NexJ Data Bridge Release Notes

Published May 9, 2025

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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 25.04

> 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:

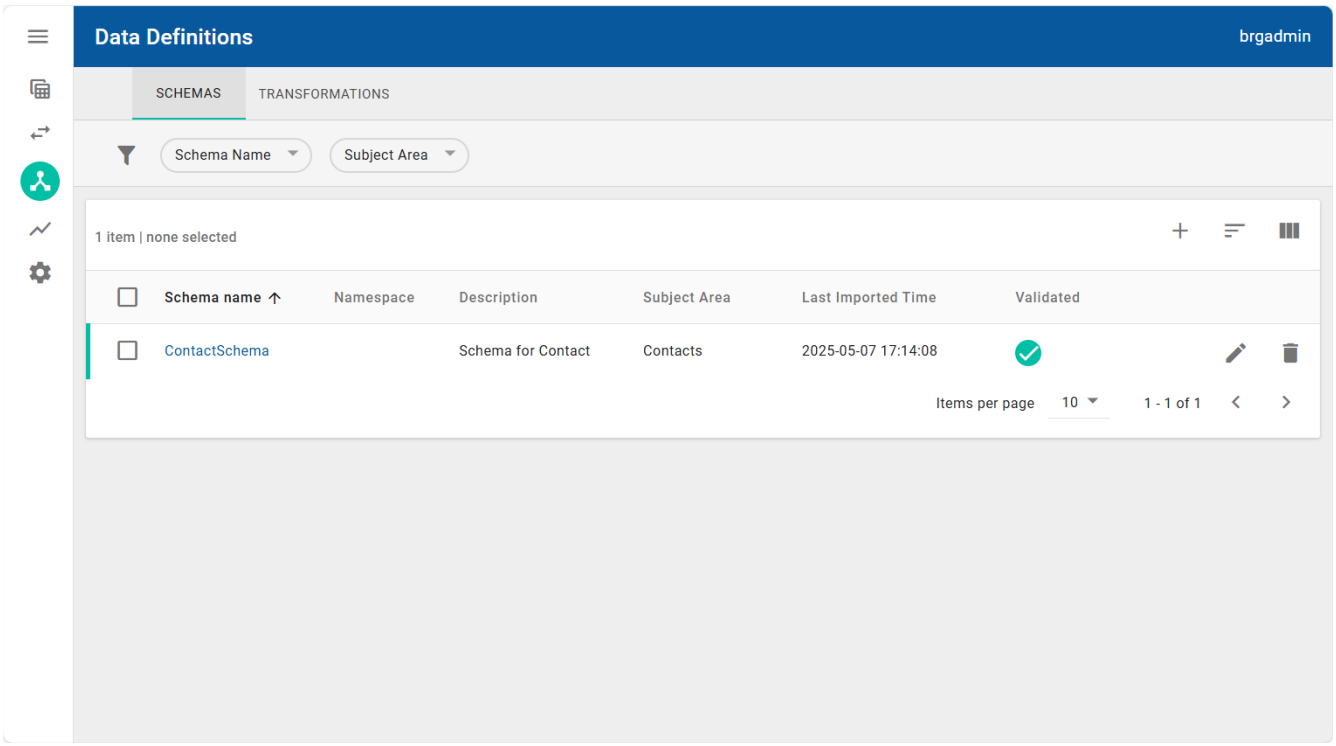
New features delivered in 25.04

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

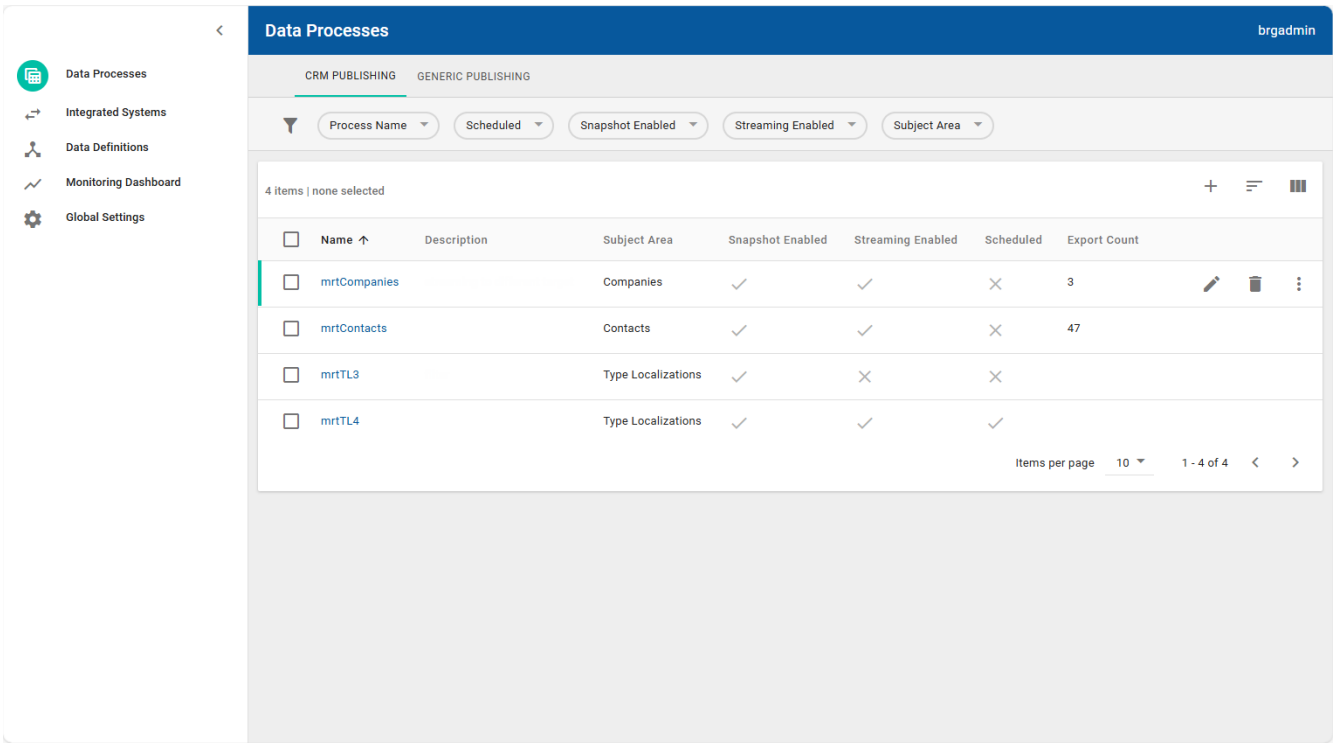
Transformations define the mapping of attributes and the calculation logic necessary to transform a message from a source to a target schema format. Transformation configurations are also defined in JSON format and imported using the **Transformations** tab on the Data Definitions workspace. Transformations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

- 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 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)

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 24.12

> 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

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 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

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 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.

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 24.09.

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

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Supported platforms

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Database server

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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

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Web server

- Apache HTTP Server 2.4.6

Databases

- Microsoft SQL Server 2012
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- 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

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Recommended workstation specifications

Processor
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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:

- Requirements and support information for Data Bridge 3.6.2 (page 34)
- New features delivered in 3.6.2 (page 32)
- Resolved issues for Data Bridge (page 52)
- Known issues and workarounds for Data Bridge (page 50)

