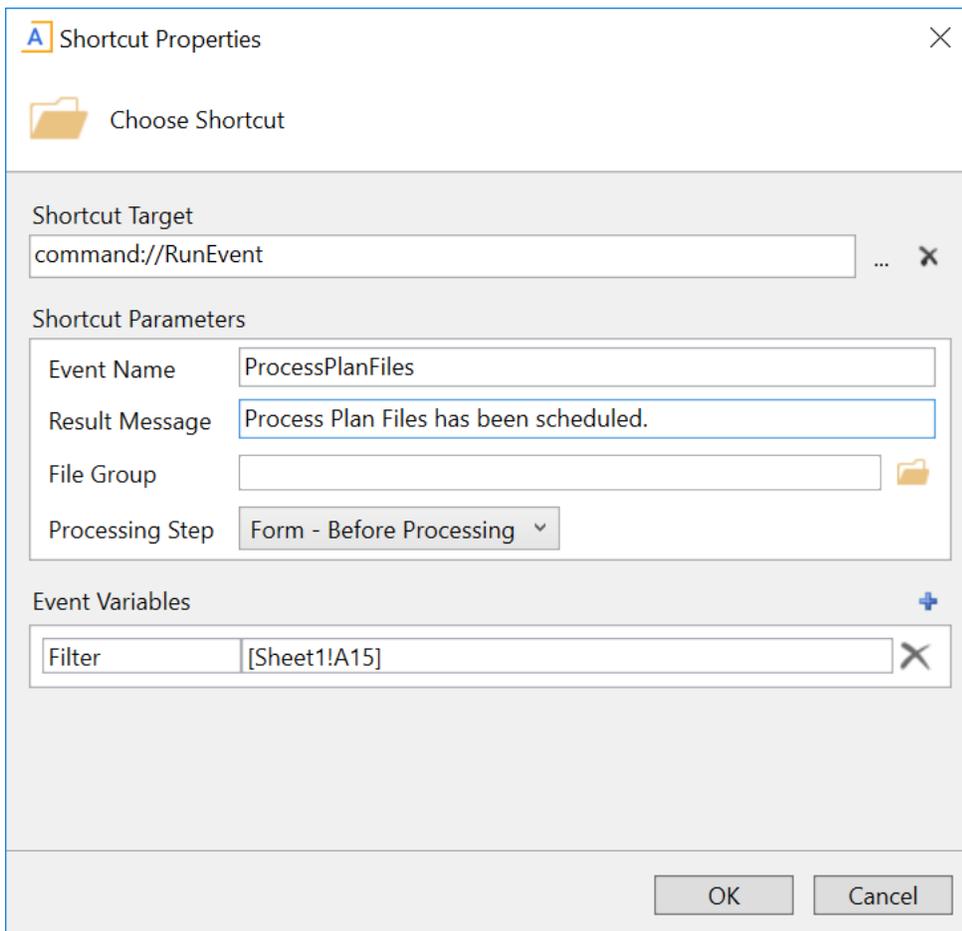
The following shows an example RunEvent function for use in an Axiom file:

```
=RunEvent("Click here to process plan files","ProcessPlanFiles","You are about to process plan files for the "&C3&" region. Do you want to continue?","", "filter = "&C4)
```

The first parameter defines the display text for the function, while the second parameter specifies the event handler name. In this example we have also defined a custom confirmation message for the user and a variable value to pass a filter to the job. The following screenshot shows the function in the spreadsheet:



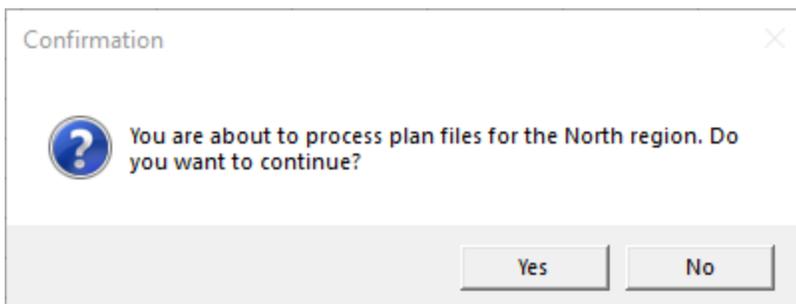
The next screenshot shows a RunEvent command set up on a Button component for an Axiom form. You can see the same event name and the filter variable also being read from a sheet location.



▶ RunEvent behavior and user experience

The behavior and user experience for RunEvent depends on the context and whether you are using optional custom messages.

- The user starts the process by doing one of the following:
 - Double-clicking the RunEvent function in the spreadsheet.
 - Clicking the Button component that is configured for RunEvent in the Axiom form.
 - Double-clicking the RunEvent item in the task pane.
- A confirmation prompt displays to the user, asking them to confirm that they want to proceed. The user can click **Yes** to proceed, or **No** to cancel. Default text is used if no custom text is defined in the RunEvent properties.



NOTE: This step does not apply when executing RunEvent from an Axiom form. The Axiom form context does not support a confirmation message. However, you can configure the Button component to display a confirmation message before executing the RunEvent command.

- Axiom Contract Management checks the list of event handlers in Scheduler to see if any match the specified event handler name in RunEvent. This check works as follows:
 - If RunEvent has a file group context, then Axiom Contract Management only tries to match with event handlers that are associated with the same file group, or with no file group. Any event handlers associated with a different file group are ignored. The RunEvent command has a file group context if a file group is specified in the shortcut parameters, whereas the RunEvent function automatically has a file group context if the file with the function belongs to a file group.
 - If RunEvent does not have a file group context, then all event handlers are eligible to match.

If any matching event handler names are found, then all Scheduler jobs that reference the event handler are triggered for execution. If multiple jobs reference the matching event handler, then all of those jobs will be executed.

If variable values are defined in the RunEvent properties, those values are passed to the job and are used when the job is executed.

- A confirmation message displays to the user as follows:
 - If no jobs were found that contained the specified event handler, the user is notified that no jobs were found.
 - If jobs were placed on the schedule, the user is notified that the specified event was scheduled. Default text is used if no custom text is defined in the RunEvent properties.

NOTE: If executing RunEvent from an Axiom form, this message displays in the bottom left corner of the form, not in a separate message dialog.

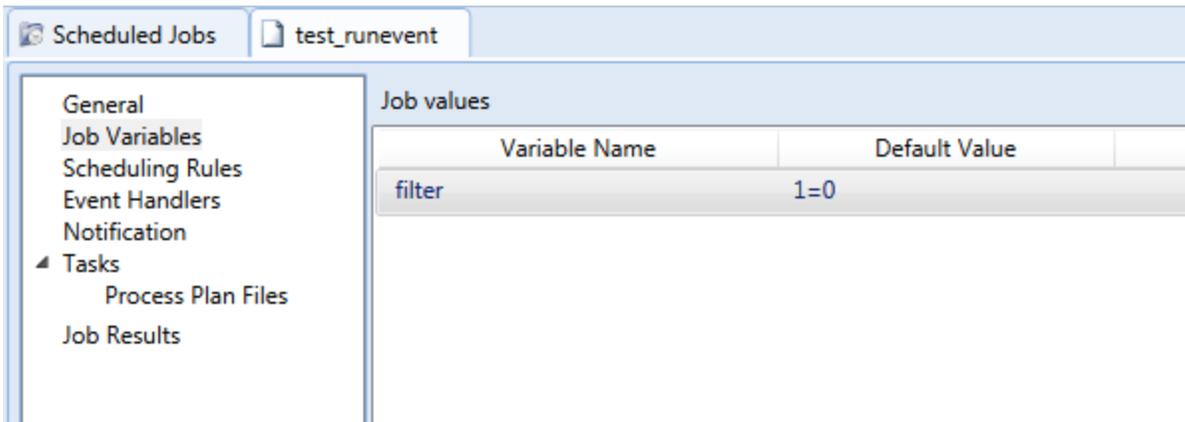
When the job is finished processing, email notifications are sent according to the settings in the job.

▶ Variable example

When using RunEvent to execute a Scheduler job, you can pass a variable value to the job. For example, imagine that you want to execute a Process Plan Files job, and you want to send a filter value to the job.

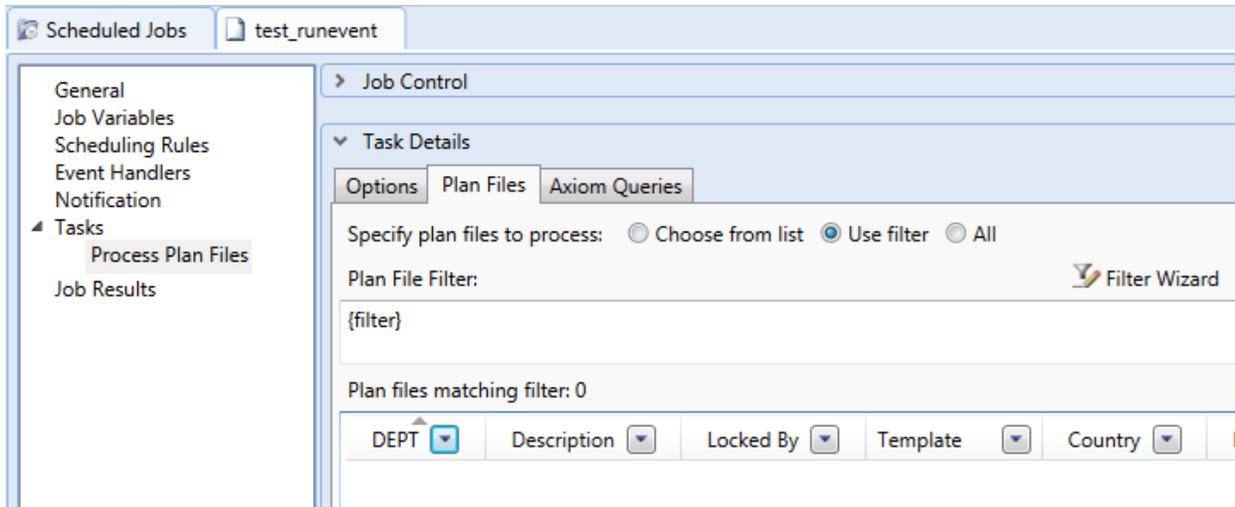
Step 1: Set up the variable in the job

The first step would be to create a job variable in the job, and then use the job variable in the filter setting.



Example job variable

NOTE: In this case, we have defined a default value for the filter variable (1=0) that does not result in any plan files. This is because we do not want to process any plan files unless a filter is provided by RunEvent. If we left the default value blank, that would mean all plan files would be processed if no filter was provided by RunEvent.



Example use of variable in job settings

For more information on Scheduler job variables, see [Using job variables](#).

Step 2: Configure RunEvent to use the Variable

Now that the job is set up to use the filter variable, you must configure RunEvent to pass in a value for that variable. If you are using the RunEvent function in an Axiom file, you use the following syntax within the function parameters:

```
variablename=variablevalue
```

These name / value pairs can be placed in the RunEvent function starting in the fifth parameter of the function. If you have two name / value pairs to pass to the job, you can use the fifth and sixth parameters, and so on.

For example, to pass the filter `DEPT.Region='North'` to the job, the RunEvent function would be constructed as follows:

```
=RunEvent("Double-click to process plan
files","ProcessPlanFiles",,,,"filter=dept.region='North'")
```

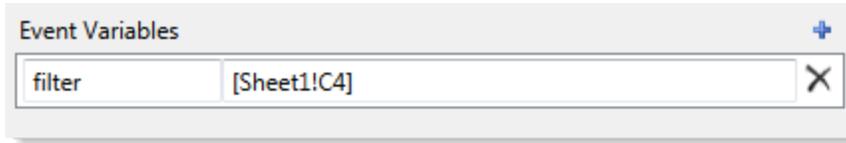
More likely, you would be reading the variable value from another place in the sheet, so the function would look something like:

```
=RunEvent("Double-click to process plan
files","ProcessPlanFiles",,,,"filter="&C4)
```

Where the filter value is read from cell C5.

When the job is executed by use of this RunEvent function, the value `DEPT.Region='North'` will be placed in the **Plan File Filter** box of the Process Plan Files task, and the job will be run using that filter.

When using RunEvent in an Axiom form, the variables and their values are defined in the Event Variables section. In this context you place the name of the variable in the left-hand box, and then in the right-hand box you enter the cell reference (in brackets) where the variable value will be read.



The Event Variables section is also present when configuring RunEvent for use in a task pane, however in this context the only option is to "hard-code" the values in the RunEvent properties.

Run another Scheduler job from within a Scheduler job

Scheduler jobs have two ways to run another Scheduler job:

- **Raise Event task:** This task uses an event handler name to trigger one or more Scheduler jobs for execution. The jobs triggered by the event handler are run independently from the job containing the Raise Event task.
- **Run Scheduler Job task:** This task runs a specified Scheduler job as a subordinate job within the current "parent" job. Essentially, the tasks in the target job are run within the parent job, which means that other tasks in the parent job can reference the results of those tasks.

The decision of which task to use depends on several factors, but the most important is whether the Scheduler jobs are independent or dependent. If the first job is dependent on the execution of the second job, then you must use the Run Scheduler Job task. When the Raise Event task is used, the triggered jobs are run independently.

The following chart details some comparison points between the two tasks:

Comparison	Raise Event	Run Scheduler Job
Can pass variables to target job	Yes	Yes
Can execute target job as requester or owner	Yes	No
Can wait for target job to complete before continuing	No	Yes
Can use results of target job in subsequent tasks	No	Yes

► Using the Raise Event task

The Scheduler Raise Event task is typically used when you need to trigger another job for execution once the current job is complete. The Scheduler job(s) triggered by the event handler are added to the schedule and then executed independently from the current job. For example, you might place the Raise Event task at the end of the task list, so that all tasks in the current job must complete successfully before the Raise Event task is run.

Because the jobs triggered by the event handler are run independently, you cannot perform additional tasks in the current job that depend on the results of the triggered jobs. The current job will not wait for the triggered jobs to be run.

Event handlers can be configured to run a job as either the job owner or as the requester (meaning the user that triggered the event). This allows some additional flexibility in how the triggered jobs are run. For example, you may want to trigger a job that needs to be run using administrator permissions. As long as the event handler is configured to run as job owner (and the owner is an administrator), then that triggered job will always have the necessary permissions, regardless of the user who is running the job with the Raise Event task.

► Using the Run Scheduler Job task

The Run Scheduler Job task is typically used when you need to run another job and then perform additional tasks once that job is complete. Because the target job is run as a subordinate job within the "parent" job, the parent job can wait for the "child" job to complete before it continues processing tasks. Later tasks in the parent job can reference the results of the completed child job, such as querying data saved from the child job, processing plan files created by the child job, and so on.

Keep in mind that if you want the parent job to stop processing tasks if the target job fails, then **Wait for all Subordinate Jobs to complete before proceeding to the next Task** must be enabled for the task and **If this Task fails, continue executing subsequent Tasks** must be disabled for the task. This is the default configuration.

The child job is run using the same user permissions as the parent job. The user running the parent job must have the appropriate permissions to complete all tasks in both the parent job and the child job.

► Chaining multiple Scheduler jobs

You can "chain" multiple Scheduler jobs together using either approach. For example, you may have three Scheduler jobs that you want to run, in a particular order.

You can place multiple Run Scheduler Job tasks in a parent job, where each task triggers a separate job. Because these tasks run as subordinate jobs, and the parent job can wait for each child job to complete, it is easy to run the jobs in order. However, if you want to stop processing the jobs if one fails, there is no built-in way to do that (as discussed in the previous section). You would need to set up the Run Scheduler Job tasks to run or not based on a condition, where the condition tests some result from the previous job.

To chain jobs using Raise Event, the last task in each job can be a Raise Event task. Each job will perform its tasks and then trigger the next job in the chain. When using this approach, the chain automatically stops if failure occurs, because if a task in the job fails then the job stops and will not proceed to the Raise Event task. The disadvantage of this approach is that the jobs cannot also be run separately, unless you manually disable the Raise Event tasks or configure the Raise Event tasks to not run based on a condition.

Running a job

If a job is saved with an active scheduling rule, then the job is automatically placed on the schedule to be run according to that rule. Each time the job is run according to the rule, it is run as the current job owner (unless it is a system job, in which case it is run as the System identity).

