



See the Complete Picture From Resource to Shipped Product

# RECONCILOR



**Reconcilor 9.9** 

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## **Overview**

Reconcilor enables mine operators to reconcile their reserve estimates and predicted versus actual production from geological model to commodity production. Reconcilor delivers rigorous and systematic analyses of resource factors across the mine value chain that drive continuous improvement to obtain better geological and grade estimates, more accurate mining predictions, improved recoveries, maximisation of the resource, and reduction in risk due to unexpected metal loss. Used by managers, geologists, metallurgists, and engineers, this comprehensive solution includes geological model reconciliation, built-in data validation, intuitive analysis features, and comprehensive reporting. By automating data imports and validation, Reconcilor enables early detection of data issues, supports informed decision-making, and ultimately helps to lower costs and increase profitability.

## **Further Information**

This document includes cumulative release notes for Reconcilor 9.9.

Release notes for other versions of Reconcilor are available via the Support Portal <a href="https://www.dataminesoftware.com/support/">https://www.dataminesoftware.com/support/</a>.





## **Reconcilor 9.9 Release Notes**

## What's New for Reconcilor 9.9

Reconcilor, developed by Datamine, is a comprehensive software solution designed to unify and enhance the insights provided by mining engineers, geologists, metallurgists, and planners. By standardising operations across multiple mining sites, Reconcilor enables advanced analysis and offers guidance for troubleshooting and optimising performance. As a commercial off-the-shelf (COTS) product, Reconcilor can be implemented without extensive customisation, offering ready-to-use functionality to improve operational efficiency.

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This **major version** update introduces several new features and improvements, aimed at enhancing the reconciliation process and overall user experience for key stakeholders. These updates provide tools to more effectively monitor site performance, allowing for early detection of issues and prompt resolution.

This is a major version update for Reconcilor. It is focused on the following new features and improvements:

- External Integration module: Users with appropriate permissions can set up an API call to the Reconcilor database for use in external software.
- **Increased precision:** Decimal places for tonnes, volume and grades on import have been increase to 8 decimal places (increased from 4dp).
- **Calendar control updates:** Automatically display current month and year rather than the last date available.
- **Quarter time period:** On the trends and model comparison screens, quarter is now available as a time period alongside day, month, year, survey period.
- Licence update: Datamine have updated their terms and conditions.



## **New Features**

### **External Integration Module**

The new Integration screen empowers authorised users to define and execute API calls on the Reconcilor data warehouse. This feature streamlines dynamic data retrieval with customisable filters and data format configurations, ensuring seamless integration with external systems.

Key Features and Functionality

#### **Period Filter**

- Filter Selection: Select the appropriate period filter to determine the data being retrieved.
- All Data Option: If the checkbox is unticked, all data for the selected measures and values will be returned.

#### **Custom Filter**

• Apply additional filters to narrow down the retrieved dataset as needed.

#### **Configure Data**

- Sources: Choose from movement, stockpile, or metric tables.
- Columns: Add dimensions from the selected source table to the query.
- Measures: Define the attributes to retrieve, such as tonnes, grade, or metal.

#### **Finalising the Dataset**

Once the dataset is configured, complete the process by accessing the "..." menu next to the configuration name:

- 1. Save As:
  - a. Save the configuration as either private or global.
  - b. Specify if the configuration should be locked or unlocked. Locked configurations can only be modified by unlocking them through the Analysis Configuration screen.

#### 2. Copy External Link:

- a. Generate a URL for use in external connector tools.
- b. The data retrieved via this link is in raw JSON format, allowing consuming clients to apply their preferred formatting.



#### **Benefits**

This structured and user-friendly approach ensures that data integration is:

- Customisable: Tailor datasets to suit specific needs.
- Efficient: Use quick links to retrieve up-to-date data without modifying saved configurations.
- Secure: Control configuration access with locking options.

The Integration feature enhances data handling efficiency, enabling smooth integration with external applications for real-time insights and decision-making.

### **Increased precision for imported data**

The precision for data imports in Reconcilor has been enhanced to support up to 8 decimal places for tonnes, volumes, and grades. Previously, the system allowed a maximum of 4 decimal places. This improvement provides greater accuracy in handling and reconciling critical mining data.

#### 1. Affected Data Fields:

- a. Tonnes: Precise tonnage measurements are now supported with 8 decimal places, ensuring minimal rounding errors during import and calculations.
- b. Volume: Enhanced precision supports more accurate volumetric measurements, particularly beneficial for reconciliation processes involving stockpiles and surveyed data.
- c. Grades: Grade data (e.g., Cu, Au) imported into the system now retains up to 8 decimal places, enabling highly detailed analysis of metal grades.

#### 2. Import Process:

- a. The increased precision applies to all data imported into Reconcilor, whether through manual uploads, automated imports, or API integrations.
- b. Existing workflows remain unaffected, ensuring backward compatibility for previously imported datasets.

#### 3. Use Cases:

- Reconciliation Accuracy: Enables more accurate reconciliation of tonnes, volumes, and grades, reducing variances caused by rounding errors.
- b. Audit and Compliance: Supports compliance with reporting standards requiring high levels of precision in mining operations.

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c. Trend Analysis: Facilitates more granular analysis of production and reconciliation trends over time.

#### 4. User Impact:

- a. Improved Data Quality: Users will notice fewer discrepancies between imported data and reported values due to rounding.
- b. Seamless Transition: No changes are required from users to benefit from this feature. Data imports with up to 8 decimal places will automatically be processed and displayed correctly.

## **Calendar Control Updates**

The calendar controls within Reconcilor have been updated to enhance usability and improve efficiency during date selection. Previously, the calendar would default to the last available date in the dataset. With this update, the calendar will now automatically display the current month and year, providing a more intuitive user experience.

#### Details of the update

#### 1. Default Display Behaviour:

- a. The calendar control will now open with the current month and year displayed as the default view.
- b. Users no longer need to scroll backwards from future dates to locate the current period.