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.

1 https://confluence.nexj.com/display/PUBDEV9/.Resolved+issues+for+Data+Bridge+v9.4
2 https://confluence.nexj.com/display/PUBDEV9/.Known+issues+and+workarounds+for+Data+Bridge+v9.4

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.

3 https://confluence.nexj.com/display/PUBDEV9/.Resolved+issues+for+Data+Bridge+v9.4
4 https://confluence.nexj.com/display/PUBDEV9/.Known+issues+and+workarounds+for+Data+Bridge+v9.4

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-718

Using the "equals today" operator with filters on date attributes results in an error.

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-1150

When a value picker filter is added for an association attribute (for example, Contacts > Tier) and then edited more than once, the filter becomes not editable. In order to continue editing the filter, the view itself must be saved and edited.

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.

DATABRIDGE-1628

Updating some properties (for example, Channel Name or Topic Name) of a data source after it has been enabled to receive streaming updates through a Generic View, does not take effect.

Workaround:

Remove the data source and then re-add it to the view configuration.

DATABRIDGE-1630

On the Create/Edit Data Source dialog, if you save a data source configuration where the channel name is refers to a channel that does not exist, an unexpected error message is displayed.

DATABRIDGE-1965

If a Generic Publishing Process is configured to imported updates from a Kafka topic, and the Data Bridge Kafka Consumer is later restarted, the streaming of inbound updates may be impacted.

Workaround:

Create a new consumer group. (First, edit the Generic Publishing Process to disable streaming and save your changes. Then, edit the process again and enable streaming.)

DATABRIDGE-1996

When a snapshot that contains currency or percentage fields is published to a Kafka Avro or Kafka JSON publishing target, these field values are exported as string values.

DATABRIDGE-1998

Imported Avro Schemas that contain attributes with union types (for example, `"type": ["null", "string"],`) cannot be used in Transformations.

