precisely

Data360 Analyze

Release Notes

3.10.3

Table of contents

1. Setup requirements

	Server	Desktop

System requirements	The minimum hardware specification for the server product is as follows:
	
	• 32GB minimum (Web Server - 12GB, Database server - 8GB, Execution Server - 4GB base + 2GB per core)
	
	• Minimum 4 cores for a server instance
	
	Note: As the number of users and/or the number of scheduled jobs increases, you should look to increase the number of cores and thus memory.
	
	• At least two separate drives or partitions:
	  ◦ One for the Data directory.
	  ◦ One for temporary execution data.
		The minimum hardware specification for the desktop product is as follows:
		
		• 8GB RAM.
		
		• Intel Core i5 or 4-core equivalent processor minimum (i7 recommended).

	Server	Desktop
System requirements	For desktop installations and installations on Windows Server, you must install the required Visual C++ Redistributable Packages (choose the x64 variant of the .exe file): • Visual C++ Redistributable Packages for Visual Studio 2008 • Visual C++ Redistributable Packages for Visual Studio 2013 For Windows Server installations, you must also install: • Visual C++ Redistributable Packages for Visual Studio 2019 **Note:** The Power R node and the nodes in the Statistical and Predictive Node Pack process data in-memory. Additional RAM will be required when processing data sets with a large volume of data. Similarly, if the R node is used, the machine hosting the R environment must have sufficient available RAM to process the data.	
Supported platforms	The following operating systems are supported on the Data360 Analyze server product: • Windows Server Core 2019 • Windows Server 2019 (Desktop Experience) • Windows Server 2016 64-bit (Server with Desktop Experience) • RedHat Enterprise 7.X 64-bit • RedHat Enterprise 8.X 64-bit Requires the `libnsl-2.28-151.el8.x86_64` RPM package or later, and the `compat-libgfortran-48` package. The following browsers are supported on both server and desktop: • Google Chrome - Latest stable version • Microsoft Edge - New Chromium-based version	The following operating systems are supported on the Data360 Analyze single-user desktop product: • Windows 10 64-bit

	Server	Desktop
App server databases	Postgres	H2
Authentication servers (server only)	• Active Directory • OpenLDAP	N/A
Authentication protocols (server only)	• LDAP • LDAPs	N/A
Single Sign-On (server only)	SAML 2.0	N/A
App servers	Tomcat 9.0.70	

2. Latest release - 3.10.3

This document provides release information for all releases of Data360 Analyze from version 3.9.0 onwards. If you require release information for an older version of Data360 Analyze, please contact us at support.precisely.com.

For information on installing Data360 Analyze, please see the installation guide. Once you are up and running, you can access the integrated product help by clicking the Help button, positioned towards the top right-hand corner of the screen.

The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

2.1 What's new

Parquet - ADLS Data Lake File Metadata Reader

Azure Data Lake Storage List node now has the ability to identify file types by choosing the "Identification" option on the "MetadataMode" property,

The node can also harvest metadata from both CSV and Parquet files by choosing the "Structure" option from the "MetadataMode" property.

New Filtering options are also available on the node to allow the user to include or exclude certain files or directories.

Upgrade to TERR v 6 on Analyze 3.10

The TERR version used by Statistical and Predictive Analytics Nodes is upgraded to version 6.0.3. Note that while these nodes will work as before, scripts and packages used by the Power R may have to be updated.

Database Profiler - Azure Synapse support

The Database Profiler now supports profiling of Azure Synapse databases.

Performance Improvements

The Data360 Analyze application UI has undergone a number of performance improvements which make designing Data Flows and general use of the application a better experience for the users. This work also fixes issues where the application would get slower after a number of hours of continuous use

Other changes

- Upgraded a number of 3rd party components to take advantage of the latest feature and security update.

2.2 Corrected issues

Issue summary	Issue number
Application now displays a user friendly message when unable to export because you don't have access to all dependencies	LAE-23275
Fixed an issue when upgrading Analyze on Windows, the Tomcat service would not always be removed correctly during the uninstall part of the upgrade.	LAE-29440
When installing using the multi-user install instructions on Linux, the permissions for the <site-dir>/shared/Public folder were set incorrectly and dataflows were not able to write to the directory.	LAE-29845 LAE-30015
Fixes an issue whereby the LDAP Authentication Settings are corrupted if the password field is empty when the settings are updated.	LAE-30021
Classes specified in the DbDriver parameter on the JDBC database nodes would not search the DbDriverClasspath for the driver. This has now been fixed.	LAE-30031
Fixed an issue where the Database Metadata node would not work always work correctly against an Azure Synapse database when database objects being queried contained characters that needed escaping.	LAE-30178
Fixed an issue when generating a Filter node from the Data Viewer where the node would fail when being run.	LAE-30184
Fixes an issue in the Excel file node whereby for XLSX files list permissions were required for the full path to the file itself and not just the file and read permissions on the file path.	LAE-30196
Fixes an issue where Analyze could not start up correctly if the user directories specified at installation contained spaces.	LAE-30490