However, you can also choose to run a job manually. If you run a job manually, the job is added to the **Scheduled Jobs** list with a start time of now, to be processed according to its [job priority settings](#). The job will be run using your user identity (again, unless it is a system job).

Running a job manually does not impact any scheduled executions of the job as determined by scheduling rules. For example, if a job is scheduled to be run at 10:00 PM tonight, and you run the job manually at 2:00 PM, the job will still be run as scheduled at 10:00 PM.

To manually run a job:

1. In the [Scheduler dialog](#), in the **Job** tab, click **Open**.

The **Axiom Explorer** dialog opens, showing the Scheduler Jobs Library only.

2. Select the job and then click **Open**.

The job opens in the **Scheduler** dialog. Make sure the job is the active tab in the navigation pane (the most recently opened tab is the active tab by default).

3. In the **Job** tab of the ribbon, click **Run Once**.

A confirmation message informs you that the job has been placed on the schedule.

NOTE: When you click **Run Once**, any unsaved changes to the job are automatically saved. This save will designate you as the job owner (if you are not already the job owner).

You can also run jobs manually using the Scheduler area of the Web Client. For more information, see [Running a job manually in the Web Client](#).

Scheduler Task Reference

Each Scheduler task in a job has two sections of task properties:

- **Task Control:** Common task properties that apply to all task types. For more information, see [Task Control properties](#).
- **Task Details:** Properties specific to the current task type. For more information, see the topics for each individual task type.

The following task types are available:

Task	Description
Active Directory Import	Import users from Active Directory into Axiom Contract Management. This task adds new users, and can also disable users that no longer exist in the Active Directory domain.
Collect Worksheets	Collect worksheets from multiple files into a single file.
Copy On Demand Plan Files	Copy plan files from one on-demand file group to another.
Create Plan Files	Create new plan files (same as the Create Plan Files utility for file groups).
Echo Task	Test the Scheduler server. This task sends a message to the Scheduler server and asks it to send the message back.
Execute Command Adapter	Execute a command from the Command Library.
Execute SQL Command	Run a SQL statement on an Axiom database.
Export ETL Package	Export data to an external database, using an export utility defined in the Exports Library.
File Processing	Perform file processing actions on a report. You can use the report's native file processing settings, or override the settings.
Import ETL Package	Import data into Axiom Contract Management, using an import utility defined in the Imports Library.
Process Document List	Process any set of Axiom files—for example, driver files or report utilities. The task calculates and saves the files, and can also refresh Axiom queries and save data to the database.
Process Plan Files	Process plan files (same as the Process Plan Files utility for file groups).
Process Template List	Process a template file. The task runs designated Axiom queries, time-stamps the queries, and saves the template.
Purge System Data	Purge old Scheduler results and system temp tables.
Raise Event	Trigger another Scheduler job for execution, using a named event handler.
Run Scheduler Job	Run another Scheduler job as a subordinate job.
SMTP Message Delivery	Deliver email notifications resulting from Scheduler jobs.
Start Process	Start a process definition for Process Management.
Update Indexes and Constraints	Update the indexes and constraints in your Axiom Contract Management database.

Task Control properties

The following task properties are available for all Scheduler task types. To edit these properties, select the task in the Scheduler job, then expand the **Task Control** section.

Item	Description
Skip this Task	<p>If selected, the task will not be run when the job is processed.</p> <p>By default, this option is not selected, which means this task will be run.</p>
Process task only if the value of this expression is true	<p>Optional. Enter a logical expression to conditionally process this task depending on whether the expression resolves to true or false at the time the job is executed. If true, the task is processed as normal. If false, the task is skipped.</p> <p>The logical expression is evaluated by the Scheduler server using an IF function. The expression can be any statement that would be valid within an IF function. You can use Excel functions, Axiom functions, and Scheduler job variables in the expression. If you use a job variable in the expression, you must place the variable in double quotation marks unless you expect it to be resolved and evaluated as a number.</p> <p>For more information, see Conditionally processing tasks in a job.</p>
If this Task fails, continue executing subsequent Tasks	<p>If selected, the job will continue processing even if this task fails.</p> <p>By default, this option is not selected. If a task in a job fails, the job is canceled and no further tasks are processed.</p>
Create a Subordinate Job for this Task	<p>If selected, this task will be processed as a subordinate job to the current job.</p> <p>Selecting this check box enables concurrent processing of different tasks, if the option to Wait for all Subordinate Jobs to complete before proceeding to the next Task is not selected.</p> <p>NOTE: This option is not available for Process Plan File tasks.</p>
Wait for all Subordinate Jobs to complete before proceeding to the next Task	<p>If selected, the job will wait for any subordinate jobs to complete before moving to the next task.</p> <p>If this check box is not selected, and the option Create a Subordinate Job for this Task is selected, then tasks can be processed concurrently instead of sequentially.</p> <p>This check box is selected by default for Plan File Refresh and File Processing tasks. For other task types, this option is not selected by default.</p>

Item	Description
Override Log Level for this Task	<p>By default, Scheduler jobs perform logging at the same level that is specified for the application. If necessary, you can override the logging level for a particular task, so that it always runs at a specified logging level. You may want to do this if you encounter performance issues for tasks that generate a lot of logged messages.</p> <p>To do this, select the check box for Override Log Level for this Task, then select the desired logging level from the drop-down list.</p> <p>NOTE: This option is only available for File Processing tasks.</p>

NOTE: Older systems may see a setting named **Workbook processing engine to use**. If this option is present, it should always be set to **Axiom Web Engine**. Use of Excel for processing on the Scheduler server is no longer supported. All Scheduler tasks that involve spreadsheet processing are processed using the same spreadsheet emulation engine as the Windows Client.

Iteration

This section can be used to optionally enable iterative processing for the task. For more information, see [Using iterative task processing](#).

Item	Description
Iterate this Task	<p>Specifies whether iterative processing is enabled for the task. If enabled, then the task will be performed N times, where N is the number of unique items in the specified iteration column. Job variables can be used to apply the current iteration value and iteration number to the task.</p>
Create a Subordinate Job for each iteration	<p>Specifies whether each iteration is processed as a separate subordinate job. By default, this is disabled, which means that all iterations are processed sequentially within the overall subordinate job created to process the iterations.</p> <p>If enabled, then each iteration is processed as a separate subordinate job, enabling concurrent execution of multiple iterations. This option should only be enabled if the order of iteration processing is not important.</p>
Column	<p>The column that contains the values to iterate over. Use <code>Table.Column</code> syntax to specify the column. Multiple-level lookups can be used.</p> <p>For example, if you specify <code>Dept.Region</code>, then the task will be processed once for each unique region value in the column (after applying any filter to limit the list of values).</p>

Item	Description
Group By	<p>Optional. By default, the group by column is the same as the iteration column, so that the task is processed once for each unique value in the iteration column. However, if needed, you can specify a different grouping level.</p> <p>You can use any column or columns that would be valid as the "sum by" level for an Axiom query, where the primary table is the table specified for the iteration column.</p>
Order By	<p>Optional. By default, the values are sorted based on the iteration column, in ascending order. You can specify a different sort column, or use the same sort column but change the order to descending.</p> <p>The sort order is ascending unless the keyword <code>desc</code> is used to specify descending order. For example:</p> <pre>Dept .Dept desc</pre>
Filter	<p>Optional. A filter criteria statement to limit the list of values for the iterative processing. You can use any filter that is valid against the source table (the table of the iteration column).</p>

Active Directory Import task

This task imports users from Active Directory groups into Axiom Contract Management security. For more information on using Active Directory integration with Axiom Contract Management, see the *Security Guide*.

This task has three tabs of settings: **Source Directory**, **Notification**, and **Preview Import**.

NOTE: The user running this task must be an administrator or have the **Administer Security** permission.

For Axiom Cloud systems, the Active Directory Import task can import users from your local Active Directory by use of the Axiom Cloud Integration Service. If you have a remote data connection that is enabled for user authentication, this task will use that connection when the job is executed by Scheduler.

▶ Source Directory tab

On this tab, you specify the domain to import from and the groups to import.

Item	Description
Domain or Server	<p>Select either Domain or Server to specify the source domain for the import.</p> <ul style="list-style-type: none"> • If you select Domain, enter the name of the domain. • If you select Server, enter the name of the domain controller server. <p>The server option is available in case you are not currently logged into the source domain, and your current domain does not have access to the source domain. In this case, you must use domain credentials in order to access the source domain.</p> <p>Only one domain can be selected per import task. If you want to import users from multiple domains into an Axiom Contract Management system, then you must create multiple import tasks.</p>
Credentials	<p>Specifies the credentials to use when accessing Active Directory for the import. Select one of the following:</p> <ul style="list-style-type: none"> • Use process credentials: (Default) Use the credentials of the network service account for Axiom Scheduler Server (on-premise installations) or Axiom Cloud Integration Service (Axiom Cloud systems). • Specify domain credentials: Enter the credentials of a specified domain User and Password. This option is required if you identified the source domain using the server name instead of the domain name.
Never Enable Users	<p>Specifies whether the import enables imported users as part of the process:</p> <ul style="list-style-type: none"> • If unchecked (default), then newly imported users are enabled as part of the import. Additionally, any existing imported users who have been changed to disabled are re-enabled. • If checked, then newly imported users are not enabled as part of the import. A security administrator must modify the security settings after the import is complete to enable the new users. Existing imported users retain their current enabled status.
Groups to import	<p>The Active Directory groups for which members will be imported into Axiom Contract Management Security.</p> <ul style="list-style-type: none"> • Click Add to select from a list of groups for the specified domain. If the specified domain name is not valid or if Axiom Contract Management cannot connect to it, then an error will result when attempting to add groups. • If you need to remove a group, select the group and click Remove. • Click Role Mapping to define mappings for the selected groups. If a mapping exists for a group, then when users are imported for that group they are automatically assigned to the mapped role and subsystem. See the discussion following this table for more information.

Role mapping

In the **Role Mapping** dialog, click **Add mapping** (the plus icon) to add a role mapping for a group. Then complete the following:

- In the **Directory Group** column, select the Active Directory group to be mapped.
- In the **Axiom Role** column, select the role to be assigned to users in that group. If you want to map the group to more than one role, add another mapping row. You can select **None** if you do not want the users in the group to be assigned to any role.
- In the **Subsystem** column, select the subsystem for users in that group. If you want to map the group to more than one subsystem, add another mapping row. This option only displays if subsystems are enabled for your system.
- In the **User Type** column, select the license type for the imported users. The default license type is **Standard**.
- In the **Authentication Type** column, select the authentication type for the imported users, **Windows User** or **SAML**. The default authentication type is Windows User. Note that the selected authentication type will be assigned to users regardless of whether that authentication type is currently enabled for the system.

You can map each group to multiple roles and subsystems. If a group has no defined mappings, then the users will not be assigned to any roles or subsystems. If the import creates new users without mappings, the assigned user type is Standard and the assigned authentication type is Windows User.

To remove a mapping, select the mapping in the grid and then click **Remove mapping** (the X icon). If users have already been imported using this mapping, removing the mapping will not remove the users from the role or subsystem in subsequent imports (unless other group mappings in the import use the same role or subsystem, and the users are not also part of that group).

NOTE: If a user belongs to multiple mappings—either multiple mappings for a single group, or multiple mapped groups—then the user will be assigned to the user type and the authentication type for the last-processed mapping.

► Notification tab

On this tab, you specify users to be notified when changes are made in Axiom Contract Management Security due to the import.

Type in one or more email addresses to be notified. Separate multiple addresses with a semi-colon. For example:

```
jdoe@axiomepm.com;jsmith@axiomepm.com
```

When the import task is run, if any users are created or modified in the Axiom Contract Management system, an email notification will be sent to the addresses specified here. The email summarizes the changes made. This email notification is independent of any job-level notification settings (which notify based on overall job completion or failure).

We recommend setting up this task-level notification to send emails to the security administrator(s) responsible for maintaining the security settings in Axiom Contract Management, so that he or she can define security settings for newly added users, validate changes made to existing users, and perform any other follow-up tasks.

Scheduler [job variables](#) can be used in this setting.

▶ Preview Import tab

On this tab, you can preview the import results to test that the import is set up as desired.

To preview the results, click **Preview**. Axiom Contract Management processes the import task but does not actually make the changes to the system. Instead, the tab displays a summary of the changes that would result.

The preview shows a list of users that would be added, changed, or disabled.

NOTE: The preview is always executed locally, even for Axiom Cloud systems. The remote data connection to the Cloud Integration Service is only used when the task is executed by Scheduler.

Collect Worksheets task

This task collects sheets from multiple source workbooks and combines them into a single target workbook. You can then save the target workbook to a specified file location, and/or email the workbook.

NOTE: This task is primarily intended for backward-compatibility only. The main method of performing a file collect operation is to use the file processing feature with the [File Processing](#) Scheduler task. For more information on setting up a file collect report using file processing, see the *Axiom File Setup Guide*.

Typically, this task would be used at the end of a job with multiple File Processing tasks, to take the results of those tasks and collect them into a single workbook.

Item	Description
Save or Email Workbook	<p>Specifies the delivery option for the target workbook. Select one of the following:</p> <ul style="list-style-type: none"> • Save Workbook: The target workbook is saved to the specified output folder. • Email Workbook: The target workbook is emailed to the specified recipients. The file is not saved anywhere on the file system. • Save and Email Workbook: The target workbook is both saved and emailed.

▶ Target Workbook

Complete the following settings to define the target workbook:

Item	Description
Output Folder	<p>The folder location where the target workbook will be saved (if you are saving the workbook). Click the folder icon to select a folder location, or type a folder location.</p> <p>If the specified folder does not already exist, Axiom Contract Management attempts to create it.</p> <p>Job variables can be used in this setting.</p>
Output File Name	The name of the target workbook. Job variables can be used in this setting.
File Type	<p>The file type of the target workbook. Select XLS, XLSX, or XLSM.</p> <p>NOTE: PDF displays as an option, but it is not supported in this context.</p>

▶ Email Settings

This section only applies if you are emailing the target workbook. The "From" address is always the Scheduler default From address (as defined in the system configuration settings).

Item	Description
To	Enter the email addresses to receive the target workbook via email. Separate multiple addresses with a semicolon.
Subject Line	The subject line for the email.
Body Text	The body text for the email.

► Source Workbooks

In this section, you specify one or more source workbooks from which to collect worksheets. Workbooks are identified by folder location. Within a folder location, you can specify one or more workbooks by name, or by using wildcards, or by using *.* to collect all workbooks at the location.

All sheets in each source workbook will be collected. Ideally, you will be collecting from workbooks that only contain relevant sheets (for example, no blank "Sheet2," etc.), and where the sheets have unique names. If multiple workbooks have sheets with the same name, the sheets will be incremented by number in the target workbook.

- + To add a workbook, click the Add button. In the **Edit Workbooks Source** dialog, complete the settings as described below, then click **OK** to add the workbook to the list.
- ✕ To remove a workbook, select the workbook in the list and then click the Remove button. Only one workbook can be selected at a time.
- ▲ ▼ To change the order of workbooks, select the workbook in the list and then click the arrow buttons to move the workbook up or down. Source workbooks are processed in the order they are listed in the grid.

Item	Description
Folder Path	<p>The folder location of the source workbook(s). Click the folder icon to select a folder location.</p> <p>NOTE: The Folder Path location must be accessible by the Scheduler service user account. If you specify a network folder location using the Browse button, the location is automatically entered as a UNC path. If you specify a C: drive location, that will be evaluated as the C: drive of the Scheduler server.</p> <p>Job variables can be used in this setting.</p>
Workbooks	<p>The workbooks from which you want to collect worksheets, within the specified folder path.</p> <ul style="list-style-type: none">• Specify *.* if you want to collect all files in the folder path.• Specify individual file names to collect from specific files. Separate multiple file names with semicolons. <p>You can use wildcards (* or ?) to specify groups of files that share naming conventions. For example: <code>North*.xls</code> to collect all XLS files where the file name starts with "North".</p> <p>Only files with the following file types are valid to be collected: XLS, XLSX, XLSM. If you are using wildcards, the matches must be valid file types, or else the task will fail with an error.</p> <p>Job variables can be used in this setting.</p>

Once you have saved a source workbook location, you can edit it by double-clicking the row.

