NexJ Data Bridge Release Notes

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About NexJ Systems

NexJ Systems is the pioneer of Intelligent Customer Management. Our award-winning CRM is designed to help Wealth Management, Private Banking, Corporate and Commercial Banking, and Insurance firms revolutionize their business. Powered by artificial intelligence, our products help drive productivity, boost client engagement, and increase revenue. With users in over 60 countries, our customers benefit from our deep expertise across financial services verticals, strategic investment in innovation, and commitment to their success.

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NexJ Data Bridge is a NexJ product that orchestrates real-time packaging and delivery of data from CRM to external data consumers. Data Bridge offers powerful data export capabilities that support the creation of specific data views for individual data warehouses, reporting systems, and back-office compliance and archiving solutions. Data Bridge benefits include automatic publishing of NexJ CRM data to third party consumers, a complete and comprehensive data export model for NexJ CRM, and UI-based configuration of data views.

Product documentation is available online at https://documentation.nexj.com.

Data Bridge 25.09

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 25.09 pertain to the following code release:

Data Bridge Model JAR: nexj-meta-bridge-25.09.0.0-1.2.89-60b00a71.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.32.22.0.zip

Data Bridge Kafka Adaptor: bridge-kafka-23.12.0.0-3.war

For more information about this release, see the following topics:

New features delivered in 25.09

The following features and enhancements were included as part of Data Bridge 25.09.

New Purge and Archive process

This release introduces new CRM data management capabilities to the Data Bridge platform (DATABRIDGE-1632). The new Purge and Archive process is designed to help organizations manage CRM data lifecycle with precision, compliance, and scalability. You can now configure and execute processes for automated or ad hoc purging and archival of both the operational and audit CRM data. This feature supports key use-cases such as:

- **Regulatory Compliance**: Automatically remove and optionally archive CRM data based on configurable criteria.
- **Database Growth Management**: Reduce CRM database size by purging historical audit logs.

For example, your company policy may be that all activities older than seven years should be archived and removed from your CRM. You can use Data Bridge to generate snapshots of activity records, move them to a secondary storage (archive), and then physically remove (purge) the

activities from your CRM database. This functionality can be executed by a batch process that is scheduled to run nightly.

The **Purge and Archive** feature introduces a new dedicated tab in the Data Processes workspace. Users can use the new **Purge and Archive** tab to configure, preview, and execute automated data purge and archival workflows.

Creating a new Purge and Archive process

When creating a new Purge and Archive process, you specify the following information.

- You must select **Purge Criteria** to define filter conditions for identifying purge candidates. Specify whether or not previously soft-deleted records should be included.
- You can optionally add **Data Preview Fields** to better visualize the data selected by the purge criteria. However, these fields do not affect the purge process.
- The **Cascade Associations** section allows you to view associated objects or fields affected by the purge process.

Data archiving is optional and disabled by default. You can enable it for the process by selecting the **Enable archival of data before purging** option on the **Archive** tab. If archiving is enabled, data is only purged if it was successfully archived. Specify the following information if archiving is enabled:

- Select the **Archive Publishing Target** to specify how the snapshot of the archived data should be saved.
- Specify the **Archive Fields** to include as part of the archiving snapshot or apply a **Transformation**.
- The Archive Preview can be used to better visualize the data that will be archived and purged.

You can limit the allowed running time of the process to avoid overlap with the core business hours or with other batch processes.

Executing a Purge and Archive data process physically removes select records from the CRM operational database; such records will not be recoverable. Additional functional privileges were introduced to control the ability to configure and execute Purge and Archive processes.

Support for additional subject areas

New subject area configurations were added for the following CRM system audit logs (DATABRIDGE-2032). The following new subject areas have been added:

- Audit Log
- Attribute Audit Log
- Authentication Audit Log
- Integration Log

You can now build CRM Publishing processes and Purge and Archive processes using these subject areas.

Support for relative dates in filters

You can now use relative date values when specifying filtering criteria (DATABRIDGE-2031). For example, you can identify tasks that were created in the past two months. To do this, you can add the **Create Date** field as a filter. You can then set the operator as `greater than`, select the `month` interval, and then set its value as `-2`. Whenever this process is run, the filter will identify all tasks created within the prior two months of the run date.

Automatic retrieval of the CRM metadata

In order to be able to configure and execute data publishing and data management processes with Data Bridge it is necessary to import the up-to-date CRM metadata (class model) into the product configuration. Previously, this task was accomplished by first exporting the relevant metadata as .json files with the help of the Data Bridge Adapter for CRM, and then importing them into the Data Bridge Server's configuration. For more information about this process, see the "Exporting NexJ CRM metadata as JSON" and "Creating new subject areas and extending default subject areas" topics in Data Bridge documentation.

In this release, the process was enhanced to automatically retrieve the necessary CRM metaclass information using an API endpoint (DATABRIDGE-2041). While exporting and loading the CRM metadata using .json files is still supported, it is no longer necessary. Data Bridge automatically determines the list of CRM metaclasses for which it requires details. It queries the CRM server using an API at startup. It can also query the server using an API on an ad hoc basis.

For an ad hoc retrieval of CRM metadata, a user with Administrator privileges must navigate to the Global Settings workspace and the **Subject Area Configuration** tab, and click the **Load Metadata** button.

To enable this functionality, the following setting in the NexJ Data Bridge System Admin Console must be set appropriately. On the **Statistics** page, navigate to **nexj.bridge > Administration > DataEngine > Model** and ensure that the **Load CRM Metadata via APIs** attribute is set to `Y`. This is

the default value. If this attribute is not set to `Y`, then Data Bridge will continue to look for the .json metadata files when attempting to load metadata.

