1 EnviroSys release notes: version 9.2 (September 2023)

1.1 Highlights

EnviroSys version 9.2 has been released to address change requests and fixes. This release includes all previous changes and fixes from the previous release (9.1.5).

1.2 New features

Data Loading

EnviroSys version 9.2 introduces new and enhanced features for:

- Mapping issues for Test Methods and Sample Points
- Managing Data Load feeds.

Sample Point mapping

The new Sample Point mapping feature streamlines configuration and review of data feeds with location name issues. Data Loads will use these mappings when matching Sample Points as part of processing a file. Mappings can also be created to ignore invalid values or values that are not applicable.

Sample Point mapping enhancements include:

- A new screen to search and maintain Location mapping names to Sample Points
- Sample Point mappings can be added for the applicable Analyst
- **Ignore always** mapping option to not load invalid location names.

Test Method mapping

The Test Method mapping feature streamlines configuration and review of data feeds with parameter/analyte naming issues.

Test Method mapping enhancements include:

- A new Test Method mapping screen

- Test Method mappings can be added for the applicable Analyst and Data Type

- **Ignore always** mapping option to not load invalid parameter/analyte names.

Data Input Console

The Data Input Console is now also accessible from the **Administration** menu, as well as from the Global menu.

The following improvements have been made in the **Review** tab of Data Loads:

- Data Loads in **Awaiting Review** status:

  ○ Will load *valid* records immediately; the review of unmatched Locations/Test Methods can then be performed

  ○ Can be unloaded or reloaded

- Use the **Ignore** or **Map** to future data load options to create mappings that will be applied to other Data Loads as part of the review

- Reactivate inactive Locations/Test Methods as part of the review

The following improvements have been made when viewing Data Loads:

- Additional header information, including Duration, Sample/Result count, Type (of format), Site, Analyst, Auto create Sample Points, Use Test Method mappings, Load if errors, Update results
- Improved **Logs** tab, including additional timing steps and when mappings have been used.

Security

Enhancements to EnviroSys security include:

- EnviroSys login method now supports multi-factor authentication (MFA) using an authenticator application. It can be used for the online and mobile applications and is enabled using the ENABLE_MFA_ENVIROSYS_ LOGIN system parameter. Users will be prompted on the next login to configure the authenticator application using a QR code.
- Administrators can reset MFA for a user when required.
- Updated the Office 365 login using the Microsoft Authentication Library (MSAL).

> This requires an updated Azure AD configuration (see the **acQuire knowledge base** for more information).

- Application logging and dependencies have been upgraded to use log4j2 2.20.0 from log4j.

1.3   Other improvements

Functionality	Description
Action Management	Added the ability for Standard users to perform operations on Actions.
Action Management	Improved the traceability on activities for Actions so that users cannot delete or edit activities that are system-generated, reassigned, completed or withdrawn.
Administration and Settings	Updated the **Update Business Contact** screen to replace the **Fax** column with the **Position** column in the **Contacts** list.
Data Loading	Improved Data Loading to allow Data Loads to load with a status of **Loaded** when Samples have no Results. Messages are now logged as Info and do not affect the final status.

Data Loading	Improved searching for and configuring Datafile Structures, including:
	
	• Add **Structure Type** to classic Datafile Structure search.
	• Prevent the following column types from being added to for cross-tab structure:
	  • **Comments - Results**
	  • **Metadata - Results**
	  • **Quality Codes - Results**.

Data Loading	Improved the configuration of Unit Conversions for Data Loads, including: • Display the applicable global conversion, if applicable, or a warning, if it does not exist. • Store conversion comments on the Result instead of the Sample.
Data Loading	Changed the status for a Data Load that has no errors but at least one warning to **Partially Loaded**, instead of **Partially Loaded - Warnings**.

Functionality	Description
Data Loading Engines	Added the ability to send an email notification to an Administrator when Data Load emails have been received with valid attachment types, but do not match any Data Load Definitions. Configure this functionality by using the DL_ADMIN_EMAIL system parameter.
EnviroSys	Updated SQL Server Sequences so they only increase by one when accessed by EnviroSys. Changed the JDBC connection properties.

1.4   Fixes

The table below describes the EnviroSys fixes in this release.