Copy On Demand Plan Files task

This task copies on demand plan files from one file group to another. It performs the same actions as the **Copy On Demand Plan Files** command in the Command Library.

This is an advanced feature and should only be used if it is the only way to achieve the desired population of plan files between two related file groups. It is the responsibility of the solution designer to ensure that the copied plan files will behave as expected in the target file group. For example, the plan file must be designed to dynamically save to the appropriate tables and columns within the context of the new file group.

The Copy On Demand Plan Files task uses two tabs to define the properties of the task.

- **Options:** Defines the options to be used for the copy operation
- **Plan Files:** Specifies the plan files to copy

► Options tab

The following options are available on the Options tab. Note that all of these options can be changed dynamically by using [system variables](#).

Item	Description
Source File Group	The file group to copy plan files from. Click the folder icon to select a file group. You can select any on-demand file group, or any file group alias that currently points to an on-demand file group.
Destination File Group	The file group to copy plan files to. Click the folder icon to select a file group. You can select any on-demand file group, or any file group alias that currently points to an on-demand file group.
Keep original plan file creator	Specifies whether the plan file creator for the copied plan files is set to the same creator as the original plan files. By default, this option is enabled. If this option is disabled, then the plan file creator for the copied plan files is set to the user identity used by the Scheduler job when it is run.

Item	Description
Use default template	<p data-bbox="456 254 1349 436">Specifies whether the copied plan files have the option to adopt the default template of the new file group. This is primarily intended to be used when copying plan files to a file group that uses virtual, form-enabled plan files, so that the copied plan files can be converted to virtual files and use the new template.</p> <ul data-bbox="456 453 1398 842" style="list-style-type: none"> <li data-bbox="456 453 1398 558">• If disabled (default), then the target file group must contain copies of the original templates that were used to create the plan files from the source file group. If these templates are not present, then the copy process will fail. <li data-bbox="456 575 1398 842">• If enabled, then the copied plan files will be assigned a template as follows: <ul data-bbox="488 617 1398 842" style="list-style-type: none"> <li data-bbox="488 617 1398 722">◦ If the target file group contains copies of the original templates that were used to create the plan files from the source file group, the copied plan files use those templates. <li data-bbox="488 739 1398 842">◦ If the target file group does not contain copies of the original templates, the copied plan files use the default template specified for the target file group in the file group properties. <p data-bbox="488 863 1398 926">If the target file group does not contain copies of the original templates and does not have a designated default template, then the copy process will fail.</p>
Copy plan file attachments	<p data-bbox="456 951 1398 1024">Specifies whether plan file attachments are copied to the target file group when a plan file is copied. By default, this option is enabled.</p> <p data-bbox="456 1045 1349 1115">If this option is disabled, then plan file attachments will not be copied to the target file group.</p>

Item	Description
Save plan files after copy	<p>Specifies whether the new plan files are processed and saved in the target file group after the copy is performed. This is intended to perform a save-to-database within the context of the new file group. By default, this option is disabled.</p> <p>If you enable this option, then after the plan files are copied to the new file group, they are opened, refreshed, and saved (including a save-to-database). The refresh includes all active Axiom queries where Refresh during document processing is enabled.</p> <p>Regardless of whether this option is enabled, if it is ever intended to save the copied plan files in the target file group, then they must be designed so that they save data to the appropriate tables after being copied.</p> <p>NOTES:</p> <ul style="list-style-type: none"> • If Process with Utilities is enabled for the target file group, then utility processing is performed instead of normal processing. The default data source is used. • If you enable this option but also specify a Copy data utility, then the new plan files are not processed and saved. Instead, the designated utility file is processed for each new plan file.
Copy data utility	<p>Optional. Specifies a utility file to process for each copied plan file. You can select any file in the Utilities folder of the target file group, or a file in the Reports Library.</p> <p>The primary purpose of this option is to handle copying virtual plan files between file groups. Because the plan files are virtual, no data exists in the file itself and therefore saving the new plan file will not populate data for the new file group. Instead, you should create a utility file that queries in the necessary data for the original plan file, then saves the necessary data for the new plan file to the appropriate tables for the new file group. Reserved document variables are available to return information in the utility file such as the old plan file code and the new plan file code.</p> <p>For more information, see Copy data utility.</p> <p>NOTE: Save plan files after copy must be enabled in order to specify a copy data utility. If a utility is specified, then the new plan files are not saved and instead the utility file is processed for each new plan file.</p>
Default Values	<p>Optional. This section can be used to apply default values to any columns in the target plan code table, when the new record is created in the target file group. For more information, see Defining default values.</p>

► Plan Files tab

On the **Plan Files** tab, specify the plan files from the source file group that you want to copy to the target file group. There are three different options that you can use to specify the plan files: **Choose from list**, **Use filter**, and **All**.

The most common option when copying plan files using Scheduler is to define a filter. You can dynamically copy a subset of designated plan files using the filter. If the Scheduler task is triggered by using RunEvent, you can pass in the filter from the source of the RunEvent (such as an Axiom form).

Copy a filtered set of plan files

To use a filter to copy a subset of plan files, select **Use Filter**. When the Scheduler task is executed, Axiom Contract Management will process only the plan files that meet the filter. You can specify the filter directly, or use a job variable.

To specify the filter, click the Filter Wizard button. You can also manually type a filter criteria statement into the filter box. The filter must use the plan code table of the source file group, or a lookup table. For example: `CapReq2020.Transfer=1`, where CapReq is the plan code table.

Once you have entered a filter, you can click **Refresh plan file list** to show the plan files that currently match the filter. The refresh feature is intended to help you determine whether you have defined the filter correctly.

If you want to set the filter dynamically, you can use the Filter [system variable](#) to override the filter defined in the task. This is intended for use when running Scheduler jobs via RunEvent. If a variable value is specified when triggering the event, such as the value `CapReq2020.CapReq IN (45, 67, 98)`, then that filter statement is used to determine the plan files to be copied instead of the filter defined in the task.

Copy all plan files

To copy all plan files, select **All**. When the Scheduler task is executed, Axiom Contract Management will copy all plan files in the file group (except for those hidden via the Show on List column). This is not a common use case for the copy feature, but can be used if needed.

Copy selected plan files

To copy certain plan files, select **Choose from list**, and then select the check boxes for the plan files that you want to copy. When the Scheduler task is executed, Axiom Contract Management will copy only the selected plan files. This is not a common use case for the copy feature, but can be used if needed.

NOTE: This option is not available when using a file group alias as the source file group for the task. This is because the alias could change to point to any file group, which could result in a different list of plan files.

► Defining default values

When the copy action is performed, the columns for the new record are populated as follows:

- If a value has been defined for a column in the **Default Values** section, that value is used.
- Otherwise, the value from the original record in the source file group is used. This only occurs if the column names match in the source and target tables, and if the column in the target table is a compatible data type to accept the copied value.

If a column exists in the source table but not the target table, that value is ignored and does not cause an error. If a column exists in the target table but not in the source table, then it is only populated during the copy action if a default value has been defined. If the target table contains columns with lookup relationships, those columns must be populated with valid values (either from the original record or by using default values) or else the copy action will fail.

To define default values for the new records:

- Click the plus button **+** to add a new column/value pair to the **Default Values** section.
- In the left-hand box, type the name of the column in the target plan code table. For example: `SourceID`. Do not use `Table.Column` syntax.
- In the right-hand box, type the value to be placed in this column. You can enter a "hard-coded" value, or you can enter the name of a column from the source plan code table in brackets to use the value from that column. For example, `[CapID]`. The column reference is only necessary if you want the source column value to be placed in a column that has a different name than the source column. If the columns have the same name, the value will be copied automatically as noted previously in this section.

For both the column name and the value, you can use file group variables via a file group alias. Axiom Contract Management looks up the current target of the alias, and finds the current value of the designated variable within that file group. Built-in variables and custom variables can both be used. To reference a variable, use the following syntax:

```
{FileGroupAliasName.VariableName}
```

For example: `{CP_CurrentYear.FileGroupYear}` returns the file group year for the file group that is currently the target of the `CP_CurrentYear` alias.

Scheduler job variables can also be used in the column name and in the value.

► Overriding task settings using system variables

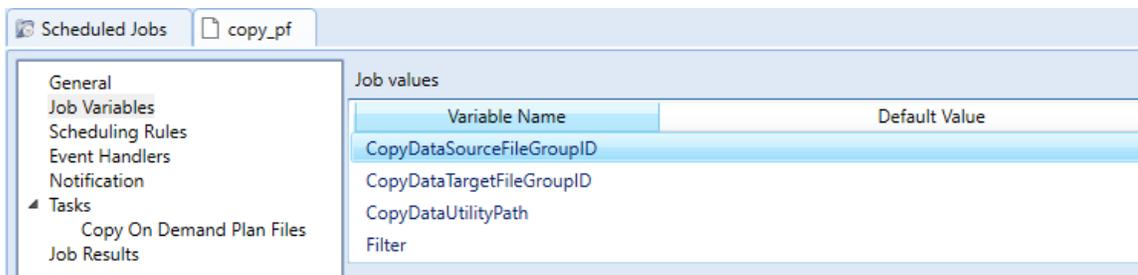
All of the settings for the Copy On Demand Plan Files task can be overridden using system variables. This is intended for use when the task is being triggered by `RunEvent` (such as from within an Axiom form), and you want to pass in variable values to determine how the task is run.

The variable names for this task are as follows:

Variable	Description
CopyDataSourceFileGroupID	Overrides the Source File Group . Must be set to a valid file group ID. File group names or alias names cannot be used.
CopyDataTargetFileGroupID	Overrides the Destination File Group . Must be set to a valid file group ID. File group names or alias names cannot be used.
CopyDataUtilityPath	Overrides the Copy data utility . Must be set to a valid document path in Axiom Contract Management.
Filter	Overrides the Plan File Filter to specify the plan files to copy. Must be set to a valid filter criteria statement.
KeepOriginalPlanFileCreator	Overrides the option Keep original plan file creator . Must be set to a valid Boolean value (True/False).
UseDefaultTemplate	Overrides the option Use default template . Must be set to a valid Boolean value (True/False).
CopyPlanFileAttachments	Overrides the option Copy plan file attachments . Must be set to a valid Boolean value (True/False).
SavePlanFilesAfterCopy	Overrides the option Save plan files after copy . Must be set to a valid Boolean value (True/False).

To override task properties using these variables:

- Add the variables that you want to use to the **Job Variables** tab. For example, if you want to override the source and target file groups, the copy data utility, and the plan file filter, then add those variables to the Job Variables tab. You do not need to add a variable name if you do not plan to override it.



Example Job Variables tab to override certain settings for the copy task

You do not need to define a default value for the variable. If the value is blank, then the setting defined in the task is used. The corresponding task property will only be overridden if the variable has a defined value.

- You do not need to add the variables to the task properties. The variables automatically overwrite the task properties if they have defined values.

- When configuring RunEvent, define values for the variables as needed. For example, you could have a form where you allow the user to select the source and target file group for the copy action. Based on the user's selected file group names, you can use the GetFileGroupID function to determine the IDs for those file groups. You can then pass those IDs as variable values for the variables CopyDataSourceFileGroupID and CopyDataTargetFileGroupID.

Example RunEvent properties to pass certain variable values to the copy task

► Plan file process considerations

If the target file group has an active plan file process, the new plan file is started in that process as part of the plan file creation. The process initiator for the plan file is set as follows:

- If the plan file process has a designated Process Initiator Column, the user listed in that column is the process initiator.
- If the plan file process does not have a Process Initiator Column, or the column value is blank, then:
 - If **Keep original plan file creator** is enabled for the command, then the original plan file creator is the process initiator.
 - Otherwise, the user performing the copy operation is the process initiator.

► Copy data utility

If a **Copy data utility** is specified, this processing is performed as follows:

- The selected plan files are first copied to the new file group. If the plan files are virtual, then the placeholder document records are copied instead of physical plan files.
- The utility file is opened once before processing begins. Any data lookups or Axiom queries that are configured to refresh on open are executed at that time.
- The utility file is then iteratively processed for each new plan file as follows:
 - Document variables are set in the utility, and the workbook is calculated.
 - Axiom queries set to **Refresh during document processing** are refreshed.
 - A save-to-database is executed.

The utility file is *not* closed and reopened for each new plan file. All processing occurs within the same file session, similar to when performing multipass file processing.

The following reserved document variables are available to the utility file, to be returned using `GetDocumentInfo`. These variables return necessary information about the copied plan files and the source and target file groups.

Variable	Description
SourceFileGroupID	The ID of the source file group. You can use this ID in functions such as <code>GetFileGroupVariable</code> —for example, to return the name of the data table to query from the source file group.
SourcePlanCode	The plan code of the original plan file from the source file group. You can use this code to filter Axiom queries to return data for the original plan file.
TargetFileGroupID	The ID of the target file group. You can use this ID in functions such as <code>GetFileGroupVariable</code> —for example, to return the name of the data table to save data to for the target file group.
TargetPlanCode	The plan code of the new plan file in the target file group. You can use this code to save data for the new plan file.

For example, `GetDocumentInfo("Variable", "SourceFileGroupID")` returns the ID of the source file group.

Create Plan Files task

This task creates plan files for a file group. It works the same way as the **Create Plan Files** utility that is available from the file group menu.

This task has two tabs of settings in the **Task Details** area: **General** and **Plan Files**.

NOTE: If you are using Create Plan Files to create new on-demand plan files, those plan files will be automatically started in the designated **Plan File Process** for the file group. This only applies when creating a brand new plan file. If an existing plan file is overwritten, its process status will be left as is.

▶ **General tab**

The following settings are available on the General tab:

Item	Description
Select File Group	<p>The file group for which plan files will be created. You can select any file group or file group alias.</p> <p>If the Scheduler job is stored in a file group Utilities folder, then you can select Use Current File Group to automatically use the file group that the Scheduler job belongs to. This is the recommended approach when the Scheduler job belongs to a file group, so that it will automatically update to point to the current file group when the file group is cloned.</p> <p>NOTE: If the task uses an alias, then you cannot select individual plan files on the Plan Files tab. Only the Use Filter and All options are available.</p>
Overwrite existing plan files?	<p>By default, this option is not selected, which means that existing plan files will not be overwritten, even if the plan file is selected to be created.</p> <p>If selected, existing plan files will be overwritten.</p>

▶ **Plan Files tab**

On the Plan Files tab, specify the plan files that you want to create. This tab lists all plan codes that you have the right to access. (If a plan code has been set to **False** in the designated **Show On List Column** for the plan code table, then it is not available in this list.)

You can create plan files in any of the following ways:

- **Create all plan files:** To create all plan files, select **All**. This will cause all plan files to be created, for all existing and future plan codes.

Alternatively, you can select **Choose from list** and then select the check box in the column header, causing all plan codes to be selected, but then the list of plan codes is fixed and will not adjust for any future changes. For example, if you add a new department in the future, that new department will only be created by this task if you use the **All** option.

- **Create selected plan files:** To create certain plan files, select **Choose from list** and then select the check boxes for the desired plan codes.

To find the plan files you are looking for, you can sort, filter, and group the list using standard Axiom grid features. You can show additional columns and hide columns by right-clicking in the column header. If you have filtered the list, you can select the check box in the header to select only the plan codes that currently display in the dialog.

NOTE: This option is not available if the file group for the task is an alias. This is because the list of plan files could change when the alias target changes.

- **Create a subset of plan files using a filter:** To use a filter to create a subset of plan files, select **Use filter**, and then type a filter into the filter box. You can also use the Filter Wizard to build the filter. The filter must use the plan code table or a reference table that the plan code table links to. For example: `DEPT.Region='West'`.

Once you have entered a filter, you can click **Refresh plan file list** to show only those plan codes that currently match the filter. This feature is to help you determine whether you have defined the filter as intended. The filter will be applied to the list of plan codes when the Scheduler job is processed, so if changes have been made to the plan code table since then, the actual list of plan files processed will reflect those changes.

You can also use a job variable for the filter. For example, you can define a job variable named "filter" and then place the text `{filter}` in the filter box. This is intended for use when running Scheduler jobs by using the RunEvent function. If a value is specified in the RunEvent function, such as "Filter=dept.region='west'", then that filter will be used in place of the `{filter}` variable to determine the list of plan files to be created.