> This feature is not yet available in multi-tenant deployment configurations.

Security, integration, and automation upgrades

The NexJ Framework used for Data Bridge 25.09 includes the following upgrades (DATABRIDGE-2079, DATABRIDGE-2062):

- Apache Tomcat has been upgraded to version 9.0.107 (released by the Apache Software Foundation on July 4, 2025) (CRM-4129).
- OpenJDK has been upgraded to version 11.0.27+6 (released April 15, 2025) (CRM-3948).
- Selenium has been upgraded to version 4.33 (released by the Software Freedom Conservancy on May 25, 2025) (CRM-3909).
- The Avro library was upgraded to version 1.11.4+ (released by the Apache Software Foundation on September 22, 2024) (CRM-3861).
- The googlei18n/libphonenumber library has been upgraded to 9.0.5 (released May 07, 2025) (CRM-3853).
- The date.olson.db.js module has been upgraded to version 2025b (released March 22, 2025) (CRM-3486).

Requirements and support information for Data Bridge 25.09

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 25.09 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server
- PostgreSQL

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2017
- Microsoft SQL Server 2019

Support for the Microsoft SQL Server 2017 will be removed in an upcoming release.

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 25.04 was integrated with Confluent 6.1.0 server that includes Apache Kafka 2.7 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 25.04.

The row in the following table represents a single core testing stack used during the development and test cycle of Data Bridge 25.04. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 11

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Support for the Microsoft SQL Server 2017 will be removed in an upcoming release.

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database servers for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder.

PostgreSQL
To run on or integrate with PostgreSQL data sources, you should use the `postgresql-version.jdbc.jar` driver provided with your PostgreSQL distribution.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 25.04

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 25.04 pertain to the following code release:

Model JAR: nexj-meta-bridge-25.04.0.0-1.2.82-d1d4b20b.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.30.27.0.zip

For more information about this release, see the following topics:

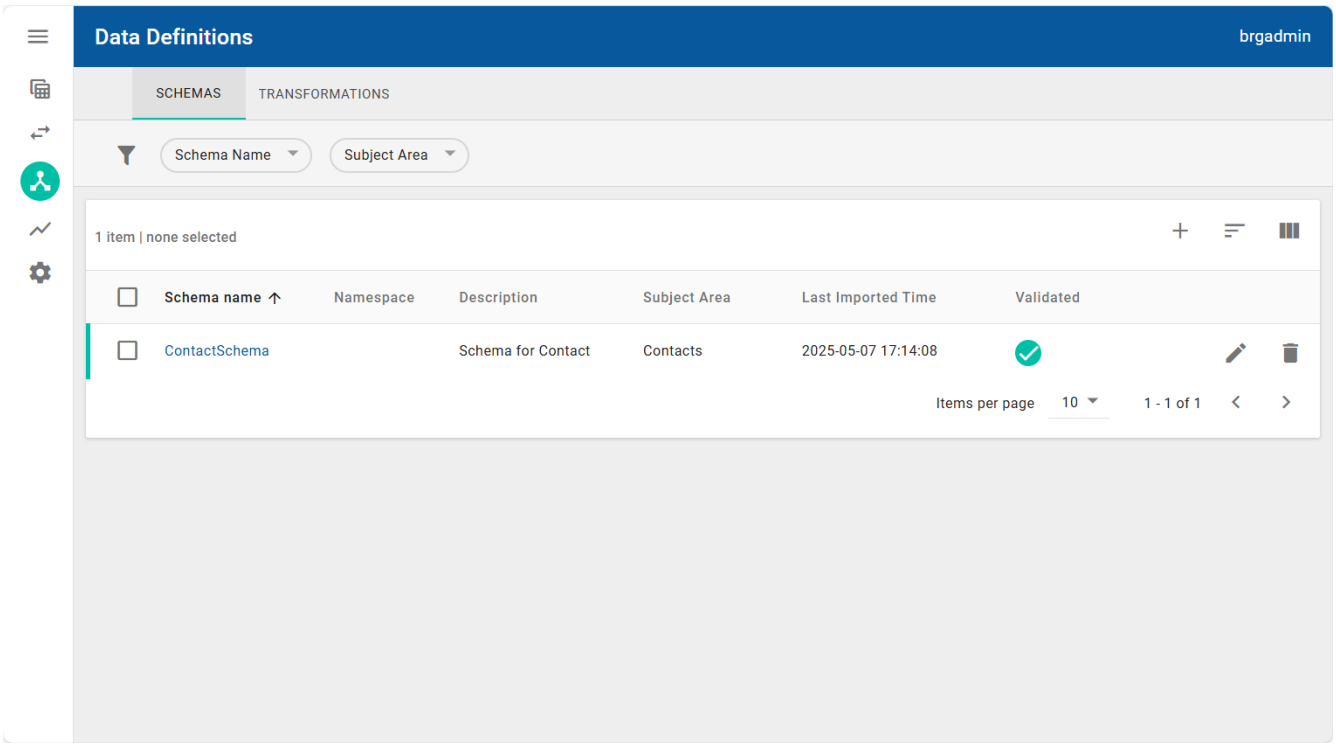
New features delivered in 25.04

The following features and enhancements were included as part of 25.04.

Bidirectional data transformation

You can now apply data transformation rules both when publishing and when ingesting updates through Data Bridge (DATABRIDGE-1813). This latest enhancement enables Data Bridge to perform complex data orchestration tasks involving the NexJ CRM and other supported systems while maintaining the communication in specific organization-defined formats.

Access this functionality using the new Data Definitions workspace, which has replaced the Schema Explorer workspace.



This feature is supported by the following new configurations.