#### 2. User Interaction:

- a. Users can still navigate to other months and years manually using the calendar's navigation controls.
- b. Selected dates will function as before, with no changes to how dates are saved or processed.

#### 3. Use Cases:

- a. End-of-Month Reporting: Users can quickly access dates relevant to the current reporting period without unnecessary scrolling.
- b. Reconciliation Workflows: This update streamlines workflows by reducing time spent navigating to the desired date range.
- c. Ad Hoc Queries: Improves the speed of selecting dates for on-the-fly queries or adjustments.

#### 4. Backward Compatibility:

a. Historical data is unaffected, and users can still navigate to future months or years if required.





## **New Time Period - Quarter**

Reconcilor now supports Quarter as a selectable time period on period filter and also as a grouping option on the trends and model comparison screens. This enhancement adds flexibility for users analysing data over larger intervals, complementing the existing options of Day, Month, Year, and Survey Period.

#### **Details of the Update**

#### 1. New Time Period Option:

- a. The Quarter time period is now available as a filtering and grouping option in:
  - 1. All analysis screen in the period filter
  - 2. Trends Screen: Analyse data trends over quarterly intervals.
  - 3. Model Comparison Screen: Compare model performance and results across quarters.
  - 4. Pivot view date shift option on columns or rows

#### 2. Automatic Calculation:

- a. Quarters are calculated based on the calendar year or financial year (Datamine consultants will configure the Quarter definition for your instance.
  - 1. Q1: January March, Q1: July September
  - 2. Q2: April June, Q2: October December
  - 3. Q3: July September, Q3: January March
  - 4. Q4: October December, Q4: April June
- b. All data within the selected quarter will be grouped and summarised accordingly.

#### 3. Use Cases:

- a. Trend Analysis: Identify quarterly trends in production, grade, and other key metrics.
- b. Model Comparisons: Evaluate performance and reconciliation metrics on a quarterly basis for better insights into seasonal or operational patterns.
- c. Pivot View: Generate summaries and reports tailored to quarterly intervals, aligning with standard business and financial reporting cycles.

#### 4. UI Integration:

a. The Quarter option is seamlessly integrated into the period filter, alongside the existing Day, Month, Year, and Survey Period options.



b. Grouping by time and quarter will dynamically update the data displayed in the trends and model comparison views.

## **Licence Update**

As part of our commitment to transparency and compliance, Datamine has updated its License Terms and Conditions. These changes aim to provide greater clarity and align with evolving legal and operational requirements.

#### **Details of the Update**

#### 1. Key Changes:

- a. Enhanced clarity in definitions and terms for improved user understanding.
- b. Updated clauses to reflect current industry standards and best practices.
- c. Inclusion of provisions related to data security, privacy, and software usage.
- d. Streamlined terms to ensure compatibility with international regulations where applicable.

#### 2. Where to Access the Updated Terms:

a. The revised terms and conditions are available on the Datamine website at:

www.dataminesoftware.com/software-license-and-subscriptionagreement

#### 3. Applicability:

- a. The updated terms automatically apply to all existing and new users of Datamine products, including Reconcilor.
- b. By continuing to use Datamine software, users agree to adhere to the revised terms.
- c. Any company that has a non-standard licence agreement will not be impacted by the updated terms.

#### 4. Communication:

- a. Users will be notified of the updated terms in application notifications.
- b. Acknowledgement of the updated terms will be required during login of this release.





## **Defect Fixes**

### **Re-handle calculation rules update**

**Issue 1:** The default rules in Reconcilor for calculating Re-handle are overly broad, encompassing movements between any stockpiles. This has resulted in Re-handle calculations incorrectly including movements between plant and port stockpiles.

**Resolution 1:** Re-handle should only account for movements between Pre-crusher Stockpiles, as determined by their membership in the 'Pre-crusher Stockpiles' Entity Group.

#### **Upgrade Instructions:**

- 1. Update Configuration:
  - a. Modify the Comparison Value Type Rule configuration to ensure that both the source and destination stockpiles for Re-handle movements must belong to the 'Pre-crusher Stockpiles' Entity Group.
- 2. Material Movements Screen Update:
  - a. Apply the same filter on the Material Movements screen to ensure Rehandle movements displayed align with the updated rules (i.e., only movements between Pre-crusher Stockpiles are considered).

**Expected Outcome:** The Re-handle value in Material Movements will now accurately include only movements between Pre-crusher Stockpiles, excluding all other stockpile movements.

### **User Log-In Event Tracking**

**Issue 1:** During User Acceptance Testing (UAT), the system logs were reviewed to identify which users had logged into the system and completed tests. However, filtering by the event "Log into the application" revealed the following issues:

- 1. The **User** column in the data grid was mostly empty, preventing effective filtering by User.
- 2. User information was available in the **Primary Subject** column but was inconsistently formatted (for example, mixed use of backslashes and forward slashes), making this filter unreliable.

#### **Resolution 1:**



- 1. Update Log Recording for "Log into the Application" Event:
  - a. Ensure the User column consistently captures the username for all "Log into the application" events.
  - b. Standardise data capture to eliminate gaps in the User field.
- 2. Standardise Formatting in Primary Subject Column:
  - a. Normalise the formatting of data in the Primary Subject column to ensure consistency (e.g., consistent use of backslashes or forward slashes).
- 3. Enhance Filtering Logic:
  - a. Update the User filter to work seamlessly with the corrected data in the User and Primary Subject columns.

**Upgrade Instructions:** No specific actions are required to benefit from this bug fix. The update will automatically be applied during this upgrade.

**Expected Outcome:** System logs will reliably display user information in the User column for all "Log into the application" events. Consistent formatting in the Primary Subject column will further enhance usability, ensuring accurate filtering and improved traceability of user activities.

## Material Type and Lithology Type Ordering on Analysis Screens

**Issue:** The Pivot View, Trends and Model Comparisons screens do not display material types or lithology types in the same order as shown in the configuration screens (Material Types and Lithology Types Management). Instead, these are displayed in the order they were entered (by ID), which can cause confusion and inconsistency.