Issue summary	Issue number
Fixes a permissions issue with export to CSV and download from the data viewer on linux in a multi-user installation.	LAE-30436
Fixes the unwanted 'Changes that you made may not be saved.' dialog when you refresh the directory page after discarding data flow edits.	LAE-30492
Fixes an issue with execution containers on linux whereby not all required packages were included in the container image causing certain nodes to fail.	LAE-30497
Fixes the unwanted 'Changes that you made may not be saved.' dialog when you refresh the directory page after discarding data flow edits.	LAE-30527
When the interactive run cleanup was configured to only cleanup temporary data only, temporary data and logs from failed nodes was not getting cleaned up. This has been fixed so that data from failed nodes will also be cleaned up on the interactive run cleanup.	LAE-30624
Ensures that the tasks for cleaning up scheduled and interactive runs are tolerant in the face of errors. Previously, the run cleanup would be aborted if the cleanup task encountered invalid data flow search paths. Now this issue will be logged, however will not prevent cleanup of unrelated run data. Rather than one big transaction, the cleanup operation has also been modified to commit its changes in batches to ensure that if there is a large backlog of execution runs to cleanup (for example due to the issue of bad data flow search paths causing the cleanup to be aborted) this will not cause issues with the transaction size getting too large.	LAE-30627
Fixes an issue whereby the upgrade fails if it was previously upgraded from a 3.8.5 or earlier to 3.10.x.	LAE-30687
	LAE-30691
Fixed issue where changes to library paths were not always being correctly respected after saving the data flow or library node on which the paths were changed	LAE-30766
Fixed a number of memory leaks in the application UI.	LAE-30777
Fixes an issue whereby Govern paging in the HTTP node would fail if the response that no items.	LAE-30798
Fixes an issue where the connections between nodes were not showing in the UI.	LAE-30780

Issue summary	Issue number
Fixes cached inherited library node properties not updated in a data flow when the properties are updated in the library node.	LAE-30781
Fixed a number of issues related to SharePoint 365 nodes.	LAE-30791
Fixes an issue whereby the user received a permission denied error when they have selected "Search Sub-Folders" when Editing Library Paths for a data flow and they do not have access to the sub folder.	LAE-30855
Fixes an issue where the Scheduled Run Cleanup process could hang if a scheduled run was locked.	LAE-30880
Fixed an issue where issues on scheduld runs could occassionally result in deadlocks.	LAE-30881
Fixed an issue where when using execution sandboxing where the execution containers could be brought down by the container cleanup task immediately after they were created. This was especially a problem when a schedule which brought up the container would start at the same time as the container cleanup task.	LAE-30989
When using execution sandboxing and when first attempting to run a set of nodes which would bring up the sandboxed containers, on newer docker CE and mirantis versions, this first call to execute would result in an error. This has been fixed.	LAE-30990
Fixes an issue whereby the adhoc runs clean up process could hang and prevent system backups from taking place.	LAE-30999
Fixes an issue whereby property definitions for properties in a group were hidden but not deleted when the group was deleted.	LAE-31009
Cached resolution entry was incorrectly used when virtual nodes inheriting all attributes from an instance in a library composite were updated leading to incorrect results.	LAE-30643

2.3 Deprecation Notice

As of 3.10.3 the following nodes will be marked as deprecated, with a view to removal in a future Analyze release. These nodes will remain deprecated yet available for the duration of 3.10.x:

Output Tableau (Superseded)

Due to the drop in support of the underlying Tableau SDK that is used by the node, and the issues seen when running the node to upload .tde files to a Tableau server in a Linux Analyze environment (see "Known Issues" section), this node is being deprecated as of the 3.10.3 release, with a view to removal in the future 3.14.0 release.

Customers are recommended to move to using the newer "Output Tableau" and "Upload Tableau" nodes which use the .hyper file format.

2.4 Upgrades

The following platform distributions have been upgraded:

- Upgraded JDK to version 11.0.19.7.1

- Upgraded Postgres to version 13.11

- Upgraded OpenSSL to version 1.1.1u

- Upgraded Apache Tomcat to version 9.0.70

2. New in - 3.10.2

This document provides release information for all releases of Data360 Analyze from version 3.9.0 onwards. If you require release information for an older version of Data360 Analyze, please contact us at support.precisely.com.