Schemas

Schemas or *data schemas* describe the format of the data used in data publishing and data ingestion configurations. They are defined in JSON format and imported using the **Schemas** tab on the Data Definitions workspace. Schemas can also be Apache Avro definitions or be based on one of the CRM subject areas that are configured in Data Bridge.

Transformations

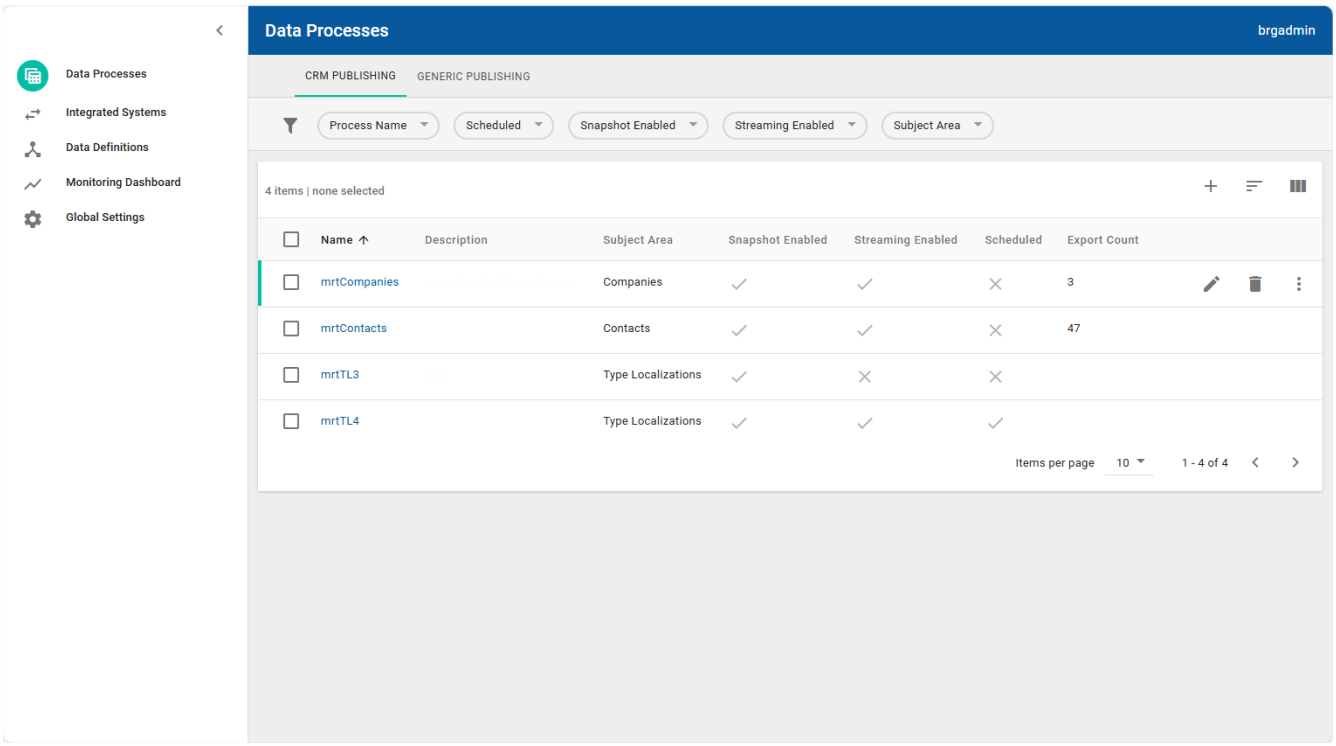
Transformations define the mapping of attributes and the calculation logic necessary to transform a message from a source to a target schema format. Transformation configurations are also defined in JSON format and imported using the **Transformations** tab on the Data Definitions workspace. Transformations are used to specify the values of attributes defined in the target data schema with the help of calculations.

Transformations can be applied to CRM publishing processes and generic publishing processes (previously CRM and Generic Views), using the **Add Transformation** field on the **Data Selection** tab.

The data transformation logic is powered by a set of functions provided out-of-the-box. Additional or custom functions may be added through model augments to further extend the transformation capabilities.

Additional user interface updates

To more accurately reflect their purpose and to better align the future development of the product, “views” are now referred to as “processes” within Data Bridge. Therefore, the View Explorer workspace has been renamed and is now the Data Processes workspace (DATABRIDGE-1917). The **CRM Views** tab and **Generic Views** tabs have also been renamed and are now **CRM Publishing** and **Generic Publishing** tabs.



Additional usability enhancements

- When viewing the details of a data process on the Data Processes workspace, you can now navigate between different data records on the **Preview** tab (DATABRIDGE-1895).
- When creating or editing a schema or a transformation, you can now define default values for attributes (DATABRIDGE-1931).

Security enhancements

Apache Tomcat has been upgraded to version 9.0.102 (released by the Apache Software Foundation on March 6, 2025) (DATABRIDGE-1969).

Deprecated functionality

The Schema Sharing feature has been deprecated (DATABRIDGE-1849). Use schemas and transformations instead.

Requirements and support information for Data Bridge 25.04

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 25.04 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

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- CentOS
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- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server
- PostgreSQL

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2016
- Microsoft SQL Server 2017
- Microsoft SQL Server 2019

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 25.04 was integrated with Confluent 6.1.0 server that includes Apache Kafka 2.7 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 25.04.

The row in the following table represents a single core testing stack used during the development and test cycle of Data Bridge 25.04. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 11

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database servers for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder.