#### **Resolution:**

- 1. Update Trends Screen Ordering Logic:
  - a. Modify the Pivot View, Trends and Model Comparison screesn to display material types and lithology types based on the configured display order defined in the Material Types and Lithology Types Management screens, rather than the entry order (ID).
- 2. Align Display Order Logic:
  - a. Ensure the screens respect any sorting rules applied in the configuration screens, such as alphabetical or custom-defined orders.





#### 3. Testing and Validation:

- a. Verify that the screens accurately reflect the configured order for material and lithology types.
- b. Test with a variety of configurations to confirm the update works across different datasets.

**Upgrade Instructions:** No specific actions are required to benefit from this bug fix. The update will automatically be applied during this upgrade.

**Expected Outcome:** Material types and lithology types on the Pivot View, Trends and Model Comparison screens will now match the display order specified in the configuration screens, providing a consistent and intuitive user experience.



## **More Information**

The following general resources are available to help you use your product:

- Integrated Online Guidance: your product online guidance (information icon in top right of the User Interface Shell) is your first stop for assistance and contains a wealth of information, including the latest information about this version.
- Datamine Document Portal: Home to the Reconcilor online help, release notes and system requirements (through online help link). <u>https://docs.dataminesoftware.com/Reconcilor/</u>
- Online video tutorials: check out our YouTube channel for video tutorials for step-by-step guides to some of our more complex features. <u>https://www.youtube.com/@DatamineSoftware/search?query=reconcilor</u>
- **Support Portal:** The Datamine Support Portal allows you to get in touch with our global support teams for direct assistance with any software related issues. <u>https://datamine.freshdesk.com/en/support/login</u>
- The support portal also hosts the:
  - Reconcilor FAQ's
     https://datamine.freshdesk.com/en/support/solutions/Reconcilor/FAQ
  - Reconcilor Basic Troubleshooting
     <a href="https://datamine.freshdesk.com/en/support/solutions/Reconcilor/Basic Troubleshooting">https://datamine.freshdesk.com/en/support/solutions/Reconcilor/Basic Troubleshooting</a>
- Latest version: The latest 9.8 release version can be upgraded by contacting your Datamine Reconcilor consultant.

Release notes are available at <a href="https://docs.dataminesoftware.com/Reconcilor/index.htm">https://docs.dataminesoftware.com/Reconcilor/index.htm</a>





## **Feedback and Support**

We value your feedback and are committed to continuously improving our product. If you encounter any issues or have suggestions for further enhancements, please contact our support team, and we will be glad to assist you.

Thank you for your ongoing support and trust in Reconcilor. We strive to provide you with a seamless and efficient experience, and this release is a testament to our dedication to delivering excellence in data management.

Sincerely,

The Reconcilor Team



## **Resolved Tickets – Reconcilor 9.9**

The following tickets have been resolved since the last released version of Reconcilor.

For more information on individual cases, please refer to your online guidance, or contact your local support representative.

#### **New Feature**

- External Integration Module
- Update EULA page to use new Datamine Terms and Conditions
- Report Designer POC
- Increase the precision of tonnage/grade imports
- Trends/Models add timescale by Quarter
- Designation (ore/waste) filter required on Grade Block List Continuum -Viewing Comparisons
- Pivot View new open/closed stockpile status dimension and custom filter in stockpile table
- Application Settings / Approvals read only
- PowerBI Spike solution
- Add new 'PreserveLatest' Mine Plan Import Activation Mode
- Calendar for month defaults too far into future
- View Grade Block attributes
- Expand Sentry monitoring to cover additional events

#### Enhancement

- .net 7.0 deprecated from ms agent
- Material Movement dataset in diagram drop down icon
- View Grade Block Material type ordering on table
- Fix ongoing failures of the Analysis Modules Unit Tests pipeline
- Add Microsoft Word as an output option for reports
- Role groups remove Legacy Rec 8 roles from UI
- Missing system event types for recent management-based APIs
- Help documentation updates





#### **Defect Fix**

- Pivot view ordering of material / lithology types
- Trends charts x-axis label
- Material Type / Lithology type ordering on analysis screens
- Movement calculator duplicates movements for insert events
- Pivot view incorrectly reports that the query configuration is incompatible
- When Creating a Stockpile Adjustment using attributes instead of grades it assigns the balance attributesetids wrong
- Stockpile Analysis Total weighted avgs breaks when using attributes
- Fact type generation incorrectly assigns movement types
- ComparisonValue ETL fails for time periods containing >9999 shifts
- Configuration panel global and private configs visible to all
- 9.9 Error while logging API call to the database
- Pivot grade colouring sourcing wrong colours
- 9.8 Pivot view chart colour within control limits
- Engine is automatically starting on upgrade
- Maintenance health check last run not updating
- Attribute weighting quantity multipliers use incorrect ppmu
- Pivot View configurations containing a "Date Shift Id" custom filter trigger server errors
- Mine Plan Values that overlap approval periods do not pro-rata in the warehouse
- Material Movements screen not using mine plan value location tree for source location filtering when no resolved source entity
- Analysis screens do not determine the default activated mine plan upon reloading
- Pivot View 'Period' checkbox doesn't work correctly on first use after logging in
- System Log storage and performance issues
- Service queue deletions sometimes trying to delete too many at once, causing the database to lock up
- Grade Block Module grade block name fields
- System Logs missing user for raised events



- Analysis screen period filter moves back one day after refreshing/returning to page
- Material Movement crusher received metric unticked
- 9.7 Material Movement monthly plans
- Investigate adding tags to sentry logs
- Re-importing mine plans invalidates analysis screen configurations
- Login system log event does not consistently capture user name
- Default Import\_Sync\_Location\_Level settings are not appropriate for most sites
- Re-handle Metric is not calculated correctly
- Add weighting quantity multiplier attribute calculations to pivot view
- Overlapping Mine Plans can be incorrectly activated when imported at the same time
- Unset filter location error on Spatial Analysis is unclear
- Configurations Save as a blank config
- Redact import parameters section when adding a scheduled import job without parameter requirements
- Pivot stockpile cube queries adjustments as balances



## **Reconcilor 9.8 Release Notes**

## What's New for Reconcilor 9.8

Reconcilor, developed by Datamine, is a comprehensive software solution designed to unify and enhance the insights provided by mining engineers, geologists, metallurgists, and planners. By standardising operations across multiple mining sites, Reconcilor enables advanced analysis and offers guidance for troubleshooting and optimising performance. As a commercial off-the-shelf (COTS) product, Reconcilor can be implemented without extensive customisation, offering ready-to-use functionality to improve operational efficiency.