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The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

2.5 What's new

SharePoint Nodes

A new property has been added SiteRoot of type choice. Optionally specify the SharePoint root site location under which the site was created. The default root location for `Team` sites can be changed in the SharePoint admin center settings under `Site` creation.

Choose from:

`sites`

`teams`

The default value is **sites**.

For more information, see "Download for SharePoint 365", "List for SharePoint 365", "Delete for SharePoint 365", and "Upload for SharePoint 365".

Security

- There is no requirement for the Analyze application to accept cross-origin requests, and resources are protected by strict same-site cookie based authentication, therefore CORS is not enabled on the Analyze application and cross-origin requests are prevented by default from the browsers same-origin policy.

- Implemented expiry date & max-age attributes on session cookie.

- Fixed an issue whereby the server responses did not contain the Strict-Transport-Security header when HTTPS was configured.

- Upgraded a number of 3rd party components to take advantage of the latest feature and security update.

- Fixed CVE-2022-42889 "Text4 Shell" vulnerability in Apache Commons Text.

Other changes

- Changed configuration on Linux & Windows such that the latest tag is used in the Docker file for retrieving the base image when using execution containers. Therefore, we recommend for Execution Sandboxing you update your docker image while upgrading.

  For more information, see "Keeping the execution containers up-to date".

- Tomcat Server is upgrade to 9.0.68.

- Ensured that xlsx files generated by the Output Excel node will only use Zip64 by default. This also resolves compatibility issues whereby xlsx files generated by the node could not be correctly read by other software products, for example - Power BI.

- A new property "EndPoint" has been added to the S3 nodes, that provides you the ability to change the default endpoint, in order to enable connection to an alternative S3 service such as MinIO.

2.6 Corrected issues

Issue summary	Issue number
Fixed an issue in the URL Query Builder node whereby it was not possible to specify the same name for URLField and URLOutputField properties when PassThroughFields mode was set to "Used" (default value).	LAE-29326
Fixed an issue whereby metadata containing certain tab characters would result in popup dialogs in the UI and no state information would be displayed. While the tab characters are still not supported in metadata, the errors will be reported in the error panel and state will be retrieved correctly.	LAE-29442
Fixed an issue on resolution of modified virtual nodes after they had errors.	LAE-29443
Improved debug logging for network errors when using the HTTP node.	LAE-29444

Issue summary	Issue number
Fixed an issue whereby compilation errors that occurred during execution is not reported in the execution log.	LAE-29584
Fixed an issue where in both "Filter" & "Split" nodes, selecting a value from the group satisfy drop down incorrectly sets the option to an undefined value.	LAE-29542
Fixed an issue whereby the type mismatch between inputs and sort fields of a Sort node can cause generate an uncaught error and prevent the node from rendering properly.	LAE-29694
Fixed an issue whereby some compilation errors would never appear in the UI in the error panel.	LAE-29699
Fixed an issue whereby adding an empty name tag to a connection point could result in errors while viewing and executing the data flow.	LAE-29700
Fixed an issue that prevents data viewer from opening when field names contain quotes.	LAE-29798
Fixed an issue whereby the errors occurred for an operation on one data flow could be reported against a different data flow for which a similar operation was being performed at the same time.	LAE-29705
Fixed an issue where you install the multi-user, the install instructions on Linux, had the permissions for the <site-dir>/shared/Public folder set incorrectly and data flows was not able to write to the directory.	LAE-29845
Fixes an issue whereby the Analyze Desktop does not start if the JRE_HOME environment variable is set to a Java version other than 11.	LAE-29856
Fixes an issue whereby profiling certain columns and certain tables would result in an error in the Detailed Analysis field on the node's detail output: "No value for: 'limitgroups'."	LAE-29978

3. New in - 3.10.1

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The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

3.1 What's new

ERP nodes to handle the max row count

The Extract ERP Table node will allow you to set the MaxRowCount that limits the number of rows retrieved when no RowCount is specified.

The RowCount property is used to limit the rows, however, if the SAP system does not allow for the default (2147483647) number of rows, the property can be "unhidden" then set on the node or set server-wide via adding a line in the cust.prop to:

```
ls.brain.node.erp.sapconnector.extractTable.maxRowCount=<maxRowCountValu
e>
```

Preserve Tomcat settings across upgrades

The upgrade installation process has been improved by ensuring that server.xml, web.xml & cacerts keystore are maintained between upgrades. Examples of when you might change these files are while Configuring HTTPS or while Importing SSL certificates for use with certain nodes.

> **Note:** For 3.10.1 the changes will still need to be made to the files, they will be preserved after future upgrades. Also the instructions for making such changes have changed compared to previous versions.