PostgreSQL
To run on or integrate with PostgreSQL data sources, you should use the `postgresql-version.jdbc.jar` driver provided with your PostgreSQL distribution.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

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Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 24.12

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 24.12 pertain to the following code release:

Model JAR: nexj-meta-bridge-24.12.0.0-1.2.75-f40c9773.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.29.28.0.zip

For more information about this release, see the following topics:

New features delivered in 24.12

The following features and enhancements were included as part of 24.12.

Support for multiple CRM tenants

Data Bridge can now integrate with multiple NexJ CRM environments (tenants) for exporting data (DATABRIDGE-1781). All tenants need to have an identical version of the NexJ CRM model deployed. Both the snapshot export and streaming updates modes are supported.

The new Tenant Explorer workspace displays the list of tenants and their connection status (DATABRIDGE-1834). Select the tenant name to see additional details about the tenant (DATABRIDGE-1798).

The new Tenants tab has been added to the Create View dialog and Edit View workspace. It allows you to select which tenants should be monitored for data updates and queried during exports (DATABRIDGE-1830).

In NexJ CRM, you can use the Data Bridge Adaptor administrative UI to manually add or remove a tenant from the Data Bridge configuration (DATABRIDGE-1788). Automatic registration of tenants with Data Bridge is also supported.

“Tombstone” messages for Kafka topics

It is now possible to use “tombstone” messages to signify “delete” events on a Kafka topic (DATABRIDGE-1802). A “tombstone” is a message with a key and a null payload, and is a standard mechanism in Kafka to process a deleted record. Depending on the configuration of the Kafka topic, it may cause prior messages with the same key to be removed after a period of time.

You can specify whether deleted records should be published as “tombstones” when defining Kafka publishing targets. The use of “deleted” field is still supported as an alternative option.

Requirements and support information for Data Bridge 24.12

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 24.12 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

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Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
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- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server
- PostgreSQL

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 24.12 was integrated with Confluent 6.1.0 server that includes Apache Kafka 2.7 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 24.12.

The row in the following table represents a single core testing stack used during the development and test cycle of Data Bridge 24.12. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 11

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

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Minimum required workstation specifications

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Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 24.09

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 24.09 pertain to the following code release:

Model JAR: nexj-meta-bridge-24.09.0.0-1.2.67-2bae82f8.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.28.36.0.zip

For more information about this release, see the following topics:

New features delivered in 24.09

The following features and enhancements were included as part of 24.09.

Support for nested functions in schema definitions

When creating data schema definitions, it is now possible to use formulas with nested functions in order to specify the values of attributes (DATABRIDGE-1738). In the following example, the function `currentTime` is passed as an argument to the function `dateFormat` in order to determine the value of the `export_time` field:

```
{
     "name": "export_time",
     "type": "string",
     "value": "f:dateFormat \\"YYYY-MM-dd HH:mm:ss\\" (f:currentTime)"
}
```

Exporting collection field data as a single row

For data exported to Delimited File targets, a new option was added to collapse collection field values into a single delimited string (DATABRIDGE-1772). This allows only writing a single row of data for each object. The feature can be configured on the Create Publishing Target or Edit Publishing Target dialog. In the **How should collections fields be exported to a Delimited file?** field, select **Collapse to a single row using a delimiter** and then specify a value in the **Collection Field Delimiter** field.

Limiting the number of records written to each file during export

For data exported to Delimited File or JSON File targets, an option was added to limit the number of records that may be written to each file before rolling (DATABRIDGE-1771). The new parameter **Maximum number of records per file** was added to the Create Publishing Target or Edit Publishing Target dialog.

The **Maximum file size parameter** was also moved to this dialog from its previous location on the Global Settings workspace.

PostgreSQL support

This version of Data Bridge can now be deployed in an environment with PostgreSQL DBMS backend (DATABRIDGE-1782).

External software upgrades

The following third-party libraries were updated (DATABRIDGE-1799):

- Apache ActiveMQ has been upgraded to version 5.18.4 (released by the Apache Software Foundation on April 11, 2024) (CRM-1205).
- Apache Ant has been upgraded to version 1.10.14 (released by the Apache Software Foundation on August 20, 2023) (CRM-2232).
- Apache Avro has been upgraded to version 1.11.3 (released by the Apache Software Foundation on Friday, September 22, 2023) (CRM-2230).
- Apache Kafka client has been upgraded to version 3.7.0 (released by the Apache Software Foundation on February 27, 2024) (CRM-800).
- Apache Tomcat has been upgraded to version 9.0.89 (released by the Apache Software Foundation on May 7, 2024) (CRM-2233).
- Apache Xalan Serializer has been upgraded to version 2.7.3 (released by the Apache Software Foundation in April 2023) (CRM-856).
- Apache Xerces has been upgraded to version 2.12.2 (released by the Apache Software Foundation on January 24, 2022) (CRM-857).

- MySQL JDBC Connector has been upgraded to version 9.0.0 (released by Oracle on July 1, 2024) (CRM-925).
- Netty has been upgraded to version 4.1.100 (released by the Netty project on October 10, 2023) (CRM-1278).
- PostgreSQL JDBC Driver has been upgraded to version 42.7.3 (released by the PostgreSQL Global Development Group on March 13, 2024) (CRM-814).
- Selenium has been upgraded to version 4.20.0 (released by the Software Freedom Conservancy on April 25, 2024) (CRM-2252).
- The date.olson.db.js module has been upgraded to version 2024a (released by IANA on February 1, 2024) (CRM-2415).
- The IANA top level domain list has been updated to version 2023082500 (CRM-861).

Requirements and support information for Data Bridge 24.09

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 24.09 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

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Tested systems, servers, and databases

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Operating system

- CentOS Linux 7

Application server

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Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.7.0 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 24.09.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.7.0. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 24.07

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 24.07 pertain to the following code release:

Model JAR: nexj-meta-bridge-24.07.0.0-1.2.62-d7c5d212.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.26.20.0.zip

For more information about this release, see the following topics:

New features delivered in 24.07

The following features and enhancements were included as part of 24.07.