This **major version** update introduces several new features and improvements, aimed at enhancing the reconciliation process and overall user experience for key stakeholders. These updates provide tools to more effectively monitor site performance, allowing for early detection of issues and prompt resolution.

This is a major version update for Reconcilor. It is focused on the following new features and improvements:

- **Global reconciliation comparisons**: New options to define reconciliation comparisons across the system, with customisation available for metrics and colours.
- **Reconciliation comparison tolerances and control limits**: Enhanced ability to define and configure tolerances and control limits for more accurate comparisons.
- **Stockpile analysis enhancements**: Both raw and adjusted datasets are now available for more precise analysis.
- **Crusher Feed**: Additional categorical attributes can be selected to further refine data analysis.
- Material Type/Lithology Type group management: Users can now create and manage groups directly through the user interface.
- **Menu enhancements**: A new menu for comparisons improves navigation and usability.
- **Mine Plan activation**: A new filter has been added to distinguish active and inactive mine plans.
- **Contractor name in Pivot View**: Contractor names are now visible in the Pivot View movement table, adding more context for data analysis





## **New Features**

### **Defining global reconciliation comparisons**

The reconciliation comparisons that were available on the Continuum are now defined in a new menu item called comparisons. By defining the required comparisons in this screen, the continuum, model comparison, trends and pivot view modules will directly reference this list in the appropriate filters. Users can no longer set these up dynamically on the Continuum.

| Add Comparison               |              |   |                              |                              |                       |                       |                   |                 |              |            |
|------------------------------|--------------|---|------------------------------|------------------------------|-----------------------|-----------------------|-------------------|-----------------|--------------|------------|
| Comparison Name              | Abbreviation | T | From Metric                  | To Metric <b>T</b>           | Tonnes & Volume Com 🝸 | Attribute Comparisons | Metal Comparisons | Y Chart Colour  | Order Number | † <b>T</b> |
| Mine Delivered to Plant feed | MD - PF      | ŀ | Mine Delivered               | Plant Feed                   | 0                     | $\oslash$             | $\oslash$         | #95edb8         | 1            |            |
| Res - Gcm                    | Res - Gcm    | F | Resource Model (Survey)      | Grade Control Model (Survey) | $\otimes$             | $\oslash$             | $\oslash$         | 🗐 #bab7b7       | 2            |            |
| Res to GC                    | RtG          | F | Resource Model (Survey)      | Grade Control Model (Survey) | $\otimes$             | $\oslash$             | $\oslash$         | <b>#7</b> ed988 | 4            |            |
| GC to Mining                 | GtM          |   | Grade Control Model (Survey) | Mine Production              | $\oslash$             | 0                     | $\oslash$         | #cb8f8f         | 5            |            |
| MP - CR                      | MP - CR      |   | Mine Production              | Crusher Received             | $\odot$               | $\oslash$             | $\odot$           | #d5cc91         | 7            |            |
| PF - MD                      | PF - MD      | F | Plant Feed                   | Mine Delivered               | $\otimes$             | $\oslash$             | $\oslash$         | #e14d4d         | 8            |            |

By adding a comparison (top left control), a user with appropriate permissions will be able to define a new comparison and specify which measures (tonnes, attribute and/or metal) it is applicable for the image below. The chart colour selected will ensure all users view the comparison in the same colour across different modules. The chart colour can be updated at any time through the menu item Configuration/Colours.





#### Add Comparison

| Save 🛞 Cancel   |                               |     |   |
|---|-------------------------------|-----|---|
| Comparison Name*                                      | Resource to Mine Production   |     | ✓ Valid for tonnes & volume comparisons |
| Comparison Abbreviation*                              | Res to MP                     |     | ✓ Valid for attribute comparisons       |
| From Metric*  | Resource Model (Survey)       | × Ŧ | Valid for metal comparisons             |
| To Metric*  | Mine Production               | × v |   |
| Chart Colour  |                               |     |   |
| Order Number*   | 1                             | \$  |   |
| and M <sub>F</sub> denotes "To Metric" and            | l "From Metric" respectively: |     |   |
| ual Difference ∆ = M <sub>T</sub> - M <sub>F</sub>    |                               |     |   |
| etor = $\frac{M_T}{M_F}$                              |                               |     |   |
| rcent Difference = $\frac{M_T - M_F}{M_F} \times 100$ | O OR $\frac{M_T}{M_F} - 1$    |     |   |

**Note:** The comparison calculation can use either the earlier or later metric on the mine value chain as the denominator. There are some notes at the bottom of the page to denote how the calculation is derived.

#### Viewing comparisons in Continuum

The filters have been updated in the edit comparisons box. Select the comparisons from the list and then ensure you select an attribute in the table to show the comparison ribbon for that attribute.





#### Viewing comparisons in Model Comparison and Trends

The configure data and display options on the right tool bar have been updated to allow users to display the saved comparisons.