Other changes

- Fixed an issue where the Extract ERP Table node sometimes fails with an error "Option not valid" as the OPTIONS clause generated by the node was not always inserting the correct spaces

surrounding parentheses.

- The Database Metadata node has been changed to make trigger queries against Oracle using DBA_TRIGGERS instead of ALL_TRIGGERS. This should remove the need for any trigger permissions via "grant create any trigger to <user>" and only select permissions should be required via "grant SELECT_CATALOG_ROLE to <user>".

- Introduced an ability to disable the schedule for a data flow while it is running.

- It is now possible to download the node logs directly from the canvas using the download option available when you right-click on the respective node.

- Introduced fistExec, lastExec, and execCount functions to the advanced scripting capability of the Lookup node.

- Introduced a new property in the Execution Sandbox. ls.brain.server.docker.mounts allows the user to configure access to file locations other than the locations restricted to the Execution Sandbox.

- Fixed an issue whereby if multiple executions started simultaneously as the first runs after a server restart, the executions could result in error stating "Multiple elements are in the collection" due to a race condition. This error would then reoccur on all executions until a subsequent restart.

- Added a new property "`CreateFileUsingAbsolutePath`" to the "`Archive Compress`" node, where the backwards compatibility is set to true. When set to false the path of the files in the created zip file will be relative to the source folder, as opposed to using the full file path of the source system which previously caused issues with the default Windows zip tool when trying to open the zip files produced by the node.

3.2 Corrected issues

Issue summary	Issue number
Fixed an issue in the Database Metadata node for DB2, the Procedure Parameters output had a field called TABLE_NAME which should have been called PROCEDURE_NAME. On the Function Parameters output, had a field called TABLE_NAME which should have been called FUNCTION_NAME.	LAE-28804
Fixed an issue whereby the d3sa.api.rest.host or ls.brain.webapp.contextUrl were not used when creating the URL for the URL_To_Linked_Run property in the failed schedule e-mail notification.	LAE-28819

Issue summary	Issue number
Fixed breadcrumbs on upload file to server dialog.	LAE-28927
Fixed an issue where toggle temporary transparency was not working for textbox.	LAE-28784
Fixed an issue in URL Query Builder Node whereby fields specified Excluded Fields property were not excluded.	LAE-28948
Fixed an issue where in the Database Metadata node, the table columns, and procedure and function parameters outputs previously had a null catalog field when run against postgres. While postgres does not return this information, the node knows which catalog it is working against to include the catalog information.	LAE-28966
Fixed an issue where in 3.10.0 while running the Database Metadata node against an Azure Synapse database, if there were more than 32 thousand columns across all tables in any single schema, the node would log a warning and not retrieve any of the columns for that schema.	LAE-28941
Fixed an issue whereby Data360 Analyze services does not initiate when installing with restore from backup option.	LAE-28774
Fixed an issue where system backups could occasionally result in the application winding up in a deadlock requiring an application restart.	LAE-27566
Fixed an issue when an Execute Data flow node is running while a system backup is ongoing, it will not be able to finish until the backup is complete.	LAE-26357
Fixed an issue where system backups could occasionally result in the application winding up in a deadlock requiring an application restart.	LAE-27690
Fixed an issue where logged errors are not displayed if a node is completed successfully.	LAE-28619
Fixed an issue on the HTTP node where the DataOutputFieldType property was not always being used if one of the other output field properties were set.	LAE-27559
Fixed an issue where multiple 'do output' statements in a single brainscript script pointing to the same output were not always writing the records correctly.	LAE-28613

Issue summary	Issue number
Fixed an issue where the file picker does not show the files in the directory when the file picker is re-opened following the selection of a file in a sub-directory.	LAE-28852
Fixes an issue whereby the Database Metadata node was reporting warnings about "USE statement is not supported" and causing the node to not retrieve correct information when running against an Azure Synapse database.	LAE-28939
Fixed an issue where the Database Profiler node will report the internal errors that occur during the column analysis phase of the profiling to the node's error output but this will not cause the node to fail unless the FailureBehavior property is set to Error.	LAE-28875
Fixed an issue in the Excel File node if a WorkbookSpec property was specified which did not have the start and end column defined, and the node was configured to DetectFieldTypes, and the header row in the Excel spreadsheet contained empty cells, the cells were not getting auto-named correctly and instead were winding up with field names from the first row of the data.	LAE-28351
Fixed an issue whereby it was not possible to rename the output pin on the Modify Field Prefix node.	LAE-28615
Fixed an issue where the Query for Salesforce node would show sensitive information when logging errors.	LAE-28991
Fixes an issue whereby users with long user names could not execute data flows in the Execution Sandbox configuration of Data360 Analyze.	LAE-29196
Data360 Analyze Docker network was removed after restart of Windows VM. This issue has been changed such that by default, on windows, when the Data360 Analyze server starts up and is configured to use execution containers, the named network will be recreated if it does not exist.	LAE-28936
Fixed Salesforce node where Id mapping was incorrect for insert operation.	LAE-28808
Fixed an issue whereby the Modify Field Prefix node was not adding the prefix in a case-sensitive manner.	LAE-28782