Transformation of published data into a defined schema

It is now possible to apply transformation logic to NexJ CRM data as it is exported to Kafka, HTTP or JSON File target types (DATABRIDGE-802).

This powerful new feature makes it even easier to integrate CRM with Enterprise Data Warehouse and other systems that require updates of CRM data in a specific organization-defined format. Target data schemas can be defined in JSON and imported into Data Bridge using the new Schemas workspace.

A data schema is subject-area specific and can be applied to one or more CRM Views based on the same subject area (for example, Companies). Data schemas allow configuring the complete set of attribute names, types, and values that are expected as a part of the output. Attribute values can be described with a formula-based calculation syntax, allowing for data transformation logic. You can also specify default values for each attribute.

Enhancements for ingesting data from a Kafka topic

The previous release of Data Bridge introduced the ability to ingest updates from a Kafka topic (DATABRIDGE-1140). The current release includes the following additions or changes to this functionality:

- The ability ingest data from a Kafka topic can be enabled and disabled by setting the `isDataIngestionActive` property in the environment file (DATABRIDGE-1674). To be able to register consumer with Kafka Consumer and process messages from Kafka Consumer, set the value to `true`.
- If the `isDataIngestionActive` property is set to `false`, the **Generic Views** tab on the View Explorer workspace and the **Data Sources** tab on the Integrated Systems workspace are no longer displayed (DATABRIDGE-1673).
- Two new columns are now displayed on the Data Sources tab (DATABRIDGE-1593):
  - **Connection Status** displays either Inactive (in red) or Active (in green)
  - **Server Address** displays the Kafka Broker URL:PORT

Framework enhancements

The following enhancements were included in the supported framework plugin:

- OpenJDK 11 version has been updated to 11.0.22+7 (released January 18, 2024) (CRM-1610)
- Apache Tomcat server version has been updated to 9.0.83 (released November 15, 2023) (CRM-829)

Requirements and support information for Data Bridge 24.07

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 24.07 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.7.0 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 24.07.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.7.0. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 23.12

NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

Data Bridge 23.12 release includes the Data Bridge 3.7.0 release.

These release notes for NexJ Data Bridge 23.12 pertain to the following code release:

Model JAR: nexj-meta-bridge-23.12.0.0-1.2.51-1b6ed917.jar

Framework Plugin: com.nexjsystems.nexjstudio_13.25.37.0.zip

For more information about this release, see the following topics:

New features delivered in 23.12

The following features and enhancements were included as part of 23.12.

Data Bridge 23.12 release includes the Data Bridge 3.7.0 release.

Creating publishing targets and mapping them to views

This release introduces a new concept of Publishing Targets that enables a more flexible and intuitive way to create CRM data event streaming and snapshot publishing configurations, enhances the user experience and paves the way for future strategic development of Data Bridge product. Data Bridge user interface has been refactored to support configuration of Publishing Targets and mapping them to Views (DATABRIDGE-1181). This new functionality enables you to:

- Add publishing targets (data consumers), which determine where the data is published, on the new **Publishing Targets** tab on the Integrated Systems workspace (DATABRIDGE-1015 and DATABRIDGE-1260). Settings specific to each publishing target can now be configured on

the Publishing Targets tab. Such configuration was previously found on the Global Settings workspace or under each View.
- Configure multiple data publishing pipelines per view. This can now be achieved by adding one or more publishing targets to a view in the Publishing Target Mapping section in the Publishing Options tab in the View Builder, and configure the targets to enable snapshot exports, real-time streaming, and scheduling (DATABRIDGE-1171 and DATABRIDGE-1267).
- Monitor the performance of real-time streaming and snapshot exports for each publishing target in the Monitoring Dashboard (DATABRIDGE-1175).
- View the name of the publishing target and target type for errors in the Errors tab on the View Details page (DATABRIDGE-1176) and filter the errors data table by target type in the Errors tab (DATABRIDGE-1300).

Ingesting data from a Kafka topic

In addition to data publishing capabilities, this release of Data Bridge introduces the ability to ingest updates from a Kafka topic (DATABRIDGE-1140). The new Data Ingestion module enables:

- Subscribing for event streaming updates from a Kafka topic. The Kafka topic is identified using the new **Data Sources** tab on the Integrated Systems workspace.
- Publishing the data updates to a NexJ CRM or a third-party HTTP API. The publishing targets are defined on the **Publishing Targets** tab on the Integrated Systems workspace.
- Support for Apache Avro de-serialization (DATABRIDGE-1599). Avro formatting can be specified when configuring a data source.

This major capability update greatly simplifies the task of integrating CRM with an Apache Kafka-based data hub, consuming data updates and de-serialization of Apache Avro messages into JSON. Data Ingestion configurations can be built by a Data Bridge administrator at run-time with the help of the **Generic Views** tab on the View Explorer workspace.

Support for non-persisted attributes in filters

It is now possible to configure whether a non-persisted attribute can be used as a view filter by specifying the filterable property on the attribute in the relevant Data Bridge subject area definition file (DATABRIDGE-1233). This feature is meant to be used at the discretion of the developer, with the non-persisted CRM model attributes that have query engine support for filtering.

For more information, see Using Data Bridge .

Requirements and support information for Data Bridge 23.12

Supported platform information, tested configurations, as well as hardware and software requirements for this release are listed below. Software and hardware mentioned below may have their own additional requirements.