The chart axes require either a comparison (factor or percentage change) or a value and allow selection of definitive attributes to plot.

| Configure Data             | ×               |
|----------------------------|-----------------|
| 😲 Apply 🕑 Apply & Clo      | se              |
| Left Axis Type             | Right Axis Type |
| Comparison(s)              | Value(s)        |
| Left Axis Unit             | Right Axis Unit |
| factor × 💌                 | g/t × ▼         |
| Left Measures              | Right Measures  |
| All items are selected 🗙 💌 | Au (g/t) 🛛 🛪 🔻  |

Selecting the data to include in the datasets is determined by the category and other filters (dynamic filtering), which is unchanged. The upgrade is that the only comparisons returned in the list will be those that are relevant to the site, that is, they have been set up under the comparisons screen.

| 0 | Category  | Raw or Adjusted |   |
|---|---|-----------------|---|
|   | Block Modelling 🗙 💌                                   | Select          | - |
| E | Block Model Type                                      |                 |   |
|   | Resource Model  | ×               | Ŧ |
|   | Select  |                 | - |
| 5 | Select<br>Data to Include                             |                 | * |
| E |   |                 | + |
|   | Data to Include                                       |                 | * |
|   | Data to Include<br>Select                             |                 | * |
|   | Data to Include<br>Select_<br>Resource Model (Survey) |                 | * |

There are some new configure display options that are available: chart type, colours, control limits and table control limit colours.





| Left axis chart type    |              | Right axis chart ty | pe  |
|-------------------------|--------------|---------------------|-----|
| Line                    | *            | Column              | v   |
| Chart colour preference | ÷            |                     |     |
|                         |              |                     |     |
| Auto                    |              |                     | ~   |
|                         | ntrol limits | or                  | × * |
| Include comparison co   |              |                     |     |

#### Viewing comparisons in Pivot View

The pivot view has had some enhancements in this version 9.8 to allow the comparisons that are available in other analysis modules to be shown for analysis here.

There is now a configure data panel and a configure display panel on the configure toolbar on the right. This helps declutter the toolbars and guide the user to building a query easier.

Sources are now: Movement, Stockpile and Metric (renamed from Comparison)

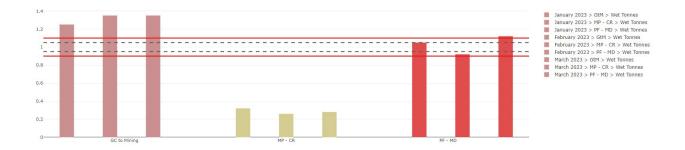
By selecting the metric name or metric abbreviation as a row or column, the comparisons that were set up are now available for analysis.

| Period 01 J    | Jan 2023 - 31 Jan 2023 - 01 Ma | ar 2023 - 31 Mar 2023 🦄 | Custom Metric Nam | ne | × • | Values selected              | × A |
|----------------|--------------------------------|-------------------------|-------------------|----|-----|------------------------------|-----|
| ustom Filters: | Metric Name : 6 selected       | Clear All Custom F      | ilters            |    |     | Search                       |     |
|                |                                |                         |                   |    |     | Clear Select All             |     |
| =              |                                |                         |                   |    |     | Resource Model (Survey)      | -   |
| Month Name 🔻   | Metric Abbreviation 🔻          | Metric Name 🔻           | Wet Tonnes        |    |     | Grade Control Model (Survey) |     |
| January 2023   | GtM                            | GC to Mining            | 1.25              |    |     | Mining Model (Survey)        |     |
|                | MP - CR                        | MP - CR                 | 0.32              |    |     | Mining Model (Haulage)       |     |
|                | PF - MD                        | PF - MD                 | 1.05              |    |     | Mine Production              |     |
| ebruary 2023   | GtM                            | GC to Mining            | 1.35              |    |     | Mine Production (Adj)        | -   |
|                | MP - CR                        | MP - CR                 | 0.26              |    |     |                              |     |
|                | PF - MD                        | PF - MD                 | 0.92              |    |     |                              |     |
| March 2023     | GtM                            | GC to Mining            | 1.35              |    |     |                              |     |
|                | MP - CR                        | MP - CR                 | 0.28              |    |     |                              |     |
|                | PF - MD                        | PF - MD                 | 1.12              |    |     |                              |     |

Users can also colour up the table using the tolerances defined in the menu item **Configuration/Comparison Calculations**. The image below shows a table and chart with tolerances turned on for both.



| od 01 Jan | 2023 - 31 Jan 2023 -           | 01 Mar 2023 - 31 Ma | r 2023 🔻 Cus   | tom Filter Dime | nsions        | 2          | Filter Dime |            |            | <b>T</b>   |
|-----------|--------------------------------|---------------------|----------------|-----------------|---------------|------------|-------------|------------|------------|------------|
|           |                                |                     |                |                 |               |            |             |            |            |            |
| Ме        | etric Name : 6 select          | ed × Clear All 0    | Custom Filters |                 |               |            |             |            |            |            |
|           |                                |                     |                |                 |               |            |             |            |            |            |
|           | Month Name 🕨                   | January 2023        |                |                 | February 2023 |            |             | March 2023 |            |            |
|           |                                |                     | MP - CR        | PF - MD         | GtM           | MP - CR    | PF - MD     | GtM        | MP - CR    | PF - MD    |
| Metr      | ric Abbreviation 🕨             | GtM                 | MP+CR          | Pr - MD         | 000           |            |             | our.       |            | 11 110     |
|           | ric Abbreviation ►<br>: Name ▼ | GtM<br>Wet Tonnes   | Wet Tonnes     | Wet Tonnes      | Wet Tonnes    | Wet Tonnes | Wet Tonnes  | Wet Tonnes | Wet Tonnes | Wet Tonnes |
| Metric    |                                |                     |                |                 |               |            |             |            |            |            |
| Metric    | Name v<br>Mining               | Wet Tonnes          |                |                 | Wet Tonnes    |            |             | Wet Tonnes |            |            |



## Defining the reconciliation comparison tolerances and control limit styles

The **Comparison Calculations** screen in Reconcilor is where the calculation type, number of decimal places, chart control limits and styles of the lines on the chart are configured. Charts in the Comparison Calculations screen displays a list with data shown in the image below.