Issue summary	Issue number
Fixed an issue in the Convert Tabular XML node, where the node was incorrectly dealing with the 'From Field' choice, instead of referencing the specified input field. Hence, the node was processing the fieldname as literal xml and throwing a parsing error.	LAE-24871
Fixed an issue where the Query for Salesforce node would fail on some unicode characters.	LAE-27674

4. New in - 3.10.0

This release includes a number of features that were introduced in the 3.9.X releases, including execution sandboxing with Docker (server only) and new canvas alignment features.

4.1 What's new

This release includes a number of features that were introduced in the 3.9.X releases, including execution sandboxing with Docker (server only) and new canvas alignment features.

Rebranded user interface

The Data360 Analyze user interface styles and colors have been updated to match the Precisely

brand.

Execution sandboxing with Docker (server only)

Execution sandboxing is a new security feature that enables you to secure user access to data file locations on the server. Through provisioning of Docker execution containers on a per user basis, users will only have access to their own file upload location, their own temporary execution data location, and the shared file upload location, ensuring that users cannot access each others data files.

For more information, see the "Enabling execution sandboxing" topic in the help.

Note: When using Docker execution containers, nodes can only access "My Folder", "Public" and temporary file storage locations. Other file system locations, including mapped drives, are not currently available. Note that renaming a user would cause their "My Folder" location to become inaccessible. Before renaming a user, ensure that they have first copied their data into the Public folder, or have downloaded it from the server. Following the name change, they can upload their data to their new My Folder location. "My Folder" and "Public" are accessible via the upload and download buttons on the toolbar. These are Data360 Analyze server locations that you can use to store data that you want to upload or download for use in your data flows.

Canvas alignment features

A new Smart Guide feature has been added to enable you to easily align items on the canvas. Additionally, a new align and distribute feature has been added which allows you to uniformly distribute items in a horizontal or vertical direction on the canvas.

For more information, see the "Aligning nodes" section of the "Selecting and moving nodes" topic in the help.

Multi-user installation (Linux server only)

A new security feature has been added for Linux users to enable you to configure a multi-user installation.

Enterprise Data360 Analyze installations on Linux can now run the core Data360 Analyze components (Web Application, Execution Server, and Database) as separate Linux OS users. These users are assigned stricter levels of file access resulting in a much more secure running environment.

To configure a multi-user installation, it is recommended that you first create the required users, as detailed in the Data360 Analyze Server Installation Guide, and then follow the configuration steps to complete the setup immediately after installation.

For more information, see the Data360 Analyze Server Installation Guide.

SharePoint 365 nodes

Along with the **Download for SharePoint 365** and **List for SharePoint 365** nodes that were introduced in 3.9.2, the following two SharePoint 365 nodes have been added in this release:

- **Delete for SharePoint 365** - Deletes the contents from a SharePoint document library or folder using the Microsoft graph API.

- **Upload for SharePoint 365** - Uploads the contents to a SharePoint document library or folder using the Microsoft graph API.

These nodes integrate with SharePoint 365 online.

For more information, see the "Delete for SharePoint 365" and "Upload for SharePoint 365" node topics in the help.

Required input pins

If a node requires a valid input connection to enable it to run, an orange circle is displayed within the required pin until an enabled input is connected. This enables you to easily trace missing input connections that can prevent your data flow from running.

For more information, see the "Required input pins" section in the "Connecting nodes" topic in the help.

Scheduled data flow email notification

A new run property **URL_Link_To_Run** has been added to the **Data360 Failed Schedule Email Notification** data flow. An admin user can reference this property in the schedule email template to include a direct link to the failed run in the email.

For more information, see the "Configuring schedule emails" topic in the help.

Database Metadata node

The **Database Metadata** node will now switch between using the correct queries for SQL Server or Azure DWH/Synapse when using the SQL Server driver.

Other changes

- A display preference option has been added to the canvas to enable you to show/hide run dependencies.

- The Privacy and Security option has been removed from the Directory Settings list in the Desktop edition of the product as it is now only relevant to the Server edition of the product. Previously, the Desktop product contained a "collect usage data" section in the Privacy and Security page, but this has been removed.

- Last known location information now appears in the Library Node Conflicts dialog.

- Improvements have been made to the look and feel of drop-down menus on the Designer page.