Supported integrations

Data Bridge 23.12 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.7.0 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 23.12.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.7.0. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ Data Bridge includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

Data Bridge 3.6.2

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 3.6.2 pertain to the following code release:

Model JAR: nexj-meta-bridge-3.6.2.0-1.2.29-62a23589.jar
Framework Plugin: com.nexjsystems.nexjstudio_13.17.27.0.zip

For more information about this release, see the following topics:

New features delivered in 3.6.2

This release includes performance and stability enhancements. The enhancements lower the overall load incurred by the CRM Object Queue engine and provide administrators with improved control over which CRM classes are being monitored by Data Bridge for event streaming purposes.

The following new run-time configurable parameters were introduced.

Enabling restricted model monitoring

By default, Data Bridge monitors all CRM classes that are associated with supported Data Bridge subject areas and sends notifications whenever it detects changes. You can now limit the number of notifications by monitoring only the CRM classes associated with the Data Bridge views that were created. This can be enabled at run-time in the Data Bridge System Admin Console, which can be accessed from the `https://[host]/nexj/SysAdmin.html` URL.

In the Data Bridge System Admin Console, open the **Statistics** page and navigate to the following path: `nexj.bridge/Administration/DataEngine/Model`

Set the **Generate Restricted Model** attribute to `Y`.

Restricted monitoring is disabled by default.

You can also enable this feature during deployment, by including the following property in the Data Bridge environment file:

```
generateRestrictedModel="true"
```

Including and excluding classes from being monitored

You can now explicitly specify the list of CRM classes that should always be monitored and the list of CRM classes that should never be monitored for event streaming purposes.

In the Data Bridge System Admin Console, open the **Statistics** page and navigate to the following path: `nexj.bridge/Administration/DataEngine/Model`

These two parameters allow administrators to further fine-tune the behavior of the Data Bridge Adapter:

- **Blocked Classes**
  Comma-separated list of classes excluded from being monitored by the UOW Listener. This value overrides any other settings, except the Required Classes list.
- **Required Classes**
  Comma-separated list of classes always monitored by the UOW Listener. This value overrides any other settings, including the Blocked Classes list.

A value of "none" should be used in case there are no classes to specify.

Disabling streaming

You can now disable all Data Bridge event streaming at run-time, using the NexJ System Admin Console, which is accessed from the `https://[host]/nexj/SysAdmin.html` URL.

In NexJ System Admin Console, navigate to the following path: `nexj.finance/Administration/DataBridgeAdapter/Replication`

Set the **Data Bridge Streaming Enabled** attribute to `N`.

While streaming is disabled, snapshot exports are still supported.

Requirements and support information for Data Bridge 3.6.2

Supported platform information, tested configurations, as well as hardware and software requirements for the 3.6.2 release are listed below.

Software and hardware mentioned below may have their own additional requirements.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server

Apache Kafka

Data Bridge 3.6.2 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server 22.04.3.0 and 22.11

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.6.2 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 3.6.2.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.6.2. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ CRM includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder. For example, if you install NexJ Studio in `C:\nexj_studio\13.x`, the driver will be in `C:\nexj_studio\13.x\plugins\com.nexjsystems.nexjstudio_version\ext`.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

NexJ Studio hardware and software requirements

Your system must meet the following requirements to be able to install and use NexJ Studio.

Operating Systems

- Microsoft Windows 10

> The 64-bit version of the Microsoft Windows operating system is recommended.

Minimum hardware requirements

- 12 GB RAM (16 GB or higher recommended)
- 2 GB free disk space for each workspace

Software

- Java SE Development Kit 8 (JDK 8)
- Java Runtime Environment 8 (JRE 8)

Data Bridge 3.6.1

NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 3.6.1 pertain to the following code release:

Model JAR: nexj-meta-bridge-3.6.1.0-1.2.28-8af9075e.jar
Framework Plugin: com.nexjsystems.nexjstudio_13.17.27.0.zip

For more information about this release, see the following topics:

New features delivered in 3.6.1

The NexJ Data Bridge 3.6.1 release ensures that compatibility between NexJ Data Bridge and NexJ CRM is maintained for clients upgrading to NexJ CRM 22.11 and later releases (DATABRIDGE-1389).

Requirements and support information for Data Bridge 3.6.1

Supported platform information, tested configurations, as well as hardware and software requirements for the 3.6.1 release are listed below.

Software and hardware mentioned below may have their own additional requirements.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server

Apache Kafka

Data Bridge 3.6.1 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server 22.04.3.0 and 22.11

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.6.1 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 3.6.1.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.6.1. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ CRM includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder. For example, if you install NexJ Studio in `C:\nexj_studio\13.x`, the driver will be in `C:\nexj_studio\13.x\plugins\com.nexjsystems.nexjstudio_version\ext`.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

NexJ Studio hardware and software requirements

Your system must meet the following requirements to be able to install and use NexJ Studio.

Operating Systems

- Microsoft Windows 10

> The 64-bit version of the Microsoft Windows operating system is recommended.

Minimum hardware requirements

- 12 GB RAM (16 GB or higher recommended)
- 2 GB free disk space for each workspace

Software

- Java SE Development Kit 8 (JDK 8)
- Java Runtime Environment 8 (JRE 8)

Data Bridge 3.6.0

> NexJ Data Bridge version 3.6.1 and later releases are compatible with CRM versions 8.8.8.X and later releases. Data Bridge version 3.6.0 and earlier releases are compatible with NexJ CRM version 8.8.8.X and later releases, up to version 22.09. Data Bridge version 3.6.0 and earlier releases are not compatible with NexJ CRM version 22.11 and later releases.
> To verify Data Bridge compatibility with other versions of NexJ CRM, please consult your NexJ service representative.