DATABRIDGE-2009

The `f:cast` function fails to convert a literal string representation of a timestamp to a timestamp value.

Resolved issues for Data Bridge

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.

Version 3.5.2

DATABRIDGE-1117

Previously, when you navigated to the **History** tab of a view, used the Date filter chip, and selected a relative date operator (for example, "equals today"), an error was generated, and you were denied access to the function due to insufficient visibility. This issue only affected the ability to filter historical Snapshot or Streaming status records in the UI and did not impact data publishing. This issue has been resolved.

Version 3.5.0

DATABRIDGE-905

Previously, when you opened an existing view in Data Bridge, selected the **Preview** tab, clicked the **More Actions** button, and selected either **Enable Streaming** or **Disable Streaming**, the preview data was loaded automatically. This issue has been resolved.

DATABRIDGE-907

Previously, enabling or disabling streaming from the **More Actions** menu in the Data Bridge UI was not working as expected. The **Enable Streaming** and **Disable Streaming** menu options, that were temporarily disabled in the View Explorer and on the View Details page for views, have been re-enabled. This issue has been resolved.

DATABRIDGE-916

Previously, chunked mode snapshot exports were occasionally stuck in "In progress with errors" when the output disk was full. This issue has been resolved.

DATABRIDGE-917

Previously, the Load Preview Data in the **Preview** tab, and Export Avro Schema functions were not available for views that had a highly restrictive filter criteria configured that caused Data Bridge to retrieve zero objects from CRM. This issue has been resolved.

DATABRIDGE-988

The Monitoring Dashboard was experiencing a performance issue when displaying data. This issue has been resolved.

DATABRIDGE-996

Previously, when you opened an existing view in Data Bridge, selected the **Preview** tab, clicked **Load Preview Data**, clicked **Edit**, modified the view definition, and then clicked **Revert** to revert your changes, the preview data in the **Message** subtab and **Data** subtab in the **Preview** tab autoloaded upon reverting changes. This issue has been resolved.

Version 3.4.3

DATABRIDGE-926

An issue that meant that multiple manifest files were generated when zero records were exported as part of a view snapshot has been resolved.

DATABRIDGE-935

Previously, the status for a snapshot process that was cancelled by a user could get stuck in the "Cancelling" state for an abnormally long time before converting to "Completed with errors." This issue has been resolved.

DATABRIDGE-936

Previously, in isolated scenarios, missing error handling logic caused the query timeout errors to be reported in the Data Bridge log but not in the UI. This issue has been resolved.

DATABRIDGE-970

Previously failed snapshots for views caused "delta" exports to incorrectly compute their set of records. This issue has been resolved.

Version 3.4.1

DATABRIDGE-848

Previously, when you published a File (JSON) snapshot for a view in Data Bridge, selected the **History** tab, and the **Snapshot** subtab, the Date column in the data table displayed a timestamp that used the Coordinated Universal Time (UTC) standard instead of displaying the local time. This issue has been resolved.

DATABRIDGE-849

An issue that meant that some currency characters were serialized as \uXXXX in the JSON output for views has been resolved.

DATABRIDGE-851

Previously, and in some isolated cases, it was possible for Data Bridge to send an "update" streaming event to Apache Kafka when in fact a "delete" event occurred in NexJ CRM. This issue has been resolved.

DATABRIDGE-859

Previously, it was not possible to include soft-deleted CRM records as part of snapshot output. This applied to both full and "delta" snapshots. A new feature has been added to address this issue.

DATABRIDGE-861

Previously, if the Data Bridge server ran out of disk space while a delimited or a JSON file snapshot export was in progress, the process did not fail gracefully. A "java.io[5].IOException: No

5 http://java.io

space left on device" error was repeatedly displayed in the UI, and the process would get stuck in the "in progress with errors" state. This issue has been resolved.

DATABRIDGE-868

Previously, a single-threaded export of an Activity view with a date filter could perform poorly and eventually fail with the following error message: "Unable to retrieve data from CRM server. SQL error. (err.persistence.sql) (err.Bridge.CRMFeed.fetchError)". This issue has been resolved.

DATABRIDGE-900

Previously, for Data Bridge views that queried large volumes of records from NexJ CRM, it was possible that the "Refresh Count" function found in the **Preview** tab in the UI could fail to display the updated object count if the request took longer than one minute to complete. The actual count was eventually updated successfully, however the UI failed to refresh. This issue has been resolved.