- Use of the EOL library log4j 1.2.17 has been replaced by the actively supported reload4j library. This addresses a number of vulnerabilities that have been identified with log4j-1.2.17.

- Upgraded the shipped JDK to Amazon Corretto 11.0.15.9.1.

- Upgraded OpenSSL to 1.1.1o to address various CVEs.

- Upgraded the embedded Postgres to 13.7.

- The Swagger API documentation page has been removed from the product. For information on supported APIs, see the link to the API documentation from the product help.

- A number of third-party libraries have been updated to benefit from the latest security updates.

Notes

Upgrading to 3.10.0

To upgrade to Data360 Analyze 3.10.X from Data360 Analyze 3.4.3 and below, you must do it in

two stages, as follows:

Current version	Upgrade steps
Any version between 3.2.0 and 3.4.3	First upgrade to Data360 Analyze 3.8.4, then perform the Data360 Analyze 3.10.X upgrade.
Before 3.2.0	First upgrade to Data360 Analyze 3.6, then perform the Data360 Analyze 3.10.X upgrade.

> **Note:** Please contact your Precisely representative or raise a support ticket to request a copy of Data360 Analyze if you require an older version for a two stage upgrade.

LogicalTypeDefinitions property

If you have previously used the **LogicalTypeDefinitions** property on the Data Profiler or Database Profiler nodes to specify custom semantic types, you will need to update your JSON specification file to match the updated example in the node help page.

Teradata driver version

When using JDBC-based nodes to connect to Teradata, for example the Database Metadata node and the JDBC Query node, it is recommended that you use the latest version of the Teradata driver. Driver versions older than 17.10.0.26 can cause potential issues with the Database Metadata node where views reference objects which no longer exist.

Java version

Data360 Analyze is built and runs on Java version 11. Please check the compatibility of any third party Java libraries that you are using and upgrade them if required.

Data360 Analyze Command-Line Interface

For information on the latest release of Data360 Analyze CLI, see the Help pages here.

4.2 Corrected issues

Issue summary	Issue number
Fixed an issue that caused a data flow run to fail if it contained a run property set with a password property with no value.	LAE-27989
Fixed an issue where changes to property names and property group names in the Define tab of the Properties panel were being saved prematurely, causing an error in some cases.	LAE-28029
Fixed an issue where the installer did not follow the specified choice on whether to backup temporary files on upgrade.	LAE-27667
Fixed an issue where the installer did not use the specified location for temporary execution data.	LAE-28539
Fixed an issue that prevented the import of legacy run property sets.	LAE-28014
Fixed an issue where permissions that were set on the Data360 Nodes and Data360 Samples data flows were not preserved after an upgrade.	LAE-27512
Fixed an issue with the Database Metadata node where table object definition information was not returned if it was not a case sensitive match.	LAE-27885
Fixed an issue where if a username was changed it was possible that both versions of the username would count towards the amount of allowed user licenses.	LAE-27808

5. New in 3.9.2

The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

5.1 What's new

Execution sandboxing with Docker (server only)

A new security feature has been added to enable you to hold each user's execution data within their own sandboxed Docker execution container.

Note that the `securityStore.jks` file is now located in the `keystores` directory in your site folder, for example `C\:/Users/<<user>>/Data360Analyze/site-7731/keystores`

This new feature only applies to the server edition of the product and is not applicable to the desktop edition of the product.

For more information, see the "Enabling execution sandboxing" topic in the help.

SharePoint 365 nodes

Two new SharePoint 365 nodes have been added in this release:

- Download for SharePoint 365 - Downloads files from a specified SharePoint 365 server using the SharePoint API.

- List for SharePoint 365 - Lists the contents of a SharePoint 365 document library or folder using the SharePoint API.

These nodes integrate with SharePoint 365 online.

For more information, see the "Download for SharePoint 365" and "List for SharePoint 365" node topics in the help.

Threshold Test node

The Threshold Test node has been superseded. The existing node is still available for backwards compatibility, and is now named Threshold Test (Superseded), but where possible it is recommended that you use the new Threshold Test node. The functionality of the node has not changed.

The Threshold Test node identifies records which, when a running aggregate is calculated, exceed a designated threshold.

For more information, see the "Threshold Test" node topic in the help

Other changes

- The Spring Framework version has been upgraded to 5.3.18 to prevent CVE-2022-22965.

- Updated the third party component jackson-databind to prevent CVE-2020-36518.

Data360 Analyze Command-Line Interface

For information on the latest release of Data360 Analyze CLI, see the Help pages here.