NOTE: If you use a variable, and you leave the default value for that variable blank within the **Job Variables** tab, then all plan codes will be created if no value is passed by the RunEvent function (or if the value is invalid). You may want to define a default filter that results in no values (such as `1=0`), so that plan files are only created if a valid filter value is passed.

IMPORTANT: For all of these options, the **Overwrite existing plan files** option on the General tab determines whether all selected plan files are created, or only the plan files that do not already exist.

Echo task

This task is used for testing purposes only, to check whether a Scheduler server is running and operational. The task sends a message to the Scheduler server, and asks it to send the message back (an "echo"). If successful, the message displays in the job results. No other action is performed.

Item	Description
Message to Echo	The message to send to the Scheduler server for testing. Job variables can be used in this setting.
Sleep Time	The time to pause in between message echoes, in seconds. Scheduler will echo the message once, then wait the specified sleep time, then echo the message again.

Execute Command Adapter task

This task executes a selected command from the Command Library.

▶ Task properties

This task has one property named **Command Name** that specifies the command to execute.

To select a command to execute:

1. Click **Edit Command**.
2. In the **Shortcut Properties** dialog, click the browse button [...] to the right of the **Shortcut Target** box.
3. In the **Axiom Explorer** dialog, select the desired command from the **Command Library**, then click **Open**.

This returns you to the Shortcut Properties dialog. The selected command is now listed in the Shortcut Target box, and the Shortcut Parameters section displays the parameters for the command.

4. Complete the **Shortcut Parameters** for the command as needed. The available parameters depend on the selected command.

You can later edit the shortcut parameters or select a different command by clicking **Edit Command**.

▶ Supported commands

Only certain commands are available for execution in this context. The following commands are available:

- File Group Rollover
- Create File Group Scenario
- File Group Rollover
- Create File Group Scenario

Systems with installed products may have Scheduler jobs that use the following additional commands:

- Create File Group From Prototype
- Upgrade File Group To Prototype Version

These commands can only be configured by product developers. Clients looking for more information on how to use a particular product-delivered Scheduler job should consult their product documentation. Syntellis employees should consult internal resources for more information on this feature as needed.

Execute SQL Command task

This task runs a SQL statement on an Axiom database. If needed, you can also use this task in a user-defined job to run any valid SQL statement on an Axiom database.

NOTE: The SQL statement in this task will be run as the Axiom database user, regardless of which user executes the job.

This task has the following settings:

Item	Description
Source Axiom Database	Select the database on which to run the SQL statement: <ul style="list-style-type: none">• Current system database: The database for the current system.• Current audit database: The corresponding audit database for the current system.
SQL Command Text	Enter any valid SQL statement to be run against the specified database. To validate the syntax of the SQL statement, click the Check SQL syntax button  . Axiom Contract Management sends the statement to your database server to see if the statement can be parsed, resulting in either a success message or an error message. Job variables can be used in the SQL statement. The Check SQL syntax button is not available if the statement uses variables.

Export ETL Package task

This task exports data from Axiom Contract Management to an external database (same as executing an export from the **Exports Library**).

This task has one setting, **Select ETL Export Package**. This is the name of the export package to process. You can select any export that is defined in the current system.

File Processing task

This task performs file processing on a specified report file or file group utility. The file must already be enabled for file processing. You can use the file processing settings that are already in the file, or you can override any setting.

The following settings must be completed for the task:

Item

Description

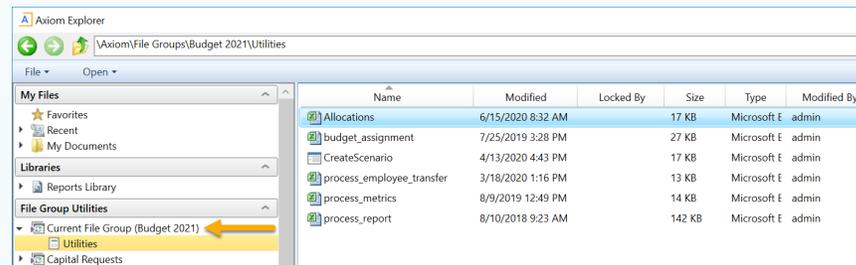
File to Process

The report to process for the task. Click the **Browse** button to open the **Axiom Explorer** dialog, and then select a report to process. You can select any report that you have access to within the Reports Library or a file group Utilities folder.

Only one report can be selected for each File Processing task. If you want to process multiple reports, you can add multiple File Processing tasks to the Scheduler job.

TIP: Once the file is selected, only the file name displays in the task. If you want to know the folder location of the selected file, hover your cursor over the field. The folder location is listed in the tooltip.

If this Scheduler job is stored in a file group Utilities folder, then you can optionally navigate to the report through the **Current File Group** node at the top of the file groups list. When you do this, the path to the file is stored relative to the current file group, which means that it will automatically update when the file group is cloned. This is the recommended method of referencing the report to process when both the Scheduler job and the report belong to the file group.



Item	Description
Override file to process	<p>Optional. Specifies a Scheduler job variable to override the file to process. The override file will then be used for processing instead of the original file. This feature allows you to pass in an alternate file to process, when using Run Event or Raise Event to trigger the Scheduler job for processing.</p> <p>To use a job variable, enter the variable name in curly brackets, such as {MyFile}. When the job is executed, this variable must resolve to a valid file path in the Axiom Contract Management file repository. Note that it is not valid to leave the variable value blank (the task will <i>not</i> use the original file to process).</p> <p>NOTES:</p> <ul style="list-style-type: none"> • The override feature is only exposed to product developers. It is only visible in client systems if the job is delivered as part of a product package and an override variable is specified in that job. • The File to Process field must point to a valid file for file processing when the override feature is used, even though that file will never actually be processed by the task. If the file to process is missing or invalid, then the task validation will fail.
Process Multipass	<p>Specifies whether the report will be run using multipass processing.</p> <ul style="list-style-type: none"> • If this option is selected, multipass processing is performed. This is equivalent to selecting File Output > File Processing > Process File Multipass. • Otherwise, multipass processing is not performed and multipass settings do not display in the task. This is equivalent to selecting File Output > File Processing > Process File. <p>NOTE: If you select Process Multipass, but the file does not have any defined multipass settings, then you must override the blank multipass settings for the file and define them in the equivalent of "advanced mode." If you want to use "basic mode" settings (specify only a source column and Axiom Contract Management automatically completes the rest of the settings for you), then you should edit the file to define the basic mode multipass settings so that they can be inherited by the task.</p>
Enable iterative calculation while processing	<p>Specifies whether iterative calculations are enabled for the file during processing. In most cases you will leave this option disabled.</p> <p>If this option is selected, then iterative calculations are enabled for the file during the Axiom query refresh process. The iterative calculation settings are fixed at a maximum of 100 iterations and a maximum change value of .001.</p> <p>For more information on iterative calculations, see the Microsoft Excel Help.</p>

▶ Advanced options

This section only displays if multipass processing is enabled for the task, and the task uses settings that are eligible for parallel processing. Click on the down arrow next to the title to expand the section and view the options.

Parallel processing for file processing tasks is performed based on multipass passes. With certain task settings, multiple passes can be separated into sub-jobs, which can then be processed at the same time (in parallel). This can improve the performance of the task.

For example, imagine that you are multipass processing a file by department. If the task is processed sequentially, then the task would process Dept 100 and finish it, then move to Dept 110 and finish it, etc. When parallel processing is used instead, Depts 100-199 can be separated into one sub-job, Depts 200-299 into another sub-job, etc. Because the sub-jobs are processed in parallel, multiple departments are processed at the same time, so the overall task can complete more quickly.

Item	Description
Maximum Parallel Jobs	<p>The maximum number of subordinate jobs to run in parallel. The default number is 4.</p> <p>This is the total number of sub-jobs that can be run at the same time for this task. Ultimately the number of sub-jobs that are run in parallel depends on the number of Scheduler threads that have been configured for use at your organization, and the number of Scheduler threads that are currently available (threads that are not processing other higher-priority jobs).</p>
Processing Batch Size	<p>The number of multipass passes to include in each sub-job at a time. The default number is 10 for eligible snapshot and export processes, and 7000 for eligible save-to-database processes (save once at end).</p> <p>Passes are determined based on the multipass list of items. For example, if you are processing by department (DEPT.DEPT), then each department is a separate pass. If the batch size is set to 10, then each sub-job would process 10 departments at a time.</p> <p>In most cases, the default settings are sufficient. If you are experiencing lengthy processing times and want to optimize performance, you can adjust this setting as follows: divide the number of passes by the number of available Scheduler threads. For example, if there will be 100 passes and there are 4 Scheduler threads, set the batch size to 25.</p>

NOTES:

- For save processes, only "save once at end" processes are eligible for parallel processing. In this case, the records to be saved to the database are extracted after each pass to a central temporary table. Once all passes are complete, then all records are saved to the database from the temporary table. Save processes where data is saved directly after each pass are not eligible, because these processes may depend on sequential processing.
- There is no way to disable parallel processing if the task is eligible; however, you can adjust the parallel processing settings if desired.

► File processing settings

Once you have selected a file to process, the file processing settings from that file display within the task as read-only. You can leave the settings as they are, or you can override any setting.

- To override a setting, select the **Override** check box to the right of the setting. The setting becomes editable, and you can change it. The change only applies to the file processing task—the setting remains unchanged within the file.
- If you override a setting, make sure that any related settings make sense in the context of the change. For example, if **File Generation** is set to **Multiple Output Files**, and you override it to be **Single Output File**, then you should also check the **Sheet Names** setting to make sure that you will end up with unique sheet names within the file.

NOTE: If the target file for the task uses **File Collect** or **Batch** processing, then it is not possible to override the settings on the File Collect Configuration Sheet or the Batch Control Sheet.

For more details on file processing settings, see the *Axiom File Setup Guide*.

Note the following requirements when running file processing using Scheduler:

- The **Output Folder** location must be accessible by the Scheduler service user account. If you specify a network folder location using the Browse button, the location is automatically entered as a UNC path. If you specify a C: drive location, that location will be evaluated as the C: drive of the Scheduler server.
- If the file processing type is **Print**, the Scheduler server(s) must be configured to access the specified printer. This may require the assistance of your IT department.

Job variables can be used in any file processing setting that accepts a typed user input.

► Batch variables

If the file has defined batch variables, you can specify variable values to be used for the file processing task. When the task is executed, any specified variable values are temporarily placed within the file, within the designated cell for that variable value. The file can be set up to use the variable value in some way during processing.

Item	Description
Variable Names	The names of the variables, as defined in the File Processing Control Sheet for the source file. If no names are listed, then no variables are defined in the file.
Variable Values	The variable values to be placed within the file when the file processing task is executed.

Job variables can be used in the batch variable settings. For example, a job variable can be used as the value for a batch variable.

Import ETL Package task

This task imports data into Axiom Contract Management (same as executing an import from the **Imports** menu).

NOTE: If the import package is configured to **Ignore lookup and key errors**, then if errors are found the execution status of the job will be Partial Success. This will trigger an email notification if the job is configured to notify only on error.

Item	Description
Select ETL Import Package	The import package to process. You can select any import that is defined in the current system.
Source Filename	<p>The path and name of the source file. This option only applies in the following situations:</p> <ul style="list-style-type: none"> The import is configured to pull data from a source file (instead of a database table). The import is configured to prompt the user for the source file during execution. <p>If the import is configured to always use the same source file, then that file displays for reference in the Source Filename box, but it is grayed out and cannot be changed.</p> <p>Job variables can be used in this setting.</p>
Package Variables	<p>Specifies values for any variables used in the import package.</p> <p>Variables are listed in the right-hand side of the grid. Use the drop-down list next to the variable name to select from the defined set of choices, or type in a value.</p> <p>Job variables can be used in this setting.</p>

Process Plan Files task

This task processes plan files in a file group. It performs the same actions as the **Process Plan Files** utility available from the file group menu.

The Process Plan Files task uses several tabs to define different options. The available tabs and the options on those tabs depend on the selected **Processing Mode** on the **Options** tab.

- **Options:** Defines the overall processing mode and processing options
- **Plan Files:** Specifies the plan files to process
- **Axiom Queries:** Specifies which Axiom queries to run in plan files (only applies to Normal Processing)
- **Utilities:** Specifies which data source to use for utility processing (only applies to Process with Utilities)
- **Processing Variables:** Defines variables to pass into plan files from Scheduler, and to Scheduler from plan files

► Options tab

The following options are available on the Options tab:

Item	Description
Processing Mode	<p>Select the type of processing to perform:</p> <ul style="list-style-type: none">• Normal Processing: Plan files are opened, refreshed, and saved. You can configure which actions occur.• Process with Utilities: A list of utilities is iteratively processed per plan file. Utilities are opened, refreshed with data for each plan code, and saved. This is primarily intended for processing form-enabled plan files with embedded forms.• Update Persistent Plan Files: Update existing plan files for text, formatting, or formula fixes. This is an advanced feature.• Process with Custom Utility: Plan files are processed using a custom utility provided by Axiom Support. This is an advanced feature. <p>The default processing mode is Normal Processing. However, if the file group has been configured so that utility processing is the default processing mode for that file group, then Process with Utilities is selected by default.</p>

Item	Description
Select File Group	<p>The file group for which plan files will be processed. You can select any file group or file group alias, including file group scenarios (click Show Scenarios in the Choose File Group dialog to show scenarios in the file group list).</p> <p>If the Scheduler job is stored in a file group Utilities folder, then you can select Use Current File Group to automatically use the file group that the Scheduler job belongs to. This is the recommended approach when the Scheduler job belongs to a file group, so that it will automatically update to point to the current file group when the file group is cloned.</p> <p>NOTE: If the task uses an alias, then you cannot select individual plan files on the Plan Files tab. Only the Use Filter and All options are available.</p>
Advanced Options: Worker Batch Size	<p>Optional. Specifies the number of plan files to be processed in each batch. The batch size must be a number between 10 and 100.</p> <p>By default this is left blank, which means that the batch size is automatically calculated based on the number of plan files to be processed divided by the total number of threads on all enabled Scheduler servers. Generally speaking, you should not customize this setting unless you are advised to by Axiom Contract Management Support.</p> <p>NOTE: Each batch of plan files is processed by a subordinate job. These subordinate jobs are automatically created for the Process Plan Files task and are processed in parallel, dependent on the number of Scheduler threads that are available at any one time.</p>

Options for Normal Processing mode

If Normal Processing is the selected processing mode, the following additional options are available on the Options tab:

Option	Description
Save document after processing	<p>Specifies whether plan files are saved during processing. This option is selected by default.</p> <p>This option does <i>not</i> cause a save-to-database to be performed—that option must be selected separately.</p> <p>NOTES:</p> <ul style="list-style-type: none"> • If this option is not selected, then the utility will open the file as read-only and will not attempt to acquire the document lock before processing. • If the file group uses virtual plan files, this option does not apply because the plan files cannot be saved. However, if the option is enabled, Axiom Contract Management will attempt to acquire the document lock before processing, which is not necessary. This option should not be enabled when processing virtual plan files.
Run Save To Database on plan files after processing	<p>Specifies whether a save-to-database is performed in plan files during processing. This option is selected by default.</p> <p>This option does <i>not</i> cause the file itself to be saved—that option must be selected separately. It is not required to save the file in order to perform a save-to-database.</p>
Create a plan file restore point before processing	<p>If selected, then a plan file restore point will be created before processing begins. This option is not selected by default.</p> <p>Restore points can be used to restore plan files to the state they were in before changes were made.</p> <p>NOTE: If the file group uses virtual plan files, this option does not apply. Plan files are not saved and therefore restore points are irrelevant.</p>

Options for Process with Utilities

If **Process with Utilities** is the selected processing mode, there are no additional options on the Options tab.

Plan files are not saved when using Process with Utilities, and plan file restore points are not created. When using this mode, the processing is being performed in the utility files, not in the plan files, so it is not necessary to save the plan files. Additionally, in most cases the plan files used with this mode are virtual form-enabled plan files, so the save and restore options are irrelevant.

Options for Update Persistent Plan Files

If **Update Persistent Plan Files** is the selected processing mode, the following additional option is available on the Options tab:

Option	Description
Report File	Click the Browse button to select the report file that is configured with the PlanFileReconfig_ControlSheet. This file must be saved in the Reports Library. This control sheet contains the settings that will be applied to plan files during processing.