These release notes for NexJ Data Bridge 3.6.0 pertain to the following code release:

Model JAR: nexj-meta-bridge-3.6.0.0-1.2.28-9222e6f3.jar
Framework Plugin: com.nexjsystems.nexjstudio_13.17.27.0.zip

For more information about this release, see the following topics:

New features delivered in 3.6.0

The following features and enhancements were included as part of 3.6.0.

Event streaming to an HTTP URL

Previously, Data Bridge was capable of publishing near-real time NexJ CRM data updates (event streaming) into a Kafka topic. As of Data Bridge 3.6.0, you can also publish streaming updates to an HTTP URL, in a webhook manner (DATABRIDGE-1008). This new functionality enables architectural patterns, including providing event streaming services to systems deployed in the Cloud. It will also be valuable to enterprise clients that are not set up to run Apache Kafka.

For more information, see Using Data Bridge and Creating custom headers for HTTP targets.

Enhanced diagnostic output for when the NexJ CRM Adapter is disabled

When the NexJ CRM Adapter is disabled, and you publish a snapshot for a view in Data Bridge, the snapshot will complete with errors, and the specific error will display in the **Snapshot** subtab in the **History** tab for the view for further investigation (DATABRIDGE-886).

For more information, see Setting up Data Bridge.

Snapshot publishing enhancements

Significant performance and usability improvements were made to publishing of snapshots to either Delimited or JSON files. Data Bridge 3.6.0 enables the use of more efficient, multi-threaded processing while maintaining the ability to write to a single file or multiple files, depending on the configuration (DATABRIDGE-923). The new **Maximum File Size** setting found under Global Settings > Export Configuration governs the file roll-over behavior.

For more information, see Using Data Bridge.

Requirements and support information for Data Bridge 3.6.0

Supported platform information, tested configurations, as well as hardware and software requirements for the 3.6.0 release are listed below.

Software and hardware mentioned below may have their own additional requirements.

Server and database requirements

NexJ Data Bridge is designed to work with a variety of operating systems, databases, and servers.

If you need support for a configuration that is not listed, contact your NexJ representative to discuss your requirements.

Supported platforms

NexJ Data Bridge works with the following operating systems, databases, and servers.

Operating systems

- Windows Server
- CentOS
- Red Hat Enterprise Linux
- Microsoft Windows

Application server

- NexJ Model Server

Web servers

- Apache HTTP Server
- Microsoft Internet Information Services (IIS)

Database server

- Microsoft SQL Server

Apache Kafka

Data Bridge 3.6.0 includes kafka-clients 3.0.0 and supports any version of Apache Kafka broker compatible with this library.

Tested systems, servers, and databases

NexJ Data Bridge has been tested with the following versions of operating systems, application servers, web servers, and databases.

Operating system

- CentOS Linux 7

Application server

- NexJ Model Server 8.8.8.x and 9.x

Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
- Microsoft SQL Server 2016
- Microsoft SQL Server 2017

Apache Kafka

For testing of the event streaming and publishing a snapshot to a Kafka topic, Data Bridge 3.6.0 was integrated with Confluent 6.0.1 server that includes Apache Kafka 2.6 broker.

Core test stack

The following stack formed the core test environment for Data Bridge 3.6.0.

The row in the following table represents a single core testing stack used during the development and test cycle of version 3.6.0. Where applicable, additional version details are provided following the table.

Application server	Web server	Database	Java
NexJ Model Server	Apache 2.4.6	MSSQL 2017	JDK 8

Application server details

NexJ Model Server
Every release of NexJ CRM includes the version of NexJ Model Server that should be used alongside it.

Web server details

Apache 2.4.6
Apache HTTP Server 2.4.6

Database details

MSSQL 2017
Microsoft SQL Server 2017 (14.0.3025.34)

Java details

NexJ Model Server
Java SE Development Kit 11 (JDK 11)

Required database drivers

NexJ Data Bridge uses various drivers to communicate with its supported databases. To ensure successful communication with your databases, use the driver versions below when you deploy NexJ Data Bridge.

Database server for deployment and data integration

Microsoft SQL Server
To run on or integrate with Microsoft SQL Server databases, you should use the `jtds-1.2.2-9.jar` driver located in the `%NEXJ_PLUGIN%\ext` folder. For example, if you install NexJ Studio in `C:\nexj_studio\13.x`, the driver will be in `C:\nexj_studio\13.x\plugins\com.nexjsystems.nexjstudio_version\ext`.

NexJ client requirements

The following topics provide the hardware and software requirements for accessing NexJ Data Bridge from various client devices.

NexJ Data Bridge end user system requirements (desktop)

To run a NexJ application client such as NexJ Data Bridge, the end user's computer must meet the following requirements.

Recommended workstation specifications

Processor
Intel Core i5 or Intel Core i7

Memory
6 GB RAM or higher

Operating system
Windows 10

Resolution display

- 1920 x 1080 (desktop)
- 1600 x 900 (laptop)

Minimum required workstation specifications

Processor
Intel Core 2 Duo 2.33GHz

Memory
4 GB RAM

Operating System
Windows 10

Resolution Display
1280 x 1024

Supported browsers

- Current version of Google Chrome
- Current version of Microsoft Edge

NexJ Studio hardware and software requirements

Your system must meet the following requirements to be able to install and use NexJ Studio.

Operating Systems

- Microsoft Windows 10

> The 64-bit version of the Microsoft Windows operating system is recommended.

Minimum hardware requirements

- 12 GB RAM (16 GB or higher recommended)
- 2 GB free disk space for each workspace

Software

- Java SE Development Kit 8 (JDK 8)
- Java Runtime Environment 8 (JRE 8)

Known issues and workarounds for Data Bridge

The following is a list of the most critical known issues in the current release of NexJ Data Bridge and their workarounds, where possible.