5.2 Corrected issues

Issue summary	Issue number
Fixed an issue where it was not possible to import nested groups from Active Directory.	LAE-27244
Fixed an issue that prevented the Privacy and Security settings panel from being displayed when using a free version of the product and when using a custom overridden license.	LAE-27692
Fixed an issue that prevented the **Edit Library Paths** dialog from opening in some cases.	LAE-27980
Fixed an issue that prevented you from adding run dependencies to top level composite nodes.	LAE-22408
Fixed an issue where a context menu was incorrectly displayed when right-clicking on a composite run dependency.	LAE-25594
Fixed an issue where the leaf node designer was used instead of the composite node designer when creating new nodes based on a composite node.	LAE-27729

6. New in 3.9.1

The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

6.1 What's new

New Metadata for Salesforce node

The new Metadata for Salesforce node fixes a number of issues that were present in the now superseded Data360 Metadata for Salesforce node.

For more information, see the "Metadata for Salesforce" node topic in the help.

New canvas alignment features

A new Smart Guide feature has been added to the data flow designer, enabling you to easily align items on the canvas. For example, selecting and dragging a node to another node that you want to align it with will display a guide and the node will snap into place. You can align items vertically or horizontally using the Smart Guide feature.

Additionally, a new align and distribute feature has been added which allows you to uniformly distribute items in a horizontal and vertical direction on the canvas.

For more information, see the "Aligning nodes" section of the "Selecting and moving nodes" topic in the help.

Performance improvements

The performance of the Database Metadata node has been significantly improved when working with large databases when no table filtering is used.

Other changes

- The deprecated DrixDoc node has been removed from Data360 Analyze.

- The Database Profiler node can now source `ProfileMode`, `CatalogFilter`, `SchemaFilter` and `TableViewFilter` properties from incoming fields.

- RedShift external tables can now be profiled using the Database Profiler and Database Metadata nodes.

- Holding the shift key and pressing the arrow key to move an element by one pixel has been removed, to facilitate easier alignment with the snap to grid functionality.

- Added support for data virtuality to JDBC Metadata and JDBC Profiler nodes.

- The documentation has been updated to include details of additional authentication options when connecting to a Microsoft SQL Server database. For more information, see the "Acquiring data from a database" topic in the help.

- A number of third-party libraries have been updated to benefit from the latest security updates.

Data360 Analyze Command-Line Interface

For information on the latest release of Data360 Analyze CLI, see the Help pages here.

6.2 Corrected issues

Issue summary	Issue number
Fixed an issue that prevented nodes from remaining where they were dropped on the canvas.	LAE-23481
Fixed the following issues in the Data360 Update for Salesforce node: • Fixed an issue where the ID was not included in the batch update sent to Salesforce if the `DataFields` property did not contain an ID field. As a result, Salesforce could not process the records, as they had no ID. • Fixed an issue that caused the node to fail processing if the `IdField` referenced an input field with a name different to "Id".	LAE-27282
Fixed an issue that prevented you from accessing the Data360 Analyze application if a node had restricted permissions.	LAE-27295
Fixed an issue where run property values were not showing in the directory, when viewing a run state produced by an Execute Data Flow node.	LAE-27392
Fixed an issue where unlimited user sessions in the license was not working correctly.	LAE-27445

Issue summary	Issue number
Fixed an issue where you could not see or run a node that you have access to, if there was another node on the canvas to which you did not have access.	LAE-27467
Fixed an issue where data would not load, if you attempted to open the pop-up data viewer in a scheduled run.	LAE-27556
Fixed a security issue by updating the log4j-core library to version 2.17.0, which patches the security vulnerabilities found in previous log4j libraries, addressing both CVE-2021-44228 and CVE-2021-45046.	LAE-27560 LAE-27561 LAE-27646
Fixed an issue that resulted in adding support for profiling external tables in RedShift.	LAE-27635
Fixed an issue where it was not possible to import nested groups from Active Directory.	LAE-27244
Fixed an issue that caused invalid LNAs to generate a NullPointerException on import.	LAE-27781
Fixed an issue that in some cases prevented the Merge, Join and Lookup nodes from working correctly.	LAE-27763
Fixed an issue where it was sometimes not possible to resize a text box on the canvas.	LAE-27796
Fixed an issue where it was possible to move items on the canvas when a data flow was opened in read only mode.	LAE-27699
Fixed an issue where user overridden run property values were not used when the data flow ran on a schedule.	LAE-27689
Fixed an issue with the data viewer where viewing data in a pop-out window led to an error when the pop-out window was closed.	LAE-27670
Fixed an issue with the Excel File node where it would sometimes fail when reading numeric data when the `DetectFieldTypes` property was set to false.	LAE-27451
Fixed an issue in the Data360 Update for Salesforce node, where the node would fail in update mode with an index out of bounds issue if the specified id field was not named Id and was not the first field on the input data set.	LAE-27717
Fixed an issue where the Query for Salesforce node would fail on some Unicode characters.	LAE-27716

Issue summary	Issue number
Fixed an issue where a non admin user could not successfully "Convert to library" a selected number of nodes from within a data flow.	LAE-27820

7. New in 3.9.0

The availability of the following new features, enhancements and corrected issues is dependent on the installed edition of the product and licensed features.