Plan files are always saved when using this processing option, and plan file restore points are always created before processing. A save-to-database is not performed in this mode, so if you need to save data, you should process plan files using Normal Processing after you have verified the results of the plan file update.

Options for Process with Custom Utility

If **Process with Custom Utility** is the selected processing mode, the following additional options are available on the Options tab:

Item	Description
Report File	Click the Browse button to select the Microsoft Excel spreadsheet file that contains the VBA custom utility. The file must be saved in the Reports Library.
VBA Module	Select the VBA module to run as part of this utility. The drop-down list shows the VBA modules available in the selected file.
VBA Function	Select the VBA function to run as part of this utility. The drop-down list shows the VBA functions available in the selected module.

Plan files are always saved when using this processing option, and plan file restore points are always created before processing. A save-to-database is not performed in this mode, so if you need to save data, you should process plan files using Normal Processing after you have verified the results of the custom utility processing.

► Plan Files tab

On the **Plan Files** tab, specify the plan files that you want to process. There are three different options that you can use to specify the plan files: **Choose from list**, **Use filter**, and **All**. You should use the option that corresponds to how many plan files you want to process—all plan files, or a subset of plan files. If you want to process a subset of plan files, you can select individual files to process or you can use a filter to define the subset.

NOTES:

- If a plan file is locked by another user when the task is executed, then processing for that file will fail. Failures are noted in the result history for the job.
- If a plan file has not yet been created for a particular plan code, then that plan code will not display in this list and will be ignored when processing. Scheduler does not support creating plan files as part of the Process Plan Files task (you must use the separate Create Plan Files task for this purpose).
- If the file group uses a **Show on List** column, then any plan code that is set to **False** will not display in the plan file list and will be ignored when processing.

Process all plan files

To process all plan files, select **All**. The list of all plan files is generated each time the Scheduler task is executed, so that if new plan files have been added then those new plan files will be included in the processing (the reverse is also true if any plan files have been removed).

Alternatively, you can select **Choose from list** and then select the check box in the column header, causing all current plan codes to be selected. However, in this case the list of selected plan codes is fixed and therefore will not automatically adjust for any future changes.

Process selected plan files

To process certain plan files, select **Choose from list**, and then select the check boxes for the plan files that you want to process. When the Scheduler task is executed, Axiom Contract Management will process only the selected plan files.

To find the plan files you are looking for, you can sort, filter, and group the list using standard Axiom grid features. You can show additional columns and hide columns by right-clicking in the column header. If you have filtered the list, you can select the check box in the header to select only the plan files that currently display in the dialog.

NOTE: This option is not available if the file group for the task is an alias. This is because the list of plan files could change when the alias target changes.

Process a filtered set of plan files

To use a filter to process a subset of plan files, select **Use Filter**. When the Scheduler task is executed, Axiom Contract Management will process only the plan files that meet the filter.

You can use the Filter Wizard to create the filter, or you can manually type a filter criteria statement into the filter box. The filter must use the plan code table or a lookup table. For example: `DEPT.Region= 'US West'` where Dept is the plan code table.

Once you have entered a filter, you can click **Refresh plan file list** to show the plan files that currently match the filter. The refresh feature is intended to help you determine whether you have defined the filter correctly.

You can also use a job variable for the filter. For example, you can define a job variable named "filter" and then place the text `{filter}` in the filter box. This is intended for use when running Scheduler jobs via RunEvent. If a variable value is specified when the event is triggered, such as the value `dept.region='west'`, then that filter statement will replace the `{filter}` variable and will be used to determine the list of plan files to be processed.

NOTE: If you use a variable, and you leave the default value for that variable blank within the **Job Variables** tab, then all plan codes will be processed if no value is passed by the RunEvent function. You may want to define a default filter that results in no values (such as `1=0`), so that plan files are only processed if a valid filter value is passed.

► Axiom Queries

On the **Axiom Queries** tab, select the queries that you want to run in the plan files. By default, all listed queries are selected. This tab only applies when using **Normal Processing** mode.

If you do not want to run a particular query, you can clear the check box. You can select or clear individual check boxes, or you can use the check box in the header to select or clear all queries currently displayed in the list. You can sort, filter, and group the list using standard Axiom grid functionality.

<input checked="" type="checkbox"/>	Template	Worksheet	Axiom Query	Refresh On Open	Dynamic
<input checked="" type="checkbox"/>	Master	Stat_Rev	AQ1: Stat_Rev	False	False
<input checked="" type="checkbox"/>	Master	Stat_Rev	AQ2: NetRevSection	False	True
<input checked="" type="checkbox"/>	Master	Stat_Rev	AQ3: Forecast	False	True
<input checked="" type="checkbox"/>	Master	Stat_Rev	AQ4: ColHide On Open	True	False
<input checked="" type="checkbox"/>	Master	Stat_Rev	AQ5: Statistics On Open	True	False
<input checked="" type="checkbox"/>	Master	JobCode	AQ1: Labor Configuration Driver On Open	True	False
<input checked="" type="checkbox"/>	Master	JobCode	AQ2: Labor Configuration Driver On Open	True	False

Example Axiom Queries tab

The list of Axiom queries is based on the source templates that were used to create the plan files. Only Axiom queries that meet the following criteria are eligible for selection:

- **Active** is set to **On**, or the setting uses a formula.
- **Refresh during document processing** is set to **On**.

If a query uses a formula for the Active setting, this means the query is dynamic and may or may not be run, depending on how the formula resolves in each plan file to be processed. When a particular plan file is processed, each selected query will be evaluated based on the current settings in that plan file. If both **Active** and **Refresh during document processing** are **On** for that plan file, then the query will be run. If either or both settings are **Off** for that plan file, the query will not be run. You can tell whether a query is dynamic or not by looking at the **Dynamic** column in the query list.

If a query is *not* selected on this tab, then that query will not be run in any plan files during processing, regardless of whether **Active** or **Refresh during document processing** are enabled in the plan file.

The plan file selection on the **Plan Files** tab affects the Axiom query list as follows:

- If you have selected individual plan files, then only the eligible queries for the source templates of the selected plan files are shown.
- If you have selected **All** or **Use Filter**, then all eligible queries for all used templates are shown. If the file group has templates that have not been used to create any plan files, then those templates are not included in the list.

The listed queries are identified by template, worksheet, and query name. The following additional properties are also listed for each query:

- **Refresh On Open**: Indicates whether the Axiom query is configured to refresh automatically when the file is opened. This is for information purposes only, to help you determine whether the query needs to be included in the processing. The Refresh on Open status is ignored by Process Plan Files—if the query is selected it will be run along with the other selected queries, and if it is not selected it will not be run.
- **Dynamic**: Indicates whether the query is dynamically enabled. True means that the query uses a formula for the **Active** setting.

NOTE: If a query is listed on this tab but it is grayed out and unavailable for selection, that means that although the query is active (either directly or dynamically), the query is not eligible to be run using Process Plan Files (because the setting **Refresh during document processing** is set to **Off**). This query is listed for your information only, so that you understand the query cannot be run as part of the process.

► Utilities tab

On the **Utilities** tab, select the ProcessPlanFileUtilities data source to use during processing. This data source determines which utility files are processed and the processing order. This tab only applies when using **Process with Utilities** mode.

The list below shows the selected utilities data source for each template in the currently selected plan files.

Template Name	Utilities Data Source
FormTemplate	Set1

Example Utilities tab

For each template listed, use the **Utilities Data Source** field to select the data source to use for plan files created from that template.

- If the template only has one data source, that data source is selected.
- If the template has multiple data sources, then the data source marked as the default data source is selected by default. If desired, you can use the drop-down list to select a different data source.

When plan files are processed, Axiom Contract Management reads the specified data source in each plan file to determine the utilities to be processed for that plan file.

The plan file selection on the **Plan Files** tab affects the Utilities list as follows:

- If you have selected individual plan files, then only the templates used to create the selected plan files are shown.
- If you have selected **All** or **Use Filter**, then all used templates are shown. If the file group has templates that have not been used to create any plan files, then those templates are not included in the list.

► Processing Variables

This tab can be used to define variables to pass into plan files before processing begins, and to pass variables back to the Scheduler job after processing has been performed. This tab is optional and is only used in special situations.

Pre-Processing Document Variables

This section can be used to pass document variables into plan files before processing. This can impact the processing of plan files if the files are configured to use the variable values in some way.

For each pre-processing document variable, you can specify a variable name and a variable value. The plan files must be set up with GetDocumentInfo functions that return the values for the specified variables.

- + To add a variable, click the Add button to add a row to the list. Complete the settings for the variable as described below.
- ✕ To remove a variable, select the variable in the list and then click the Remove button. Only one variable can be selected at a time.

To edit the variable settings, double-click the applicable cell to make the cell contents editable. When you are finished editing, you can press the Enter key or Tab key to exit the cell, or click outside of the cell.

Item	Description
Variable Name	The name of the variable. Do not enclose the variable name in curly brackets (you are not <i>using</i> the variable here, you are defining its value).
Variable Value	The value of the variable. The value can be a "hard-coded" value, or it can be a job variable that will be resolved at time of processing. If you use a job variable to define the value, the job variable must be enclosed in curly brackets.

Pre-Processing Workbook Variables

This section can be used to pass values into plan files before processing. This can impact the processing of plan files if the files are configured to use the values in some way.

For each pre-processing variable, you can specify a workbook location to place the value, and the value to be placed.

Item	Description
Workbook Location	The location in the workbook for the value to be placed. Any existing value in this location will be overwritten for the duration of the processing. If the file is saved as part of the processing, then the value will be saved in the file. The location can be specified using <i>SheetName!CellRef</i> syntax (for example: <i>Report!A13</i>), or by using a named location in the file.
Formula	The value to be placed in the specified workbook location. The value can be a "hard-coded" value, or a formula, or a job variable that will be resolved at time of processing. If the value is a formula, the formula is placed into the target cell and calculated in the plan file. The formula can be any formula that would be valid within a spreadsheet in the Axiom client. This includes using Excel functions and Axiom functions. The formula can also use job variables, which will be resolved before placing the formula in the target cell.

The specified location and value will apply to all plan files being processed by the task. If you are going to use pre-processing variables, the location should be predefined in the template and therefore available to all plan files built using that template. If the plan files will be built using multiple templates, then all templates should be set up with the same designated location, or you should set up separate processing tasks based on template type.

Post-Processing Workbook Variables

This section can be used to pass a value from plan files back to the Scheduler job after processing has been performed. This can impact the processing of subsequent tasks in the job if those tasks are configured to use the value in some way.

For each post-processing variable, you can specify the location in the workbook to find the value, and the job variable to use that value.

NOTE: If this task processes multiple plan files, the resulting variable value will be from the last file that was processed.

Item	Description
Workbook Location	<p>The location in the workbook to find the value to be passed to Scheduler. This value will become the value for the assigned job variable for the duration of executing the current job (unless a later process within the same job overwrites the value for the same job variable).</p> <p>The location can be specified using <i>SheetName!CellRef</i> syntax (for example: <i>Report!A13</i>), or by using a named location in the file.</p>
Job Variable	<p>The job variable that you want to use the value in the specified workbook location. Do not enclose the variable name in curly brackets (you are not <i>using</i> the variable here, you are simply referencing the variable name).</p> <p>If the job variable does not already exist in the job (on the Job Variables tab), then it will be created. However, in most cases you will want the variable to be already set up with a default value, so that the job does not have validation errors that prevent saving.</p>

The specified location and job variable will apply to all plan files being processed by the task. If you are going to use post-processing variables, the location should be predefined in the template and therefore available to all plan files built using that template. If the plan files will be built using multiple templates, then all templates should be set up with the same designated location, or you should set up separate processing tasks based on template type.

Even though the task may process many plan files, only the job variable value from the last-processed plan file will be used. The plan files must be set up so that all plan files result in the same value after processing, or else your results will vary depending on which plan file was the last file to be processed.

Process Document List task

This task processes a user-defined set of documents. The process operation always calculates the files. In addition, you can opt to run Axiom queries in the files, process alerts in the files, and then perform a save-to-database and/or save the files.

You can process any Axiom-managed Excel files by using this task. The primary intent of the task is to process files such as driver files or report utilities. For example, you may be using Axiom queries and GetData functions in your driver files that need to be updated regularly. Rather than opening, refreshing, and saving each driver file, you can use this task to define the set of files and schedule processing.

NOTES:

- Generally speaking, plan files should not be processed using this task. Instead, the [Process Plan Files](#) task should be used.
- This task does not perform *file processing* actions on the file. File processing can be set up for report files and driver files, and can be used to perform actions such as file delivery, using standard or multipass processing. If you want to perform file processing using Scheduler, use the [File Processing](#) task.

► Documents to process

Specify the documents to be processed when the task is run. Documents are processed sequentially in the order listed.

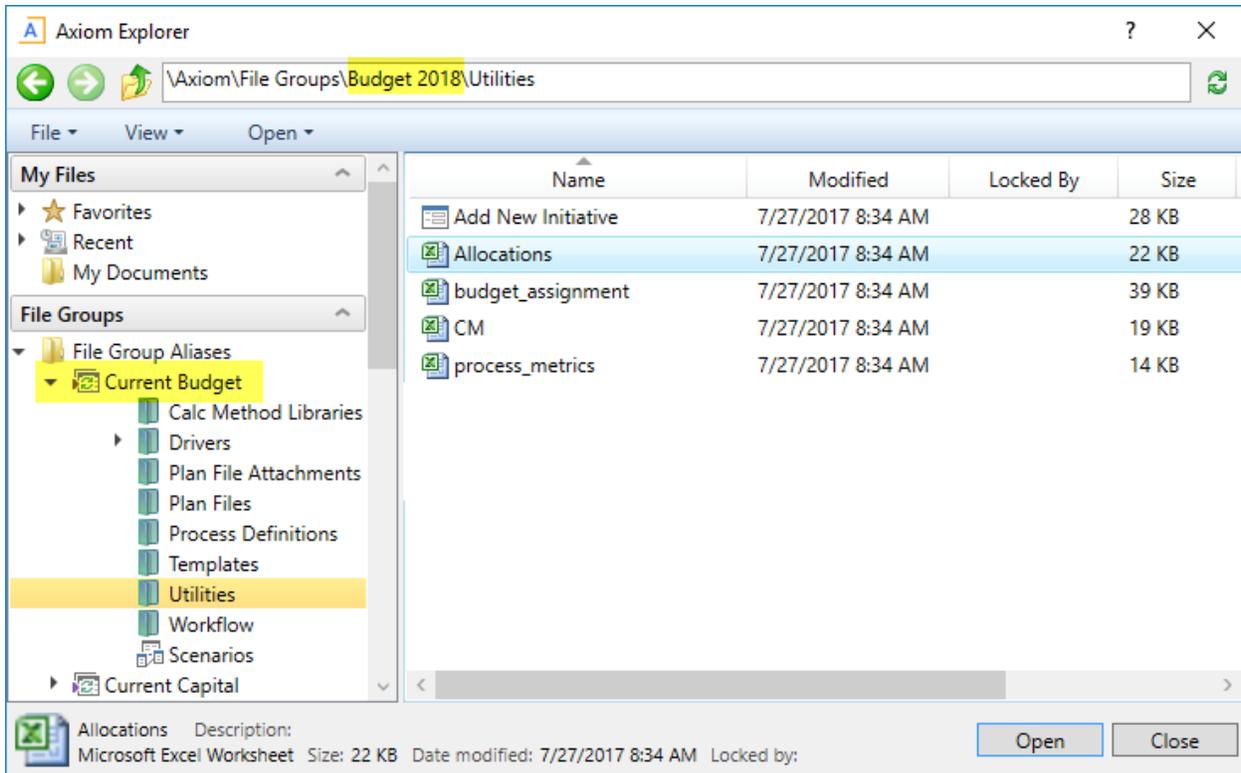
- + To add a document, click the Add button. In the **Axiom Explorer** dialog, select the file or files that you want to add, and then click **Open**.
- ✕ To remove a document, select the document in the list and then click the Remove button. Only one document can be selected at a time.
- ▲ ▼ To change the order of documents, select the file in the list and then click the arrow buttons to move the file up or down.