| Comparison Cal         | culations      |                     |                |                         |                         |                         |                         |                     |   |
|------------------------|----------------|---------------------|----------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------|---|
| Save 🛞 Reset           |                |                     |                |                         |                         |                         |                         |                     |   |
| Click any row below to | edit           |                     |                |                         |                         |                         |                         |                     |   |
| Measure Type           | Measure        | Calculation Type    | Decimal Places | 2nd Upper Control Limit | 1st Upper Control Limit | 1st Lower Control Limit | 2nd Lower Control Limit | Style Configuration | T |
| Measure                | Dry Kilotonnes | Disabled            |                |                         |                         |                         |                         |                     |   |
| Measure                | Dry Tonnes     | Percent Difference  | 0              | 15                      | 10                      | -10                     | -15                     | Reg 9.8 1           |   |
| Measure                | Tonnes         | Disabled            |                |                         |                         |                         |                         |                     |   |
| Measure                | Volume         | Actual difference ∆ | 3              | 2.000                   | 1.000                   | 0.500                   | 0.400                   | Reg 9.8             |   |
| Measure                | Wet Kilotonnes | Disabled            |                |                         |                         |                         |                         |                     |   |
| Measure                | Wet Tonnes     | Factor              | 2              | 1.10                    | 1.05                    | 0.95                    | 0.90                    | Default             |   |
| Grade                  | Agg/t          | Percent Difference  | 0              | 15                      | 10                      | -10                     | -15                     | Reg 9.8             |   |
| Grade                  | Aa ka          | Disabled            |                |                         |                         |                         |                         |                     |   |

Setting a comparison type as a percent difference or factor will populate the measure/grade/attribute in the control limit fields. These are editable and are suggestions only.

If only one set of chart control limits is required, then leave the other set blank.

The decimal places (up to 4) are configurable to ensure precision is maintained where required.





Changing a calculation type once initially selected will not clear the control limit fields, they will need to be manually updated.

The save will only apply when actioned. To undo any changes, made prior to saving, select Reset.

All style configurations will be set to default and will require manual change to a pre-configured style that has been added through the Control Limit Styles screen.

## Full dimension (metrics and comparisons) colour customisability

The **Colours** screen allows a user with the appropriate permissions to configure the colour across a range of categories (metrics, comparisons, attributes, etc).

The colours configured will be used across all charts shown in the analysis modules. This is the central place to colour, rather than on each individual screen so that colour uniformity exists across all charts and for all users.

The Colours screen displays a list with the following data as shown in the image below.

| Color | ur Configuration     |                              |   |        |   |          |    |
|-------|----------------------|------------------------------|---|--------|---|----------|----|
| 🗟 Sa  | ve 📋 Remove Selected |                              |   |        |   |          |    |
|       | Category † <b>Y</b>  | Category Value               | T | Colour | T | Status   | τ. |
|       | Block Model Type     | Custom Model Type 3          |   |        | A | Assigned |    |
|       | Block Model Type     | Grade Control Model          |   |        | A | Assigned |    |
|       | Block Model Type     | Mining Model                 |   |        | A | Assigned |    |
|       | Block Model Type     | No Model Type                |   |        | A | Assigned |    |
|       | Block Model Type     | Reserve Model                |   |        | A | Assigned |    |
|       | Block Model Type     | Resource Model               |   |        | A | Assigned |    |
|       | Block Model Type     | Rill Model                   |   |        | A | Assigned |    |
|       | Comparison           | GC to Mining                 |   |        | A | Assigned |    |
|       | Comparison           | Mine Delivered to Plant feed |   |        | A | Assigned |    |
|       | Comparison           | MP - CR                      |   |        | A | Assigned |    |
|       | Comparison           | PF - MD                      |   |        | A | Assigned |    |
|       | Comparison           | Res - Gcm                    |   |        | A | Assigned |    |

**Note: Remove Selected** in top filter will remove the colour assigned to the category value and change the status to Unassigned.

Colours that were defined in the material type of lithology type screens will be shown in the colour configuration screen. They can be changed in either screen.

Use the column filter in the category or status column to easily navigate the comprehensive list.





## **Stockpile Analysis - raw and adjusted datasets available**

The stockpile analysis screen now provides the option to view raw balances or adjusted balances.

| Configure Display         | × |
|---------------------------|---|
| 😲 Apply 🛛 Ə Apply & Close |   |
| View Mode                 |   |
| Chart and table           | v |
|                           |   |
| Raw or Adjusted           |   |
| Raw or Adjusted<br>Raw    | * |
| Raw or Adjusted Raw Raw   | * |

**Note:** that the adjusted balances are NOT adjustments, rather a rescaled "adjusted" value based on another value (that is,crusher weightometer value is being used to rescale parcels of reclaimed stockpile material).

The adjusted dataset is a custom dataset created by Datamine consultants for your site. Not all sites have an adjusted dataset, in which case raw will be the same as adjusted.

### **Crusher Feed - Categorical attributes** available

All attributes available in your instance of Reconcilor, will now be available to select in the secondary measure filter of the crusher feed screen.

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| Configure                      | ×                                |
|--------------------------------|----------------------------------|
| 🖸 Apply 🛛 Apply & Close        |                                  |
| Mine Plan Type                 |                                  |
| Weekly Plan                    | × •                              |
| Mine Plan                      |                                  |
| Default Activated              | Ŧ                                |
| Primary Measure                |                                  |
| Wet Tonnes                     | v                                |
| Secondary Measure              |                                  |
|                                |                                  |
| Au g/t                         | × •                              |
| Au g/t<br>Direct Feed Grouping | × ¥                              |
|                                | × <del>*</del><br>× <del>*</del> |
| Direct Feed Grouping           |                                  |

## Material type/ Lithology type Group creation/management in UI

There are two new menu items under **Reference Data** whereby users with appropriate permissions can manage (add, edit, delete) material type or lithology type groups.

To create a new material type group, navigate to the screen and select **Add material type group**. This will allow you to enter a name and assign a colour (for charting) to the group.