Subcategory	Problem correction
Action Management	Fixed the issue so the selected Sample Schedule name does not display after saving and closing the Action Rule.
Administration and Settings	Fixed the issue so that security checks do not prevent viewing and editing Full Audit details.
Administration and Settings Data Viewer	Fixed the issue so the cache for Lookup Codes is refreshed when you create Lookup Codes in the **Search Lookup Values** screen, resolving issues with Exceedance checks when using Lookup Codes in the application and engines.
Aggregations - Calculations Data Loading	Fixed the issue, when Data Loading, so aggregations are recalculated and triggered by a source aggregation updating in a different Data Type. Introduced in 9.1.2, 9.0.4 and 8.5.6 when using the USE_EXTERNAL_LOAD_QUERIES_FOR_ DL_AGGS = Y performance setting.
Aggregations - Calculations Locator/Tabular Results	Fixed the issue where the error thrown while validating Result values could prevent Exceedance warnings from being displayed.
Base Configuration	Fixed the issue where the **Add** button displayed on the **Update Sample Point - Data Entry Form Components** screen toolbar.
Classic Interface Emissions Security	Fixed the issue so users can change the names of Emissions Sources without errors due to security.
Classic Interface Security	Fixed issues with SQL Injection attacks in the Classic interface.
Compliance	Fixed the issue where the **Compliance Document History** tab did not display the correct date consistently formatted.
Compliance	Fixed the issue where manual/one-off requirements should not have assessments automatically created when the document is activated.
Compliance Performance	Fixed the issues to improve the performance of the **Compliance Assessment Acknowledge** dialog. It should not now load fully-hydrated Assessment and Requirement objects.
Compliance Security	Fixed the issue so users can create a correction of a Compliance Document that has a URL attachment without error.
Compliance User Interface	Fixed the issue where the count of items does not always display in the bottom right corner when drilling down from the dashboard.
Data Browser Security	Fixed the issue so that Administrator or Advanced users can edit Sample Point locations in the Data Browser.

Subcategory	Problem correction
Data Entry Forms	Fixed the issue so that Sample Comment is now mandatory if **Can sample at this Location** is set to **No**.
Data Entry Forms Data Viewer Mobile Application - Enter Data	Fixed the issue where attachments sent by the mobile application display the **Author** and **Date** as undefined.
Data Entry Forms Security	Fixed the issue so that Administrators can see Data Entry Forms that contain Sensitive Test Methods.
Data Input Console	Fixed the issue on the **Review** tab where the error message displayed and saving was prevented when a Test Method or Sample Point was not set when selecting a Map action.
Data Input Console	Fixed the issue so that the Data Load information file link downloads correctly.
Data Input Console Data Loading	Fixed the issue where additional "." characters in the filename prevented matching of Datafile Loads in the Data Upload.
Data Input Console User Interface	Fixed the issue where the **Review** tab could not view the last item when scrolling down to the bottom of a long list.
Data Loading	Fixed the issue for Data Loads auto-creating new Sample Points when setting the unique identifier.
Data Loading	Fixed the issue so that Datafile Upload uses the correct sequence for generating primary key ID values.
Data Loading	Fixed the issue so replacing a Sample Point using Review (Classic) changes the underlying Value Mapping.
Data Loading	Fixed the issue with Data Load processing so it now validates the length of any string/varchar fields, e.g. if Sample Reference No. is greater than 50 characters.
Data Loading Engines	Fixed the issue so that MS Excel file processing does not change the format of date (and date-time) columns.
Data Viewer	Fixed the issue so that the Test Method select dialog on Bulk Updates works on the second attempt.
Emissions	Fixed the issue with the save error when configuring data sources in the GHG wizard, which occurred when changing the Activity calculation method.
Licensing Security	Fixed the issue so that when the homepage panels and quick access/tools display, users access and that the feature is enabled are checked.
Locator/Tabular Results	Fixed the issue so the Audit Summary can handle the Reading First or Last Aggregation functions.
Reporting	Fixed the issue so Custom Reports using template files run without error. Users should be able to nominate the MS Excel sheet, row and column that each object should be located in an uploaded file.
Reporting	Fixed the issues so you can run a Data Extract with the Result Replacement Scheme, and the replacement of text values with numeric values is required.
Reporting	Fixed the issue so that MS Excel Custom Reports indicate when Result values have been replaced when using a replacement scheme.
Reporting	Fixed the issue so you can produce Custom Reports without error for Test Methods with special characters, such as ampersands, in the name.

Subcategory	Problem correction
Reporting	Fixed the issue so users should now be able to change any of the details contained in the header section of the **Maintain Report Pages** screen. Introduced with additional security checks in 9.1.2.
Reporting	Fixed the issue so Custom Report Result data tables should now highlight exceeding Results in all formats.
Reporting Security	Fixed the issue so custom and database extract SQL queries are sanitised without saving in upper case.
Sample Management	Fixed the issue for planning views where errors would display for sort points.
Sample Management	Fixed the issue so users can delete Sample Management Schedules that have Guidelines attached.
Sample Management	Fixed the issue so the Schedule can change each Location once every seven years.
Sample Management	Fixed the issue where the **Sampling Runs** tab continues to wait with spinning icon when the server has returned a 503 error.
Security	Fixed the issue so Administrators can access the **Quality Codes** maintenance screen.
Security	Fixed the issue so that login attempts now have consistent timing, regardless of whether the user exists or not.