Only Axiom-managed Excel files are valid to be processed in the task.

Selecting a document using a file group alias

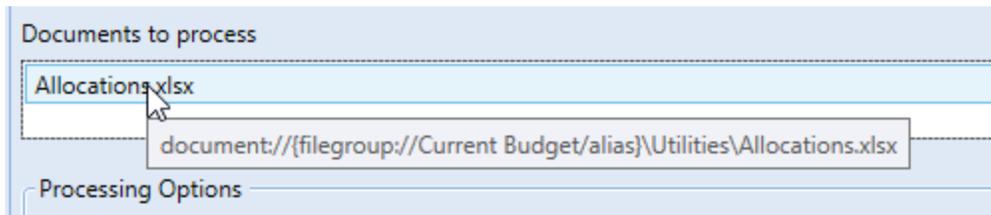
You may want to specify the document to process using a file group alias, so that the task does not have to be manually updated after rolling over to a new file group for a new year of planning. When you are selecting a document in the Axiom Explorer dialog, you can expand the file group alias to see all of the files in the current target of the alias.

For example, in the following screenshot, the file group alias Current Budget is expanded. Because the alias currently points to the file group Budget 2018, the folders and files under the alias are from Budget 2018. When you select a file or folder, you can see the real file path in the top of Axiom Explorer.



Selecting a document to process using a file group alias

When you select a document underneath an alias, the file path is written using alias syntax, so that the Scheduler task will look for the document within the current target of the alias. This path is visible in the tooltip that displays when you hover your cursor over a selected document.



File path using file group alias syntax

When the file group alias is updated to point to a new file group, the Scheduler task will use the file in the new file group automatically. If the file does not exist in the new file group, the task will fail with an error.

► Processing Options

By default, both options are selected. Axiom queries are refreshed before the save-to-database occurs.

If neither option is selected, then the files are calculated and then saved.

Item	Description
Perform all enabled Axiom Queries in selected workbooks	<p>If this option is selected, then all eligible Axiom queries in all selected files will be refreshed when the task is run. This option is selected by default.</p> <p>Axiom queries are eligible for processing if they are active and use either of the following refresh behaviors: Refresh on File Open and Refresh During Document Processing.</p>
Enable iterative calculation while processing	<p>Specifies whether iterative calculations are enabled for the file during processing. In most cases you will leave this option disabled.</p> <p>If this option is selected, then iterative calculations are enabled for the file during the Axiom query refresh process. The iterative calculation settings are fixed at a maximum of 100 iterations and a maximum change value of .001.</p> <p>For more information on iterative calculations, see the Microsoft Excel Help.</p>
Save document after processing	<p>If selected, then files will be saved after processing. This option is selected by default. The user executing the task must have Read/Write access to the files.</p> <p>This option does <i>not</i> cause a save-to-database to be performed—that option must be selected separately.</p> <p>NOTE: If this option is not selected, then the utility will open the file as read-only and will not attempt to acquire the document lock before processing.</p>
Run Save To Database on plan files after processing	<p>If selected, then a save-to-database will be performed after processing. This option is selected by default. The user executing the task must have the Allow Save Data permission to the files.</p> <p>This option does <i>not</i> cause the file itself to be saved—that option must be selected separately. It is not required to save the file in order to perform a save-to-database.</p>
Process alerts in selected workbooks	<p>If selected, then alerts in the file will be processed. The file must contain an Alert Control Sheet and one or more alerts must be defined in the file.</p> <p>If Axiom queries are enabled for processing as well, the queries will be run before alerts are processed.</p>

► Pre-Processing Document Variables

This section can be used to pass document variables into the target files before processing. This can impact processing if the files are configured to use the variable values in some way, such as to filter an Axiom query.

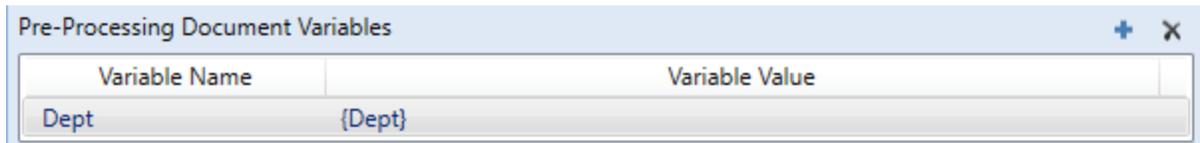
For each pre-processing document variable, you can specify a variable name and a variable value. The target file must be set up with GetDocumentInfo functions that return the values for the specified variables.

- + To add a variable, click the Add button to add a row to the list. Complete the settings for the variable as described below.
- ✗ To remove a variable, select the variable in the list and then click the Remove button. Only one variable can be selected at a time.

To edit the variable settings, double-click the applicable cell to make the cell contents editable. When you are finished editing, you can press the Enter key or Tab key to exit the cell, or click outside of the cell.

Item	Description
Variable Name	The name of the variable. Do not enclose the variable name in curly brackets (you are not <i>using</i> the variable here, you are defining its value).
Variable Value	The value of the variable. The value can be a "hard-coded" value, or it can be a job variable that will be resolved at time of processing. If you use a job variable to define the value, the job variable must be enclosed in curly brackets.

The following example screenshot defines the value for the document variable Dept. The value is defined using the value of a Scheduler job variable {Dept}. A value for Dept can be passed into the Scheduler job when the job is started, and then passed into the target file using the document variable.



► Pre-Processing Workbook Variables

This section can be used to pass values into the file before processing. This can impact processing if the files are configured to use the values in some way. For each pre-processing variable, you can specify a workbook location to place the value, and the value to be placed.

NOTE: The specified value will be placed in all files listed to process. Therefore, unless all files are set up to use the same location and the same way of deriving the value, you will need to create a separate Process Document List task for each file. If you are not using pre-processing variables, then this does not matter.

- + To add a variable, click the Add button to add a row to the list. Complete the settings for the variable as described below.
- ✕ To remove a variable, select the variable in the list and then click the Remove button. Only one variable can be selected at a time.
- ▲ To change the order of variables, select the variable in the list and then click the arrow buttons to move the variable up or down.

To edit the variable settings, double-click the applicable cell to make the cell contents editable. When you are finished editing, you can press the Enter key or Tab key to exit the cell, or click outside of the cell.

Item	Description
Workbook Location	<p>The location in the workbook for the value to be placed. Any existing value in this location will be overwritten for the duration of the processing. If the file is saved as part of the processing, the value will be saved in the file.</p> <p>The location can be specified using <i>SheetName!CellRef</i> syntax (for example: <i>Report!A13</i>), or by using a named location in the file.</p>
Formula	<p>The value to be placed in the specified workbook location. The value can be a "hard-coded" value, or a formula, or a job variable that will be resolved at time of processing.</p> <p>If the value is a formula, the formula is placed into the target cell and calculated in the target file. The formula can be any formula that would be valid within a spreadsheet in the Axiom client. This includes using Excel functions and Axiom functions. The formula can also use job variables, which will be resolved before placing the formula in the target cell.</p>

► Post-Processing Workbook Variables

This section can be used to pass a value from the file back to Scheduler after processing has been performed. This can impact the processing of subsequent tasks in the job if those tasks are configured to use the value in some way. For each post-processing variable, you can specify the location in the workbook to find the value, and the job variable to use that value.

NOTES:

- If this task processes multiple documents, the resulting variable value will be from the last document processed.
- If the task is run as a sub-job, then the post-processing variable is not passed back to the "parent" job. The task must be executed as a regular task within the job in order to pass the variable value back to the job.

- + To add a variable, click the Add button to add a row to the list. Complete the settings for the variable as described below.
- ✕ To remove a variable, select the variable in the list and then click the Remove button. Only one variable can be selected at a time.
- ▲ To change the order of variables, select the variable in the list and then click the arrow buttons to move the variable up or down.

To edit the variable settings, double-click the applicable cell to make the cell contents editable. When you are finished editing, you can press the Enter key or Tab key to exit the cell, or click outside of the cell.

Item	Description
Workbook Location	<p>The location in the workbook to find the value to be passed to Scheduler. This value will become the value for the assigned job variable for the duration of executing the current job (unless a later process within the same job overwrites the value for the same job variable).</p> <p>The location can be specified using <i>SheetName!CellRef</i> syntax (for example: <i>Report!A13</i>), or by using a named location in the file.</p>
Job Variable	<p>The job variable that you want to use the value in the specified workbook location. Do not enclose the variable name in curly brackets (you are not <i>using</i> the variable here, you are simply referencing the variable name).</p> <p>If the job variable does not already exist in the job (on the Job Variables tab), then it will be created when the job is executed. However, in most cases you will want the variable to be already set up with a default value, so that the job does not have validation errors that prevent saving.</p>

Process Template List task

This task processes a user-defined list of file group templates. During processing, any Axiom queries with **Refresh during template processing** enabled are executed and time-stamped, and then the template files are saved.

The primary purpose of this task is to enable use of *time-stamped Axiom queries* with virtual plan files. Because virtual plan files are re-created from template each time they are accessed, Axiom queries cannot be time-stamped within the plan files. Virtual plan files can use the time stamp from the template, but under normal circumstances, Axiom queries are not time-stamped when they are run in templates. However, when Axiom queries are run during template processing, the **Last refresh time** for the query is updated, which means that the queries can be configured to only run if the primary table has changed.

To use this task to enable time-stamped Axiom queries for virtual plan files, do the following:

- In the template, enable **Refresh only if primary table changed since last refresh** and **Refresh during template processing** for the Axiom queries that you want to be time-stamped.
- In Scheduler, create a job with a **Process Template List** task and add the template to the task. Define a scheduling rule for the job as appropriate. For example, you might want the template to be processed nightly.

When the template is processed, the designated Axiom queries will be run if the primary table has changed, and the time stamps are updated. When a virtual plan file that uses this template is opened, the queries will not be run again if the primary table has not changed.

This task should only be used to process Axiom queries that meet the requirements of time-stamped queries.

▶ Templates to process

Specify the templates to be processed when the task is run. Templates are processed sequentially in the order listed. If you have multiple templates to process (in the same or different file groups), you can run them all in the same task.

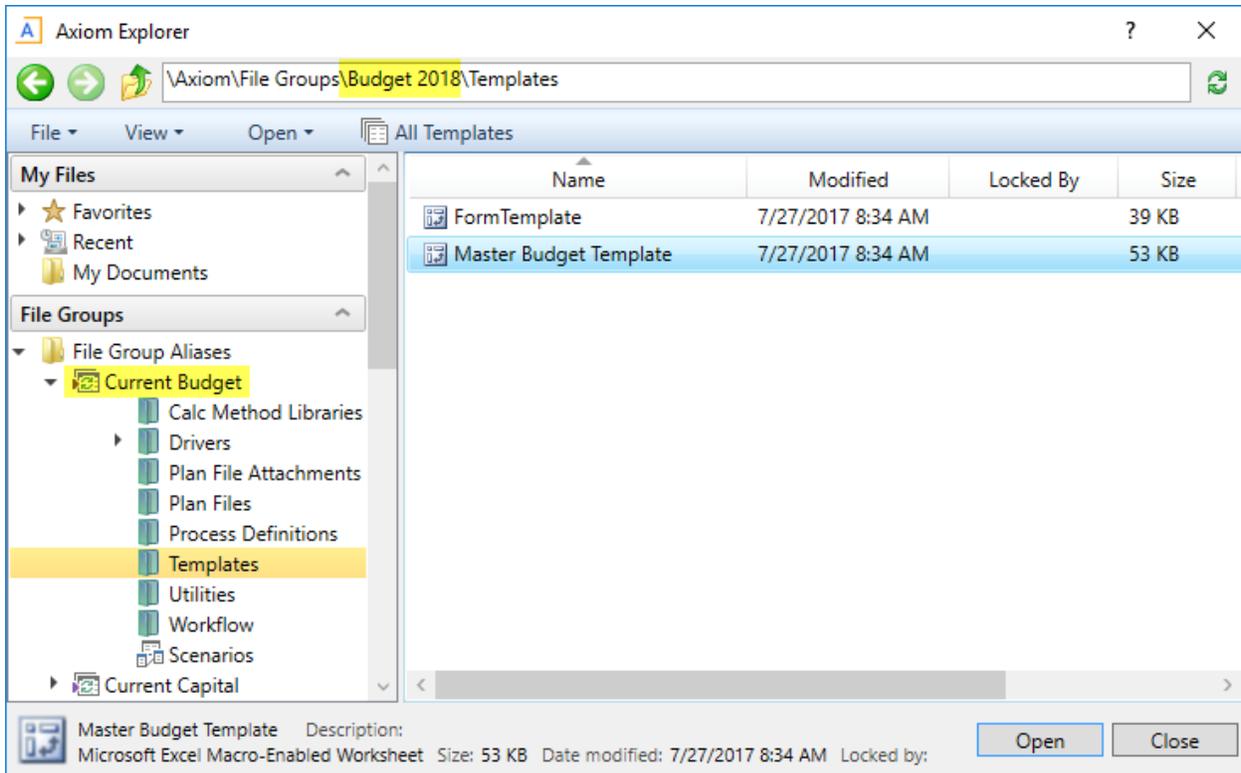
- + To add a template, click the Add button. In the **Axiom Explorer** dialog, select the file or files that you want to add, and then click **Open**.
- ✕ To remove a template, select the file in the list and then click the Remove button. Only one file can be selected at a time.
- ▲ ▼ To change the order of templates, select the file in the list and then click the arrow buttons to move the file up or down.

Normal template behavior rules apply during processing. For example, save-to-database and action codes are not run in templates. The only exception to normal template behavior during this task is that any executed Axiom queries will be time stamped.

Selecting a template using a file group alias

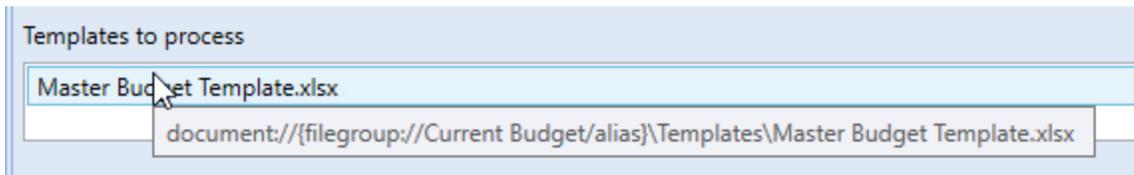
You may want to specify the template to process using a file group alias, so that the task does not have to be manually updated after rolling over to a new file group for a new year of planning. When you are selecting a template in the Axiom Explorer dialog, you can expand the file group alias node to see all of the files in the current target of the alias.

For example, in the following screenshot, the file group alias Current Budget is expanded. Because the alias currently points to the file group Budget 2018, the folders and files under the alias are from Budget 2018. When you select a file or folder, you can see the real file path in the top of Axiom Explorer.



Selecting a template to process using a file group alias

When you select a template underneath an alias, the file path is written using alias syntax, so that the Scheduler task will look for the template within the current target of the alias. This path is visible in the tooltip that displays when you hover your cursor over a selected template.



File path using file group alias syntax

When the file group alias is updated to point to a new file group, the Scheduler task will use the file in the new file group automatically. If the file does not exist in the new file group, the task will fail with an error.

Purge System Data task

The Purge System Data task is intended to clean up old data in your system, to help keep your system running efficiently.

NOTE: Scheduler automatically creates a system job for this task (System.SystemDataPurge), which administrators can edit as needed.

This task purges the following data when it is run:

- Scheduler job result history
- Scheduler and system email notifications
- System temp table data
- Audit history
- Alerts

For each category of data, you can specify a number of days of data to keep when the task is run. All results older than the specified number of days will be deleted. Note that 0 days means that no data is purged for that category.

Section	Item	Description
Scheduler Results	Number of days to keep result history	The number of days of job result history to keep when the task is run. By default, this is set to 15 days.
SMTP Messages	Number of days to keep delivered messages and attachment data	The number of days of delivered message data to keep when the task is run. By default, this is set to 15 days.
Temporary Tables	Number of days to keep temp table data	The number of days of temp table data to keep when the task is run. By default, this is set to 15 days.
Audit History	Number of days to keep system history	The number of days of system audit history to keep when the task is run. By default, this is set to 15 days. "System history" encompasses all audit data—including prior document versions and deleted documents—except table audit data.
Table History	Number of days to keep table history	The number of days of table audit history to keep when the task is run. By default, this is set to 15 days. Table audit data is tracked for tables where Audited is set to True .
Alerts	Number of days to keep alerts	The number of days of alerts to keep when the task is run. By default, this is set to 60 days.