Add Material Type Group

| 🗟 Save | ⊗ Cancel |        |            |
|--------|----------|--------|------------|
|        |          | Name*  |            |
|        |          | Colour | Unassigned |





To assign membership to the material type group, navigate to material types and on the material type name, select the edit icon. This will display the edit material type screen where you can update the group. Note that a material type or lithology type can only belong to one group.

| 🗟 Save | 📅 Delete  | ⊗ Cance    | el.        |   |   |
|--------|-----------|------------|------------|---|---|
|        |           | Name*      | High Grade |   |   |
|        | Alternati | ive Name   | 5          |   |   |
|        | Abb       | previation | HG         |   |   |
|        |           | Group*     | Material   | × | • |
|        |           | Colour     | Unassigned |   |   |
|        | Order     | Number*    | 1          |   |   |
|        | Des       | ignation*  | Ore        | × | ¥ |
|        |           | Status*    | Active     | × | * |

## **Updated menu item for comparisons**

The configuration menu now includes all comparison setups, while the new reference data menu allows updates to essential reference information such as material types, lithology, crushers, plants, and more. These updates aim to maintain an intuitive and user-friendly interface.

## Mine Plan activation - new filter for active/inactive mine plans

The plan activation screen now provides a new filter for all, active only or inactive only plans. Ensure you apply the filter for the appropriate data to return.

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| 🗑 Save | <b>D</b> Reset |   |           |     |  |      |                 |     |                    |                    |               |   |
|--------|----------------|---|-----------|-----|--|------|-----------------|-----|--------------------|--------------------|---------------|---|
| Period | 2019 - 2021    | * | Location: | All |  | *    | Mine Plan Type: | 3MP | *                  | Activation Status: | Inactive Only | v |
| ۹.     |                |   | 2019      |     |  | 2020 |                 |     | All<br>Active Only |                    |               |   |
|        |                |   |           |     |  |      |                 |     |                    |                    | Inactive Only |   |

## **Contractor name available in Pivot View movement table**

When using the pivot view and the movement table, under the dimension group of "movement" the contractor name is now available to display. The contractor name is also available as a custom filter.

| Configure Data            | × |
|---------------------------|---|
| 🕐 Apply 🛛 📎 Apply & Close |   |
| Sources                   |   |
| Movement                  | * |
| Columns                   |   |
| No selection              |   |
| Select dimensions         | * |
| Search                    |   |
| Clear Select Filtered     |   |
| ∧ Movement                | * |
| Contractor Name           |   |
| Control Point Name        |   |
| Movement Type             |   |
| Raw Destination           |   |
|                           |   |

RECONCILOR



| Pivot View - [ | Default Edited                 | ]                      |           |                    |             |    |
|----------------|--------------------------------|------------------------|-----------|--------------------|-------------|----|
| Period 01:     | Jan 2023 - 31 Jan 2023 - 01 Ma | r 2023 - 31 Mar 2023 🔻 | Custom    | Filter Dimensions  |             | Fi |
| =              |                                |                        |           | Approval Status    | 1 Alexandre |    |
| Month Name 🔻   | Metric Abbreviation 🔻          | Metric Name 🔻          | Wet Tonne | Contractor Name    |             |    |
| January 2023   | GtM                            | GC to Mining           | 1         | Control Point Name |             |    |
|                | MD - CD                        | MD - CD                | 0         | Data Shift Id      |             |    |



## **Defect Fixes**

# Export all – nonresponsive on material movement table and view grade block table

**Issue 1:** Since the 9.7.0 release, the "export all" function on the material movement table and the View Grade Block / Block Survey table has been nonresponsive.

**Resolution 1:** The export all option has been reactivated and will export all records, including >1000 with full precision. Users can round values in csv/excel.

**Upgrade Instructions:** No specific actions are required to benefit from this bug fix. The update will automatically be applied during this upgrade.

## Continuum performance degradation when attributes are selected

**Issue 1:** An issue was raised regarding the degradation of performance in the continuum when attributes are selected. It's important to note that not all sites will utilize attributes.

**Resolution 1:** This version has retained the performance on the continuum, regardless of whether a grade or attribute is selected.

**Upgrade Instructions:** No specific actions are required to benefit from this bug fix. The update will automatically be applied during this upgrade.

## **Pivot View charts**

**Issue:** When the table and chart were selected in the pivot view, the chart appeared squashed at the bottom of the screen, leaving a large blank space between the table and chart that could have been better utilised.

**Resolution:** The margins on the charts have been minimised to assist in the chart controller using the space available to display the chat.

**Upgrade Instructions:** No specific actions are required to benefit from this bug fix. The update will automatically be applied during this upgrade.



## **More Information**

The following general resources are available to help you use your product:

- Integrated Online Guidance: your product online guidance (information icon in top right of the User Interface Shell) is your first stop for assistance and contains a wealth of information, including the latest information about this version.
- Datamine Document Portal: Home to the Reconcilor online help, release notes and system requirements (through online help link). <u>https://docs.dataminesoftware.com/Reconcilor/</u>
- Online video tutorials: check out our YouTube channel for video tutorials for step-by-step guides to some of our more complex features. <u>https://www.youtube.com/@DatamineSoftware/search?query=reconcilor</u>
- **Support Portal:** The Datamine Support Portal allows you to get in touch with our global support teams for direct assistance with any software related issues. <u>https://datamine.freshdesk.com/en/support/login</u>
- The support portal also hosts the:
  - Reconcilor FAQ's
     https://datamine.freshdesk.com/en/support/solutions/Reconcilor/FAQ
  - Reconcilor Basic Troubleshooting
     <a href="https://datamine.freshdesk.com/en/support/solutions/Reconcilor/Basic Troubleshooting">https://datamine.freshdesk.com/en/support/solutions/Reconcilor/Basic Troubleshooting</a>
- Latest version: The latest 9.8 release version can be upgraded by contacting your Datamine Reconcilor consultant.