7.1 What's new

Added filtering options to Filter and Split nodes, and the Data Viewer

Extended filtering options have been added to the Filter and Split nodes, as well as the Data Viewer. As a result, you can now filter string and unicode field types for blank and whitespace values, to more readily clean your data.

Other changes

- Calculate Fields expressions can now have values from previous rows with the same name in the expression grid.

- Data360 Analyze now runs on Java 11.

- A number of third-party libraries have been updated to benefit from the latest security fixes.

7.2 Corrected issues

Issue summary	Issue number
Fixed an issue so that failed nodes will now correctly report the number output records and output metadata.	LAE-10734
Fixed an issue with the Sort node so it carries out stable sorting.	LAE-23353
Fixed an issue that resulted in adding a new `IgnoreSurroundingSpaces` property to the Output CSV/Delimited node. This allows the user to control whether input values which have a leading and/or trailing white space, are included in the output or not.	LAE-25704

Issue summary	Issue number
Fixed an issue with moving nodes into composites, where sometimes the moved items would end up in strange locations within the target composite.	LAE-26109
Fixed an issue to ensure the `joinStrings` function, used in the Transform and Aggregate nodes, gets correctly reset on each group start.	LAE-26366
Fixed an issue where `NoSuchElementExceptions` could occasionally appear during data flow compilation.	LAE-27239
Fixed an issue that would cause occasional compilation errors, when attempting to execute nodes.	LAE-27286
Fixed an issue where hovering over a pin, didn't highlight the destination pin correctly.	LAE-27287
Fixed an issue in the Query for Salesforce node, where certain properties, such as the proxy and retry sets, were not functioning as expected.	LAE-27341
Fixed an issue where the Output Excel node was reporting a missing classpath warning.	LAE-27343
Fixed an issue with the Filter and Split node, which meant data did not clear after carrying out advanced editing.	LAE-27345

8. Known issues and limitations

We would like to make you aware of the following list of issues and limitations.

If you encounter any other technical issues, please get in touch with us by visiting the forum. If your query has not been discussed previously in the forums, you can create a new topic and receive answers from our Data360 Analyze experts.

8.1 Third parties

The following table lists third party known issues and limitations:

Feature	Description
Avro	The Avro 1.7.7 specification lists some supported metadata constraints. Specifically, it places restrictions on the names of fields, as follows: • The field names must start with [A-Za-z_] • The field names must only contain [A-Za-z0-9_] Avro 1.7.7 does not support date, time and datetime data types. As a result, if you want to upload data and use the Data360 Analyze nodes, these fields will need to be converted to string data types.
Hadoop Hive Cluster	When downloading files from the Hadoop Hive Cluster, the WebHDFS API automatically encodes files to base64 format. As a result, it is not always possible to view the contents of the download in the fields on the output. For example, if the **DataOutputMode** property is set to **Field**, due to the automatic base64 encoding, the encoded result will be visible instead of the contents. To view the contents, set the **DataOutputFieldEncoding** property to **None**. However, this is not always possible due to invalid characters in the original file; in this case, the workaround is to set the **DataOutputMode** to **File** and then import the data using one of the input connector nodes.

8.2 Web application

The following table lists Data360 Analyze known issues and limitations:

Feature	Description
Composite library nodes created in previous versions	When importing or running a data flow that was created in an older version of the product, you may see error messages if the data flow contains composite library nodes that have been upgraded since the data flow was first created. If the data flow did not previously show these errors, you can resolve the issues as follows: 1. Open the data flow and select all nodes. 2. Choose **Apply Auto-Fixes**. 3. Save the data flow, then return to the Directory before reopening the data flow.
Links from tooltips to help	Although it is not currently possible to open the integrated help from the links in node property tooltips, you can manually navigate to the help by pressing **F1** then searching for the relevant topic.
Logistic Regression node	The Logistic Regression node does not support Unicode for categorical data.

9. Contact us

If you encounter any technical issues, we recommend that you visit the support portal at support.precisely.com.

Download

Precisely recommends that you use the latest version of the product. To download Data360 Analyze, please go to https://data.precisely.com/software/product-details/data360-analyze.

Our product is constantly evolving and input from you is highly valued. If you have any suggestions, please contact the product team by submitting a feature request on the Community.

Notices

Trademarks