DATABRIDGE-901

The "end time" of the previously executed snapshot for a view was used to determine the set of NexJ CRM records that changed and needed to be included in the output of a "delta" snapshot. In isolated scenarios, this incorrectly led to some NexJ CRM updates being excluded from the subsequent "delta" snapshot. The "start time" value is now being used instead.

Version 3.4.0

DATABRIDGE-496

In some cases, when you included an associated object as part of the view definition, updates made to primitive attributes for that associated object, even if they are not included in the view, caused the view to publish the update. This issue has been resolved.

DATABRIDGE-513

Previously, when you added an `Act Series` attribute to a Deals or Opportunities view and exported it to CSV, "Related Activities" displayed in the header of the exported file but no related activities data was exported. This issue has been resolved.

DATABRIDGE-539

Previously, the values that were displayed in the Monitoring Dashboard for the Failed Export Count - Snapshot - Kafka statistics could be slightly higher (+1 for each page of processed data) than the actual number of failed messages. This issue has been resolved.

DATABRIDGE-546

Previously, the set of attributes was not filtered correctly when you switched between the **Basic** and **Advanced** tabs when searching for fields on the Create View page. This issue has been resolved.

DATABRIDGE-547

Previously, updates made to some associated attributes (for example, `Address` for a Contact) triggered Data Bridge to stream the update to Kafka even if the attribute was not selected as part of the data view. This issue has been resolved.

DATABRIDGE-578

Previously, in an extremely unlikely scenario, an empty message was sent to Kafka if a Data Bridge view configuration was updated from JSON to the Avro format and a CRM data change event was triggered at the same time. This issue has been resolved.

DATABRIDGE-591

Previously, the statistics in the Monitoring Dashboard did not match the export details provided in the **Snapshot** subtab in the **History** tab on the View Details page for views with numerous records in multi-node environments. This issue has been resolved.

DATABRIDGE-604

Previously, it was possible to trigger multiple parallel snapshot export processes, which could result in the export status of a view to be reported as "In Progress" indefinitely. This issue has been resolved.

DATABRIDGE-620

An issue that caused the status of a snapshot export process to only be updated after a significant delay has been resolved.

DATABRIDGE-659

Previously, when you exported views to CSV format that contain nested associations, duplicate columns displayed in the CSV file, and they also included underscore characters. This issue has been resolved.

DATABRIDGE-662

An issue that caused Unicode characters to not be exported correctly in CSV files has been resolved.

DATABRIDGE-686

Previously, when you created a new Telcoms view, enabled streaming for it, and created a new Telcom for a contact in NexJ CRM, all Telcom data belonging to this contact was sent to Kafka, and not just the new Telcom "create" event as expected. This issue has been resolved.

DATABRIDGE-693

An issue that meant that exported date values were incorrectly adjusted backwards by 1 day has been resolved.

DATABRIDGE-694

An issue that meant that commas were displayed for integer values in exported CSV files has been resolved.

DATABRIDGE-722

An issue that meant that you were unable to create users in NexJ Admin Console when their login names were longer than 10 characters has been resolved.

DATABRIDGE-733

As issue that meant that when you added filter criteria that contained double quotes Data Bridge triggered an unexpected error has been resolved.

DATABRIDGE-754

An issue that meant that metadata import errors were unreadable as the dialog was not resizable has been resolved.

DATABRIDGE-759

NexJ CRM integration errors that are formatted as strings are no longer hidden.

DATABRIDGE-771

Previously when you clicked **Add View** in the View Explorer in Data Bridge, clicked **Select** + in the **Import View Definition from JSON** field, selected an invalid JSON view (for example with a missing subject area), and clicked **Open**, no message was generated in the Data Bridge UI to warn you that the view was not imported because it was invalid. This issue has been resolved.

DATABRIDGE-809

Previously, updates to primitive attributes of an association object that were not selected as the view attributes would cause Data Bridge to publish steaming updates. For example, when you created a new Contacts view, selected the `Full Name` and `Telcoms` attributes, enabled streaming, saved the view, and modified any `Telcom` in NexJ CRM (for example, updated a business phone number for a contact), the expected results were that no streaming updates

would be published. Instead, an update event occurred that caused the view to publish unnecessarily. This issue has been resolved.

DATABRIDGE-816

Previously, specifying any UTF-8 characters as part of the filter criteria in a view, caused Data Bridge to apply an incorrect filter to CRM data. For example, a meeting in CRM titled "Réunion de révision annuelle" could not be selected with the "starts with" operator, and "Réunion" as the filter text value. No data would be exported. This issue has been resolved.

DATABRIDGE-818

Previously, when you configured a value for the Kafka Namespace parameter in the **Publishing Options** tab for a view, you could not set its value to blank anymore. This issue has been resolved.

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