

precisely

# Data360 Analyze

Release Notes

3.10.1



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# 1. Setup requirements

	Server	Desktop
<b>System requirements</b>	<p>The minimum hardware specification for the server product is as follows:</p> <ul style="list-style-type: none"><li>• 32GB minimum (Web Server - 12GB, Database server - 8GB, Execution Server - 4GB base + 2GB per core)</li><li>• Minimum 4 cores for a server instance</li></ul> <div data-bbox="412 779 899 1024" style="border: 1px solid purple; padding: 5px;"><p><b>Note:</b> 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.</p></div> <ul style="list-style-type: none"><li>• At least two separate drives or partitions:<ul style="list-style-type: none"><li>◦ One for the Data directory.</li><li>◦ One for temporary execution data.</li></ul></li></ul>	<p>The minimum hardware specification for the desktop product is as follows:</p> <ul style="list-style-type: none"><li>• 8GB RAM.</li><li>• Intel Core i5 or 4-core equivalent processor minimum (i7 recommended).</li></ul>

	Server	Desktop
<b>System requirements</b>	<p>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):</p> <ul style="list-style-type: none"> <li>• <a href="#">Visual C++ Redistributable Packages for Visual Studio 2008</a></li> <li>• <a href="#">Visual C++ Redistributable Packages for Visual Studio 2013</a></li> </ul> <p>For Windows Server installations, you must also install:</p> <ul style="list-style-type: none"> <li>• <a href="#">Visual C++ Redistributable Packages for Visual Studio 2019</a></li> </ul> <div style="border: 1px solid purple; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> 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.</p> </div>	
<b>Supported platforms</b>	<p>The following operating systems are supported on the Data360 Analyze server product:</p> <ul style="list-style-type: none"> <li>• Windows Server Core 2019</li> <li>• Windows Server 2019 (Desktop Experience)</li> <li>• Windows Server 2016 64-bit (Server with Desktop Experience)</li> <li>• RedHat Enterprise 7.X 64-bit</li> <li>• RedHat Enterprise 8.X 64-bit Requires the <code>libnsl-2.28-151.el8.x86_64</code> RPM package or later, and the <code>compat-libgfortran-48</code> package.</li> </ul> <p>The following browsers are supported on both server and desktop:</p> <ul style="list-style-type: none"> <li>• Google Chrome - Latest stable version</li> <li>• Microsoft Edge - New Chromium-based version</li> </ul>	<p>The following operating systems are supported on the Data360 Analyze single-user desktop product:</p> <ul style="list-style-type: none"> <li>• Windows 10 64-bit</li> </ul>

	Server	Desktop
App server databases	Postgres	H2
Authentication servers (server only)	<ul style="list-style-type: none"> <li>• Active Directory</li> <li>• OpenLDAP</li> </ul>	N/A
Authentication protocols (server only)	<ul style="list-style-type: none"> <li>• LDAP</li> <li>• LDAPs</li> </ul>	N/A
Single Sign-On (server only)	SAML 2.0	N/A
App servers	Tomcat 9.0.62	

## 2. Latest release - 3.10.1

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](https://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

#### 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=<maxRowCountValue>
```

#### 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. Is.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.

## 2.2 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
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

Issue summary	Issue number
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
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

Issue summary	Issue number
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
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

## 3. 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.

### 3.1 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](#).

## 3.2 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 <b>Edit Library Paths</b> 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

# 4. 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.

## 4.1 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](#).

## 4.2 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: <ul style="list-style-type: none"> <li>• Fixed an issue where the ID was not included in the batch update sent to Salesforce if the <code>DataFields</code> property did not contain an ID field. As a result, Salesforce could not process the records, as they had no ID.</li> <li>• Fixed an issue that caused the node to fail processing if the <code>IdField</code> referenced an input field with a name different to "Id".</li> </ul>	LAE-27282
Fixed an issue that prevented you from accessing the Data360 Analyze application if a node had restricted permissions.	LAE-27295

Issue summary	Issue number
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
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

Issue summary	Issue number
Fixed an issue with the Excel File node where it would sometimes fail when reading numeric data when the <code>DetectFieldTypes</code> 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 <code>Id</code> 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
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

# 5. 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.

## 5.1 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.

## 5.2 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 <code>IgnoreSurroundingSpaces</code> 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 <code>joinStrings</code> function, used in the Transform and Aggregate nodes, gets correctly reset on each group start.	LAE-26366
Fixed an issue where <code>NoSuchElementExceptions</code> 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

## 6. 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.

### 6.1 Third parties

The following table lists third party known issues and limitations:

Feature	Description
Avro	<p>The Avro 1.7.7 specification lists some supported metadata constraints. Specifically, it places restrictions on the names of fields, as follows:</p> <ul style="list-style-type: none"><li>• The field names must start with [A-Za-z_]</li><li>• The field names must only contain [A-Za-z0-9_]</li></ul> <p>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.</p>
Hadoop Hive Cluster	<p>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.</p> <p>For example, if the <b>DataOutputMode</b> property is set to <b>Field</b>, due to the automatic base64 encoding, the encoded result will be visible instead of the contents.</p> <p>To view the contents, set the <b>DataOutputFieldEncoding</b> property to <b>None</b>. However, this is not always possible due to invalid characters in the original file; in this case, the workaround is to set the <b>DataOutputMode</b> to <b>File</b> and then import the data using one of the input connector nodes.</p>

### 6.2 Web application

The following table lists Data360 Analyze known issues and limitations:

Feature	Description
Composite library nodes created in previous versions	<p>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:</p> <ol style="list-style-type: none"> <li>1. Open the data flow and select all nodes.</li> <li>2. Choose <b>Apply Auto-Fixes</b>.</li> <li>3. Save the data flow, then return to the Directory before reopening the data flow.</li> </ol>
Links from tooltips to help	<p>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 <b>F1</b> then searching for the relevant topic.</p>
Logistic Regression node	<p>The Logistic Regression node does not support Unicode for categorical data.</p>

## 7. Contact us

If you encounter any technical issues, we recommend that you visit the support portal at [support.precisely.com](https://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](#).

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