Job variables can be used in all of these settings.

Each purge routine in the task is limited to purging a specific number of rows at a time (50000). If the number of rows to be purged exceeds this limit, then the excess data is retained until the next time the task is run. If you notice data in the database that you expected to be purged, most likely the amount of data to be purged exceeded the limit, and the data will be purged next time the task is run.

► Other purged data

This task also cleans up the following items in your system:

- Deleted columns. When a column is deleted from a table in Axiom Contract Management, the column is immediately deleted from the associated view (which prevents it from being accessed in the system), but it remains in the base table. This task finishes the process of removing obsolete columns from the base tables.
- Orphaned user folders. If the system contains any user folders that do not match up with existing users, these folders are deleted. Although user folders are deleted when a user is deleted from security, orphaned user folders can result from other processes, such as migrating a system between different management databases.

These items are not associated with any specific task settings; the delete process is performed whenever the task is executed.

Raise Event task

The Raise Event task can be used to trigger other Scheduler jobs for execution, using a named event handler. This task has one required setting:

Item	Description
Event Name	<p>Enter the name of the event that you want to raise for execution. This name must match a defined event handler name in one or more other Scheduler jobs.</p> <p>When this task is run, it looks for any jobs that contain the specified event handler name. These jobs are added to the schedule and are eligible to be processed immediately, depending on Scheduler thread availability and any other higher-priority jobs already in the queue.</p> <p>NOTE: It is not possible to specify a file group context for the event handler when using Raise Event. Axiom Contract Management will run all jobs that contain the specified event handler name, regardless of whether the event handler is associated with a file group.</p>

Event Variables

This section can be used to pass variables into the jobs triggered by the event handler. If the jobs are configured to use the variables, these values can impact how the jobs are processed.

- + To add a variable, click the Add button to add a row to the list. Complete the settings for the variable as described below.
- ✕ To remove a variable, select the variable in the list and then click the Remove button. Only one variable can be selected at a time.

For each variable, you can specify a variable name and a variable value. To edit the variable settings, double-click the applicable cell to make the cell contents editable. When you are finished editing, you can press the Enter key or Tab key to exit the cell, or click outside of the cell.

Item	Description
Variable Name	The name of the variable. Do not enclose the variable name in curly brackets (you are not <i>using</i> the variable here, you are defining its value).
Variable Value	The value of the variable. The value can be a "hard-coded" value, or it can be a job variable that will be resolved at time of processing. If you use a job variable to define the value, the job variable must be enclosed in curly brackets.

Run Excel Macro task

This task runs an Excel macro on an Axiom file.

NOTE: This task is no longer supported because it requires Excel processing on the Scheduler server. It is still available on the task list, but cannot be executed.

Please contact Axiom Contract Management support if you need assistance with this task.

Item	Description
Workbook Path	The path and name of the file to run the macro on. You can click the Browse button to navigate to the file.
Macro Name	The name of the macro to run.
Macro Arguments	If the macro takes arguments, you can enter the argument values here. Click Add to add an argument, Remove to delete the selected argument, or Clear to clear all arguments.

Job variables can be used in all of these settings.

Run Scheduler Job task

This task runs a specified Scheduler job as a subordinate job within the current job. The job containing the Run Scheduler job task is the parent job, and the target job for the task is the child job.

By default, the parent job waits until the child job is complete before continuing to the next task in the parent job. This means that tasks after the Run Scheduler Job task can reference the results of the child job. For example, the child job may perform a save-to-database. The subsequent tasks in the parent job can access the data saved by the child job.

▶ Task Control options

When you create the Run Scheduler Job task, the options in the **Task Control** section are pre-set as follows:

- The option **Create a Subordinate Job for this Task** is grayed out. This is because the target job is always run as a subordinate job.
- The option **Wait for all Subordinate Jobs to complete before proceeding to the next Task** is enabled by default. This means that tasks after the Run Scheduler Job task can be dependent on the target job and reference the results of that job. If you disable this option, then the parent job will continue to the next task in the job immediately after creating the subordinate job—it will not wait for the subordinate job to complete.

Keep in mind that if you want the parent job to stop processing tasks if the target job fails, then **Wait for all Subordinate Jobs to complete before proceeding to the next Task** must be enabled for the task and **If this Task fails, continue executing subsequent Tasks** must be disabled for the task. This is the default configuration.

If needed, you can use the option **Process task only if the value of this expression is true** to detect whether a subsequent task in the parent job should be processed. For example, if you know that the child job saves a particular value to the database, you can check for the existence of that value to determine whether to process the task. For more information on using this option, see [Conditionally processing tasks in a job](#).

▶ Target Scheduler job

In the **Task Details** section, use the Browse button to select the target **Scheduler Job**. You can select any job that you have access to in the Scheduled Jobs Library.

When the Run Scheduler Job task is executed, it creates one or more subordinate jobs as needed to execute the tasks in the target Scheduler job. As long as **Wait for all Subordinate Jobs to complete before proceeding to the next Task** remains enabled in the Task Control options, the parent job waits for all subordinate jobs to be completed before moving on to the next task in the parent job.

NOTE: The user executing the job does not need to have security access to the target Scheduler job for Run Scheduler Job. It is assumed that if the user can execute the parent job, the user should be able to execute the target job.

▶ Child Job Values

If the target job for the Run Scheduler Job task has defined job variables, those variables and their default values are listed in this section. The default values are determined as follows:

- If the parent job and the child job have a variable with the same name, the default value is the value defined in the parent job. This value will be passed to the child job and used when the child job is run.
- Otherwise, the default value is the value defined in the child job.

To override a variable value, select the **Override** check box and then click inside the **Override Value** field to enter a value. You can enter a hard-coded value or use a job variable from the parent job. Enter the variable name in curly brackets to use that variable's value as the override value.

For example, imagine that both the parent job and the child job have a variable of `{Dept}`. In the parent job, the value of `{Dept}` is set to 20000, and in the child job the value is set to 40000. The Run Scheduler Job task will display the parent value of 20000 as the default value, and that value will be used when the child job is executed.

Now imagine that the parent job has a variable of `{StartDept}` set to 20000, and the child job has a variable of `{Dept}` set to 40000. In this case, the Run Scheduler Job task will display the value of `{Dept}` as defined in the child job (40000). If you want to use the parent job value for `{StartDept}` instead, then you must select the **Override** check box and enter `{StartDept}` as the **Override Value**. Now the value of `{Dept}` in the child job will be overridden and set to 20000.

SMTP Message Delivery task

This task delivers email notifications for Scheduler jobs.

NOTE: Scheduler automatically creates a system job for this task (`System.SMTPMessageDelivery`), which administrators can edit as needed.

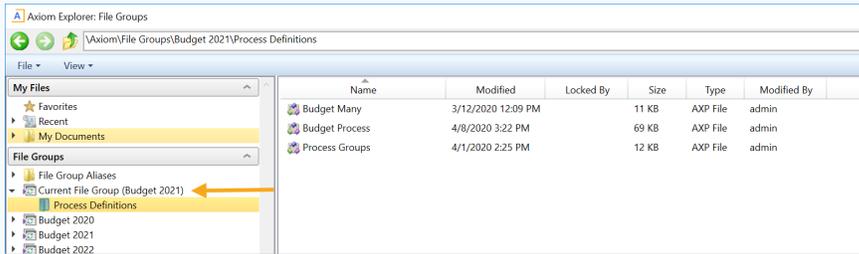
Item	Description
Server name	The server name of the SMTP email server.
Port number	The port number for the SMTP email server. By default, the port is 587, but you can specify a different port number if needed.

Item	Description
Server requires authentication	Select this check box if the SMTP email server requires authentication. If selected, type a Username and Password .
Test Mode	Specifies whether the task is run in test mode. If this check box is selected, the task verifies that it can successfully connect to the SMTP server to send email notifications, but no emails are actually sent. For the System.SMTPMessageDelivery job, new systems are automatically set to test mode. If you restore a database, the restore process also sets the system job to test mode. You must disable test mode before any emails will be sent.

Start Process task

This task starts a process for Process Management. You can use this task to automatically start a process at a specific point in time, including recurring schedules (such as to automatically start a monthly process).

This task can be used to start a generic process definition or a plan file process definition.

Item	Description
Process to start	<p>The process definition to start. Click the Browse button to select the process definition file. You can select any process definition that you have access to within the Process Definition Library or within a file group Process Definitions folder.</p> <p>If the Scheduler job is stored in a file group Utilities folder, then you can optionally navigate to the process definition file through the Current File Group node at the top of the file groups list. When you do this, the path to the file is stored relative to the current file group, which means that it will automatically update when the file group is cloned. This is the recommended method of referencing the process definition file when the Scheduler job belongs to a file group.</p> 

Item	Description
Restart process if it is already running	<p>Specifies whether the Scheduler task will restart the process if it is already running, or if the process will be left as is.</p> <ul style="list-style-type: none"> • Select this option if you want to start the target process regardless of whether it is already running. The current process instance will be aborted and a new process instance will start over at step 1. This option is selected by default. • Clear this option if you want to leave the existing process instance running. In this case, the Scheduler task will take no action if the target process is already running.

Scheduler tasks for database maintenance

Scheduler provides several built-in tasks that are intended for database maintenance. By default, these tasks are included in the System.IndexMaintenance job, which runs regularly to maintain your database. However, these tasks can also be added manually to jobs as needed to perform additional database maintenance.

The following database maintenance tasks are available:

- **Rebuild Database Indexes** task
- **Update Database Statistics** task
- **Update Indexes and Constraints** task

All of these tasks are predefined versions of the **Execute SQL Command** task. You can use the **Source Axiom Database** field to specify whether the task is executed against the system database or the audit database.

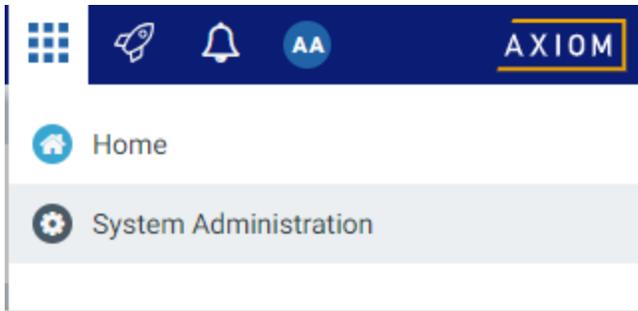
For the **SQL Command Text**, the actual SQL code used by each task is generated automatically by Axiom Contract Management when the task is executed. This ensures that the tasks always use the most current SQL code for each task as defined by Axiom Contract Management.

Web Scheduler

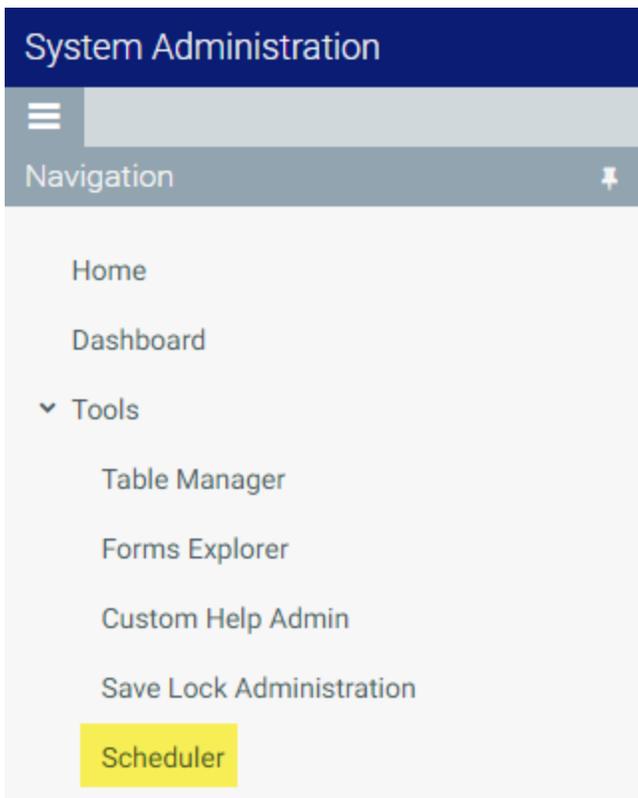
Although most Scheduler setup activities can only be performed in the Desktop Client, some job management can be performed in the Web Client. Using the "Web Scheduler", you can monitor and manage the job schedule, review job results, and process existing jobs on demand.

To access Scheduler in the Web Client:

1. In the Web Client, click the menu icon  in the Global Navigation Bar. From the Area menu, select **System Administration**.



2. From the Navigation panel, select **Tools > Scheduler**.



When you access the Scheduler area, a Scheduler panel becomes available in the left side of the Task Bar. You can use this panel to change the current Scheduler view.

Job	Status	User	Server	Priority	Start Time	Due In	A
System.ProcessNotification	Pending	System		Scheduled Job	02/15/2019	a month ago	
Process Plan Files	Pending	admin		Scheduled Job	Today at 4:05 PM	in 29 minutes	
System.SystemDataPurge	Pending	System		Scheduled Job	Tomorrow at 1:00 AM	in 9 hours	
System.IndexMaintenance	Pending	System		Scheduled Job	Tomorrow at 5:15 AM	in 14 hours	

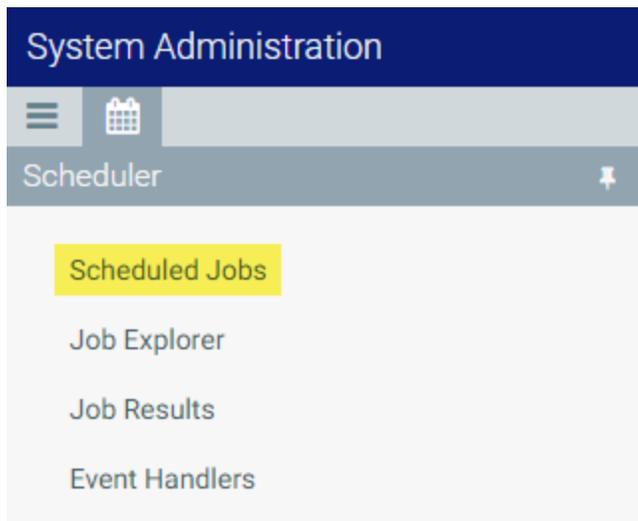
Example Scheduler area in Web Client

Managing the job schedule in the Web Client

In the Scheduler area of the Web Client, you can view the status of all jobs that are currently on the schedule. If necessary, you can view the job details, remove the job from the schedule, or run the job now.

To view the current job schedule:

- On the [Scheduler page](#), from the Scheduler panel, select **Scheduled Jobs**.



The **Scheduled Jobs** grid displays all jobs that are scheduled to be processed, or are currently in process. This includes scheduled jobs, jobs executed manually via **Run Now**, and jobs that were triggered for execution via an event handler.

Job	Status	User	Server	Priority	Start Time	Due In	Actions
File Processing	Working	admin		Manual	Today at 3:37 PM	a minute ago	
System.ProcessNotification	Pending	System		Scheduled Job	02/15/2019	a month ago	
Process Plan Files	Pending	admin		Scheduled Job	Today at 4:05 PM	in 27 minutes	  
System.SystemDataPurge	Pending	System		Scheduled Job	Tomorrow at 1:00 AM	in 9 hours	
System.IndexMaintenance	Pending	System		Scheduled Job	Tomorrow at 5:15 AM	in 14 hours	

Example Scheduled Jobs grid

You can use the **Actions** column in the right side of the grid to perform any of the following actions on a job:

 View the job properties and results.

 Remove the job from the schedule.

IMPORTANT: If the job is on the schedule due to a scheduling rule, this action disables the scheduling rule and removes all future executions from the schedule as well. If you want future scheduled instances of the job to proceed, you must edit the job to re-enable the scheduling rule.

 Run the job now.

This action places the job on the schedule for immediate execution (if another manual instance of the job is not already pending). The future scheduled instance of the job remains on the schedule.

To refresh the list, click the Refresh icon  in the Task Bar.