Release notes are available at <a href="https://docs.dataminesoftware.com/Reconcilor/index.htm">https://docs.dataminesoftware.com/Reconcilor/index.htm</a>







## **Feedback and Support**

We value your feedback and are committed to continuously improving our product. If you encounter any issues or have suggestions for further enhancements, please contact our support team, and we will be glad to assist you.

Thank you for your ongoing support and trust in Reconcilor. We strive to provide you with a seamless and efficient experience, and this release is a testament to our dedication to delivering excellence in data management.

Sincerely,

The Reconcilor Team



## **Resolved Tickets – Reconcilor 9.8**

The following tickets have been resolved since the last released version of Reconcilor.

For more information on individual cases, please refer to your online guidance, or contact your local support representative.

#### **New Feature**

- Full dimension colour customisability
- Allow the use of Windows credentials to install and run Reconcilor
- Material/Lithology Type Groups Users to create and manage
- Comparison Management module
- Comparison Calculations
- Comparison Control Limit Colour Settings
- Continuum Viewing Comparisons
- Additional Ordering of comparisons and metrics setting
- Continuum Ordering of comparisons and metrics
- Trends Ordering of comparisons and metrics
- Pivot View- Ordering of comparisons and metrics

#### Enhancement

- Relocate Reconcilor UI modules to Reconcilor repository
- Stockpile Analysis Raw and Adjusted
- Crusher Feed categorical attributes
- Data exports in pivot view retain the format (decimal places) as shown in the UI
- Mine Plan Activation Screen New 'Activation Status' filter
- Exponentially back off the exceptions being raised by Reconcilor
- Contractor Name dimension missing from Pivot View
- Application settings / Reconcilor 8 compatibility hide
- Trends/Model comparison Configure Comparisons
- Trends/Model comparisons View Comparisons
- Pivot View Configure Comparisons
- Pivot View Display Comparisons



- Reconcilor should add missing warehouse FactTypes automatically
- Additional Display Options for Trends Screen
- Missing grouping options on Mining Analysis Screen
- Enforce validation when attempting to delete referenced data related to comparisons
- Trends colour preferences
- Pivot View Add comparisons to metric type dimension
- Remove functionality related to Pivot Dimension Colour
- Restructure menu items under Configuration
- Move Crusher Feed Warehouse to Crusher Feed analysis route and remove old screen
- Help documentation updates

#### **Defect Fix**

- 9.5.1 vm-rec-test:8000 System Settings Application Settings Space is missing in the Continuum Settings screen
- 9.5.1 vm-rec-test:8000 Data Analysis Pivot View Operation Failed error appears when the Custom value is 'Mine Plan Start Date' / 'Mine Plan End Date'
- 9.6 vm-rec-test2:8100 System Settings Import Schedules Application allows the user to schedule a job with negative minutes
- Cowal Bridging Haulage Import causing duplicate grades
- 9.6 vm-rec-test:8000 System Settings Import Schedules Unable to navigate to View Schedule screen, when the minutes are in negative
- 9.6 vm-rec-test:8000 System Settings Import Schedules Incorrect validation appears though the parameter is not a mandatory field
- 9.6 vm-rec-test:8000 System Health Import Health Issues with Last recent Activity
- 9.6 vm-rec-test:8000 Stockpiles Stockpile Management Application goes into processing mode while adding a new stockpile
- 9.6 vm-rec-test:8000 Data Analysis Model Comparison Operation Failed error appears when the Designation value is blank
- 9.6 vm-rec-test:8000 Data Analysis Continuum Operation Failed error appears when the Designation value is blank
- 9.6 vm-rec-test:8000 Data Analysis Continuum Percent Change for Ag g/t, S% is showing incorrectly between Resource model and Grade Control Model



- 9.7 vm-rec-test2:8100 Stockpiles Stockpile Management Validation error appears in the Edit Stockpile screen, when Lithology Type is blank
- Pivot View (New) Difficult to select Values due limited vertical real estate within configuration panel
- Data exports Current View only to export only what is visible in UI table
- Data exports Export All will return all table values with full precision
- View Grade Block Mining Activity table totals missing
- 9.7 vm-rec-test2:8300 Data Analysis Pivot View No validation appears when the period is selected as one year, also data does not display for the selected period
- Bug in warehouse ETL Processing when stockpile imported with no grades
- Continuum incorrectly displays grades that are configured with four decimals places
- 9.7 vm-rec-test2:8300 Data Analysis Material Movement Export All option is not working
- Right axis attributes not included in Trends / Model Comparison data table
- 9.7 vm-rec-test2:8300 Data Analysis Model Comparison legend icons are not in line with labels
- 9.7 vm-rec-test:8500 System Health Data Issue Trends Survey period dates are showing incorrectly on click Save link
- 9.7 vm-rec-test:8500 System Settings Import Schedules Unable to update empty schedule
- 9.7 vm-rec-test:8500 Configuration Control Points Duplicate control point validation appears incorrectly in the management grid
- 9.7 vm-rec-test:8500 System Health System Logs Column filters are not working in the grid
- 9.7 vm-rec-test:8500 Stockpiles Stockpile Management Last Adjustment (Shift) value is not populated
- 9.7 vm-rec-test:8500 Grade Block View Grade Block Operation Failed error appears when the user clicks on the 'Export All' option in the Block Survey table
- Crusher Feed or Mining Analysis queries without groupings and the hide unknown display option generate errors
- Enforce consistent colour interpretation with application settings
- Continuum performance is severely impacted when attributes are selected
- Stockpile Analysis activity chart balance is disappearing at intervals



- Comparison calculation data cached by measures API call
- Imports Exception has been thrown by the target of an invocation.
- Comparison calculations pre-populate table
- Pivot view charts are too small when chart and table is selected
- Removed comparison values still populated by dacpac
- Analysis query location filters on batch instead of fact transaction
- Pivot view pro-rata calculations not calculating grades or attributes correctly
- Unexpected reports of incompatible pivot query errors
- Model Cell Attribute import template fields incorrect



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