DATABRIDGE-811

When you create a new Contacts view, add the `Full Name` and `Related Opportunities` attributes, enable streaming, save the view, and then create a new opportunity or delete one in NexJ CRM, instead of publishing a single update message for the related contact to Kafka, Data Bridge produces two update messages (one for the related contact and one for the related user).

Workaround:

A possible workaround is to add a filter "Type equals Contact" to such a view.

DATABRIDGE-822

When you create a view on the Activities subject area with streaming enabled in Data Bridge, create a task with a follow-up action item in NexJ CRM, and delete the main task, the action should result in a "delete" event for the task published by Data Bridge. Currently, the action results in an "update" event on the task.

DATABRIDGE-974

When the object count is refreshed in the **Preview** tab for a Data Bridge view that contains associated objects (for example, Addresses for a Company), and the **Changes (primary or associated fields)** option is selected in the **Publishing Options** tab, the displayed count may be higher than the actual number of objects that would be published. This defect only affects the preview functionality and not the accuracy of data being published.

DATABRIDGE-1565

In some cases, if an error occurs during event steaming of NexJ CRM updates to a Kafka topic, and when the update was triggered by an association attribute included in the view, the "Retry failed updates" function may not work as expected.

Resolved issues for Data Bridge

Version 25.09

DATABRIDGE-1245

Fixed an issue in the Monitoring Dashboard workspace where the **Export Rate - Snapshot** graph displayed values with excessive decimal precision. Export rate values are now correctly limited to three decimal places for improved readability and consistency.

DATABRIDGE-1630

Fixed an issue where saving a data source with an invalid channel name resulted in an unexpected metadata error.

DATABRIDGE-1709

Fixed an issue where publishing processes containing invalid attributes could still be used for data exports despite being in an invalid state.

DATABRIDGE-1806

Fixed an issue where attempting to bulk delete publishing targets, data sources, schemas, or transformations would fail if any selected items were mapped to a publishing process, which caused the application to freeze and require a manual refresh. The system now correctly deletes only unmapped items and displays an informational message indicating which items could not be deleted due to existing mappings.

DATABRIDGE-1896

Fixed an issue where, in a multi-tenant deployment configuration, users could deselect all columns in the Tenants workspace grid, resulting in an empty view with no way to restore columns without reloading the application.

DATABRIDGE-1909

Fixed an issue where the error pop-up in the **History** tab did not include a vertical scroll bar, preventing users from viewing all failed streaming messages and accessing pagination controls when the tab contained a large number of items.

DATABRIDGE-1965

Previously, when a generic publishing process was configured to import updates from a Kafka topic, and the Data Bridge Kafka Consumer was later restarted, the streaming of inbound updates was impacted. This issue was fixed.

DATABRIDGE-1980

Fixed an issue where adding `{{"includeKey": "true"}}` flag as a part of schema definition for a parent object automatically caused the inclusion of keys (OIDs) for its associated fields.

DATABRIDGE-1996

Previously, when a snapshot containing currency or percentage fields was published to a Kafka Avro or Kafka JSON publishing target, these field values were exported as string values. This issue was fixed.

DATABRIDGE-1998

Fixed an issue where an imported Avro data schema that contained attributes with union types (for example, `{"type": ["null", "string"], "name": "firstName"}`), could not be used in a transformation.

DATABRIDGE-2009

Fixed an issue where the `cast` function used in a transformation failed to convert a literal string representation of a timestamp to a timestamp value.

Version 25.04

DATABRIDGE-1745

Fixed an issue where it was possible to trigger data snapshot publishing for a CRM Publishing process that was marked invalid.

DATABRIDGE-1937

Previously, the "Replay Failed Messages" command did not work when Data Bridge was configured to integrate with multiple CRM tenant environments. This issue has been resolved.

DATABRIDGE-1938

Previously, the value of "Duration (s)" column on the **History** > **Snapshot** tab sometimes displayed a negative number if the export process had not completed. This issue is only occurred when PostgreSQL was used as the database platform for the Data Bridge server. This issue has now been resolved.

DATABRIDGE-1971

Previously, the `f:comparison` function added to a calculation in a Transformation did not allow for comparing two string, Boolean, or date/time values. This was addressed and a new argument was added to the function to specify the data type of the arguments being compared.

Version 24.12

DATABRIDGE-1870

Fixed an issue where the "Next schedule time" information did not reset after the scheduler was configured to "Run once" and a data snapshot was successfully executed.

Version 24.07

DATABRIDGE-1310

Previously, the timeline displayed on the X-axis of the "Snapshot Time" chart was off by an hour for some exports. This issue has been resolved.

Version 23.12

DATABRIDGE-734

Previously, under the certain circumstances, the filter captions in the **About** tab on the View Details page did not match the filter captions originally provided on the Create View page in the **Data Selection** tab, and in the Filters section. This issue has been resolved.

Version 3.7.0

DATABRIDGE-1184

Previously, when the Data Bridge Adapter was disabled, users couldn't export Avro schema of a view. This issue has been resolved.

Version 3.6.0

DATABRIDGE-621

Previously, when the CRM Data Bridge Adapter was installed in an environment with Kerberos authentication enabled, the default system user ID, "brgadmin", was not seeded in with the correct domain suffix appended to it. The login name needed to be manually renamed. This issue has been resolved.

DATABRIDGE-1088

Previously, when you created a new view in Data Bridge with a Boolean field (for example, **Active**), set a filter to "Active equals No", saved the view, and selected the **About** tab, the Filters section in the **About** tab did not display "false" for Boolean type filters. This issue has been resolved.

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