For each job on the schedule, you can view the following information:

Item	Description
Job	The name of the job.
User	The user identity that the job will be run as. If the job is a system job, the user is System . This is typically the name of the user who placed the job on the schedule, but not always (for example, when using an event handler that is set to run as the job owner instead of as the requester).

Item	Description
Status	Job status is either Pending (waiting to be executed) or Working (currently being executed).
Server	If a job is currently Working , then the server executing the job is listed here. Otherwise, this column is blank.
Priority	<p>The priority category for the job:</p> <ol style="list-style-type: none"> 1. Manual: The job was executed manually. 2. Event Handler: The job was executed by a Scheduler event handler. 3. Scheduled Job: The scheduled instance of the job results from an active scheduling rule. 4. Subordinate Job: The job was generated as a subordinate job, from a currently executing job. <p>The priority category determines how jobs are evaluated for processing order, in conjunction with the job's Priority Elevation setting. Manual jobs are highest priority, and subordinate jobs are lowest priority. For more information, see Processing priority for scheduled jobs.</p>
Start Time	<p>The start time of the job. The job is eligible for immediate execution if the start time is now or passed. Jobs may not be executed right at the start time if no Scheduler threads are currently available to execute the job, or if other eligible jobs have higher priority.</p> <p>If the job is on the schedule due to a scheduling rule, the start time is based on the scheduling rule. If the job was manually executed via Run Now or triggered by an event handler, the start time is the time the execution was initiated.</p>
Due In	<p>The length of time until the job is due to be processed. For example, if the job is scheduled to run at noon and it is currently 11:50 AM, then the job is due to be run in 10 minutes.</p> <p>This column is intended to make it easy to see when a job will be run, without needing to calculate it based on the start time.</p>

NOTE: If a job has a scheduling rule with a recurring schedule, only the first scheduled execution appears in the **Scheduled Jobs** list. For example, if you have a job that is scheduled to run once a month for a year, you will not see all twelve scheduled executions in the list—you will only see the first scheduled execution. Once that instance has been run, the scheduling rule is re-evaluated and the next scheduled execution appears in the list.

Viewing job results in the Web Client

In the Scheduler area of the Web Client, you can view the results of jobs that have been executed. For each job, you can see when it was run, and whether it completed successfully or had errors.

To view job results:

- On the [Scheduler page](#), from the Scheduler panel, select **Job Results**.



The **Job Results** grid shows a list of jobs that have been recently executed. The grid shows the following summary information:

- The name of the job, and the ID of the particular execution of that job
- The user identity the job was run as
- The status of the job, such as Success or Failure
- The Scheduler server that ran the job
- The start time and duration of the job

To refresh the list, click the Refresh icon  in the Task Bar.

System Administration AXIOM

Job Results

Hide system jobs

ID	Job	User	Status	Server	Start Time	Duration	
4585946	File Processing	admin	In Progress	WHQA1	Today at 3:25 PM	a few seconds	
4585937	Process Plan Files	admin	Success	WHQA1	Today at 3:17 PM	a few seconds	
4585944	Process Plan Files(4586885)[01][7]	admin	Success	WHQA1	Today at 3:14 PM	a minute	
4585943	Process Plan Files(4586885)[01][6]	admin	Success	WHQA1	Today at 3:14 PM	3 minutes	
4585942	Process Plan Files(4586885)[01][5]	admin	Success	WHQA1	Today at 3:14 PM	3 minutes	
4585941	Process Plan Files(4586885)[01][4]	admin	Success	WHQA1	Today at 3:11 PM	3 minutes	
4585940	Process Plan Files(4586885)[01][3]	admin	Success	WHQA1	Today at 3:11 PM	3 minutes	
4585939	Process Plan Files(4586885)[01][2]	admin	Success	WHQA1	Today at 3:11 PM	3 minutes	
4585938	Process Plan Files(4586885)[01][1]	admin	Success	WHQA1	Today at 3:11 PM	3 minutes	

1 - 20 of 55 items

Example Job Results grid

To view detailed results for a particular job execution, hover your cursor over the job and then click the View icon in the far right column. This opens the job properties to the **Job Results** section, with the corresponding execution ID expanded. You can further expand the job results to see the specific tasks that were executed.

System Administration AXIOM

File Processing | Results

ID	Result	Start Time	Duration	User
4585946	Success	Today at 3:25 PM	a few seconds	admin
<div style="margin-left: 20px;"> Job: File Processing </div>	<div style="margin-left: 20px;"> Server: WHQA1 </div>	Success	Today at 3:25 PM	a few seconds
<div style="margin-left: 40px;"> Task: File Processing </div>	Success	Today at 3:25 PM	a few seconds	
4585928	Success	Today at 3:02 PM	a few seconds	admin

Example Job Results detail showing tasks executed

To view the detailed task results, hover your cursor over the task and then click the View icon in the far right column. This opens a dialog to display the results for that task. For example, for a file processing task, the detailed results would contain information such as the processing type and the number of passes, and the output that was created at the end of the process.

Once you are viewing the Job Results section of the job properties, you can review all of the available job history as needed. Expand any execution ID to view the details for that particular execution.

TIP: You can also view job results by opening a job and viewing the job properties, which include the job results. In some cases it may be easier to open the job and review all of its results rather than trying to find the job within the overall job results. For more information, see [Viewing jobs and event handlers in the Web Client](#).

NOTE: Users with the **Scheduled Jobs User** security permission can only see job results for jobs that they executed. Administrators can see job results for all jobs.

▶ System job results

By default, system job results are hidden in the **Job Results** grid. System jobs such as the SMTP message delivery job may run frequently, and can easily fill up the result history, making it difficult to find results for user-initiated jobs.

If you want to view results for system jobs, you can do one of the following:

- Clear the **Hide system jobs** check box above the **Job Results** grid. The list immediately updates to include system jobs.
- Open the system job directly, and view its job results within the job. For example, you can go to the **Scheduled Jobs** page and double-click the **System.SystemDataPurge** job to view all results for that job.

▶ Job result availability

Job results are purged periodically to help optimize system performance. The availability of job results in your system depends on the configuration of the system job **System.PurgeSystemData**. This system job runs periodically to purge old data in your system, including old job results. By default, when this job is run, it purges job history older than 15 days.

The configuration of this system job can only be viewed and edited in the Desktop Client, and only by administrators. For more information, see [Configuring Scheduler system jobs](#).

Additionally, individual jobs can be configured to purge old results when the job is run. In the Web Client, you can view the job properties to see if this option is enabled, but you cannot edit the job properties. The option is displayed in the **General** section of the job, under **Job Results Cleanup**. For more information on viewing job properties, see [Viewing jobs and event handlers in the Web Client](#).

Running a job manually in the Web Client

In the Scheduler area of the Web Client, you can run a job manually as needed.

When using this approach, the job is run now. It is not possible to run a job manually and specify a future execution time. If you want to schedule a job for future execution, you must define a scheduling rule on the job, which can only be done in the Desktop Client. For more information, see [Defining scheduling rules for a job](#).

To run a Scheduler job manually:

1. On the [Scheduler page](#), from the Scheduler panel, select **Job Explorer**.



2. In the Job Explorer page, locate the job that you want to run. This page lists all jobs in the Scheduler Jobs Library that you have permission to access.
3. Hover your cursor over the job, then click the **Run Once** icon  in the far right column.

The job is added to the schedule with a start time of now, and is eligible for immediate execution (pending available Scheduler threads and any higher-priority jobs already in the queue). You are automatically taken to the **Scheduled Jobs** area of Scheduler, so that you can see the job on the schedule.

Running a job manually does not impact any scheduled executions of the job as determined by scheduling rules. For example, if a job is scheduled to be run at 10:00 PM tonight, and you run the job manually at 2:00 PM, the job will still be run as scheduled at 10:00 PM.

Viewing jobs and event handlers in the Web Client

In the Scheduler area of the Web Client, you can view Scheduler jobs and event handlers.

Viewing jobs

You can view any job in the Scheduler Jobs Library that you have permission to access.

Scheduler jobs are read-only in the Web Client. You can view the job properties to better understand the purpose of a particular job and the tasks that it performs. The Web Client does not support creating new jobs, editing existing jobs, or deleting jobs. If you need to perform any of those actions, you must use the Desktop Client. For more information, see [Scheduler Overview](#).

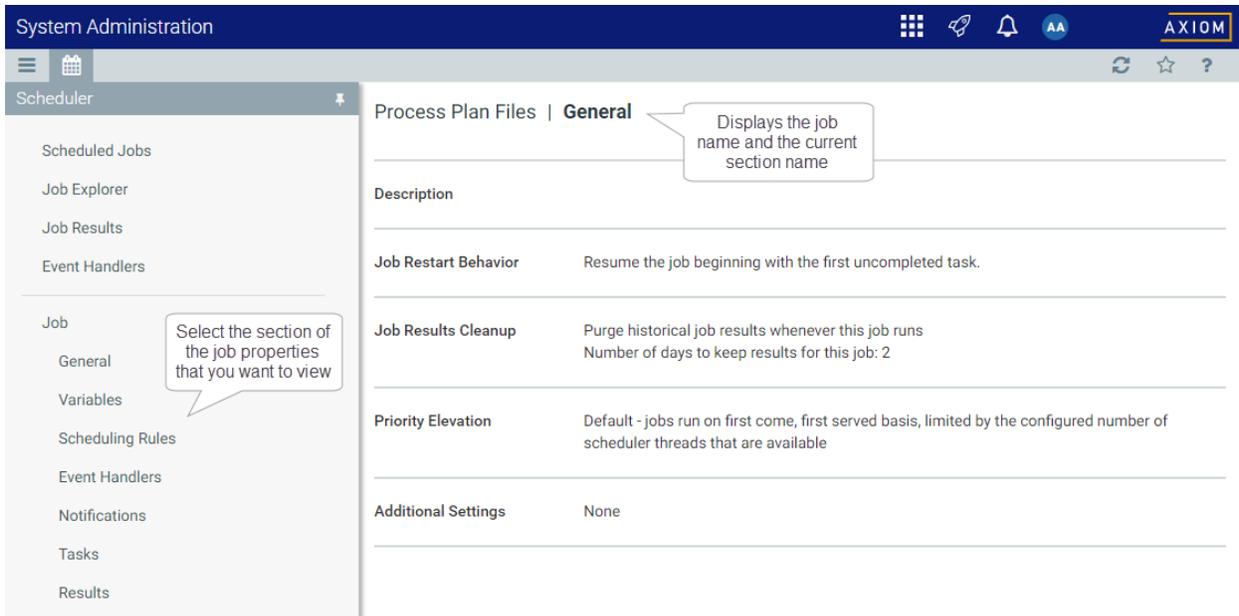
To view a Scheduler job:

1. On the [Scheduler page](#), from the Scheduler panel, select **Job Explorer**.



2. In the Job Explorer page, locate the job that you want to view. This page lists all jobs in the Scheduler Jobs Library that you have permission to access.
3. Hover your cursor over the job, then click the **View** icon  in the far right column.

The job opens, and the Scheduler panel updates to show the viewable sections of the job. You can switch between sections by selecting section names in the Scheduler panel. By default, the **General** section is shown.



Example job properties

All job properties are defined in the Desktop Client. The following is a brief overview of the job properties shown in the Web Client.

Section	Description	More Information
General	General job properties that impact the job's processing priority and processing behavior.	Job properties
Variables	Variables used by the job. <ul style="list-style-type: none"> If the job has defined variables, those variables display in the Job Variables section at the top of the page. Most likely, the tasks in the job are configured to use these variables. This typically means that the job is designed to be run using an event handler, and the necessary variable values will be passed to the job when it is triggered. The System Variables section displays the job's values for various system-defined variables. This section can help you understand who the owner of the job is, and how other system variables will resolve for the job. 	Using job variables

Section	Description	More Information
Scheduling Rules	<p>Scheduling rules to schedule jobs for future execution. If the job has an active scheduling rule, the job will be executed according to the rule (one time or recurring, depending on how the rule is configured).</p> <ul style="list-style-type: none"> • Day of Week, Hours, and Minutes specify when the job will be executed within the start / end range of the rule. An asterisk in any of these fields means "all"—for example, if Hours is set to * then the job is run every hour. • Starting On and Ending On determine the start / end range of the rule. If they are blank, then the rule has no start or end date. 	Defining scheduling rules for a job
Event Handlers	<p>If the job is designed to be run using an event handler, the event handler name is listed here. The Execute As property determines whether the job is run as the requester or the job owner when it is triggered for execution.</p>	Viewing event handlers
Notifications	<p>Notification settings for the job. The job can be configured to send email notifications when the job completes, or only when the job has errors. Variables can be used to determine the notification recipients.</p>	Setting up notifications for jobs
Tasks	<p>Tasks to be executed by the job, listed by name and task type. No other task properties are available in the Web Client. If you want to see more information about the task, you must view the job in the Desktop Client.</p>	Scheduler Task Reference
Results	<p>Detailed results of the previous job executions. Results are organized by execution ID and displayed in execution order (the most recent listed first).</p>	Viewing job results in the Web Client

► Viewing event handlers

You can view the event handlers that are defined in the system. Event handlers are used to trigger Scheduler jobs based on an event.

For example, an Axiom form can have a Button component that is configured with the RunEvent command. When a user clicks the button, the specified event name is passed to Scheduler, and any jobs associated with that event are triggered to run. Variable values can also be passed from the form to the Scheduler job as part of this process.

Event handlers are read-only in the Web Client. If you need to create, edit, or delete an event handler, this can only be done in the Desktop Client. For more information, see [Managing event handlers](#).

To view Scheduler event handlers:

- On the [Scheduler page](#), from the Scheduler panel, select **Event Handlers**.



The **Event Handlers** grid lists all of the event handlers as follows:

- **Event Name:** Name of the event handler. This is the name used in features such as `RunEvent` to trigger execution of a Scheduler job.
- **Job:** Name of the job where the event name is used. When the event is raised by a feature such as `RunEvent`, this job will be executed.
- **User:** The user identity that will be used to execute jobs triggered by the event handler. If the event handler is configured to run as the requester, then **Requester** is listed here. If the event handler is configured to run as the owner, then the owner name is listed here (either a specific user name, or **System**).

Security

Axiom Contract Management security roles

Axiom Contract Management provides four main user security roles. Following are summaries of each role. For details, refer to the following table.

CMA Admin – User with the CMA Admin security role have Administrative privileges within the application.

CMA Analyst – Users with the CMA Analyst security role have standard user level permissions within the application.

CMA User – Users with the CMA User security role have restricted rights.

CMA Scheduler – Users with the CMA Scheduler security role have access to the Axiom Scheduler and ETL tools within the Axiom.

Access to:	CMA Admin	CMA Analyst	CMA User	CMA Scheduler
Contracts	Add, delete, and modify all aspects of the contract	View only	View only	No access
Simulations	Add, delete, and modify all aspects of a simulation	View only	View only	No access

Access to:	CMA Admin	CMA Analyst	CMA User	CMA Scheduler
Claims View a Claim	<ul style="list-style-type: none"> View all tabs Add and modify Claim Tracking View Voucher 	<ul style="list-style-type: none"> View all tabs Add and modify Claim Tracking View Voucher 	View only	No access
Claims Re-calculate	All features of re-calculate	All features of re-calculate	No access	No access
Claims Track / Assign Claims	<ul style="list-style-type: none"> Create, delete, and edit user-defined categories Export reports Build filters 	<ul style="list-style-type: none"> Create, delete and edit user-defined categories Export reports and claims lists Build filters 	<ul style="list-style-type: none"> View and export Claims lists Run Reports using existing filters Export reports 	No access
Import Data	View only. We recommend contacting support prior to deleting any data from the system.	View only	View only	Create, delete, edit Axiom ETLs to facilitate loading data into Axiom tables
Reports	<ul style="list-style-type: none"> Create, view, edit reports Build Advanced filters 	<ul style="list-style-type: none"> Create new View existing Build Advanced filters 	<ul style="list-style-type: none"> View/run only Export Reports 	No access

Access to:	CMA Admin	CMA Analyst	CMA User	CMA Scheduler
Axiom Scheduler	No access to Axiom jobs	No access to Axiom jobs	No access to Axiom jobs	Create, edit, delete, and schedule Axiom jobs