# ViewDS Identity Bridge:

# Release Notes Version 1.4

**ViewDS Identity Bridge: Release Notes**

For Identity Bridge Release 1.4

May 2023


**Document Lifecycle**

ViewDS may occasionally update documentation between software releases. Therefore, please visit www.viewds.com to ensure you have the PDF with most recent publication date. The site also hosts the most recent version of this document in HTML format.

# Introduction

These notes provide information specific to Identity Bridge version 1.4.

For information about how to install and use Identity Bridge, see *ViewDS Identity Bridge: Getting Started* and the in-application help for Identity Bridge Studio.

This document describes the following:

- What is Identity Bridge
- All changes in hotfix builds
- All changes in Identity Bridge 1.4

## What is Identity Bridge

Identity Bridge is a highly flexible synchronization tool. It allows you to synchronize, migrate and provision identities across all your enterprise systems and cloud applications.

Identity Bridge has two platform-independent components:

- Identity Bridge Studio
- Identity Bridge Engine

Identity Bridge Studio is a user interface that allows you to define and maintain synchronization projects. These projects define the data sources and targets to be synchronized, plus the data processing tasks to occur during sychronization.

Identity Bridge Engine executes your synchronization projects.

# All changes in hotfix builds

This section describes the new features and issues resolved in hotfix builds since the release of Identity Bridge 1.3.

## Hotfix 1.3.5

### IB-315

Added support for IBM Java Runtime Environment (JRE) version 8.

## Hotfix 1.3.4

### IB-314

Resolved issues when connecting to a domain using TLS connections.

## Hotfix 1.3.3

### IB-304

When a task has an LDAP target, the Schema tab now includes a Compare By Value column that contains a checkbox for each row. (The Schema tab is within the Target area of the Task tab.)

This checkbox must be selected for mandatory, multivalued attributes. Otherwise, the default behaviour of attempting a 'replace' operation will fail.

When the checkbox is selected, the LDAP connector compares each attribute value, adds new values, and removes any no longer present.

### IB-305

There is now the option to include email attachments using the built-in Javascript function `sendmail`.

## Hotfix 1.3.2

### IB-278

When a license has been applied, Identity Bridge Studio's title bar now displays a license identifier and expiration date.

### IB-280

Identity Bridge was previously failing to identifying changes made to the schema of an LDAP resource.

### IB-287

A task with a flat-file source was terminating when Identity Bridge encountered a line with a missing field. This would occur, for example, when a field contained an embedded newline character. This sort of error is now logged, while the task continues to be executed, and added to the error count in the task summary on completion.

### IB-297

After a call to the `terminateProject` built-in function, Identity Bridge would terminate the current task and start the next task in the project. The built-in function now terminates the entire project immediately.

## Hotfix 1.3.1

### IB-282

All supported logging levels can now be set in the Properties area of the Project tab.

### IB-283

The SQL connector now supports the storage and retrieval of multi-valued fields.

The Source and Target areas of the Project tab allow you to identify the schema's multi-valued fields along with the delimiter that separates the values. Consequently, the connector can then retrieve a multi-value field as a concatenated string, and store a concatenated string as a multi-valued field.

### IB-284

When a task's target is an SQL database, the Target area of the Task tab now allows you to declare a DDL script to create (or re-create) a new table in the target database.

There is also the option to generate a template DDL script, which includes the value in the Table Name box plus the schema information declared in the Schema tab.

### IB-285

Identity Bridge was not removing quote symbols from the CSV header when the file was being used to populate schema.

### IB-286

It is now possible to remove the multi-value delimiter from the definition of a flat-file source.

Previously, in the definition of a flat-file source, Identity Bridge Studio would not allow the Multi-Value Delimiter box to be left empty. After clearing the box and saving your project, the Multi-Value Delimiter would revert to its default value.

This behaviour was occurring in the Source area of the Task tab, and in the Resource Configuration window.

### IB-288

The time limit for an LDAP query can now be specified in the Source area of the Project tab. The default value is five minutes.

### IB-290

For a task with an LDAP source that uses VLV, Identity Bridge Studio now displays a warning if the definition does not specify a sort identifier.

### IB-292

The error messages logged relating to an LDAP TLS connection and an invalid certificate have been improved and are now more meaningful.

### IB-293

You can now rename a task by right clicking it in the Workspace Explorer.

### IB-295

Errors relating to running Identity Bridge with Java 11 and OpenJDK 11 have been resolved.

### IB-296

Previously, if a task's source was a Delta Data Store that used a key other than DN, then no LDAP delete operations were being performed on the target.

### IB-306

Previously, importing CSV files would fail when there was a case mismatch between text in the CSV header row and the corresponding column in the target database table.

### IB-307

Issues relating to how double-quotes are handled when importing CSV files have now been resolved.

# All changes in Identity Bridge 1.4

This section lists all the new features and issues resolved in Identity Bridge 1.4.

### IB-267

The Delta area of the Task tab now includes the field Delta Deletion Threshold.

The Delta Deletion Threshold is the maximum percentage of entries that can be deleted from the target. It therefore provides a simple safety mechanism.

When executed, the task to synchronize deletes will calculate the percentage of entries in the resource marked for deletion. If the percentage exceeds the Delta Deletion Threshold, the task will exit without deleting any entries from the target. This event can be captured through a Task Termination Function that uses the built-in functions `$context.getTaskStatusCode` and `$context.getTaskStatusMessage` (see IB-322).

### IB-277

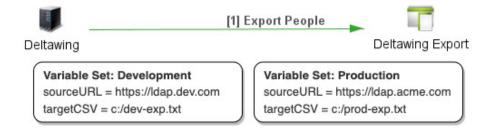Identity Bridge Studio now includes support for OpenJDK 8 and JDK 8.

### IB-281

The Properties area of the Project tab includes a new checkbox called Encrypt Security Credentials. Select this checkbox to encrypt the security credentials for the project's resources.

Identity Bridge used to store connector settings as plain text. This was a security risk when configuration files were stored in an external versioning system (e.g. Git, Subversion).

### IB-294

Identity Bridge Studio now supports variable sets and function libraries. They can be declared and managed from a new element in the Workspace Explorer called 'Store'.

A variable set is a collection of variables that can be reused in your projects. An example of how they might be used is to have different variable sets for different environments, such as *Development* and *Production*. Each set would declare the connection details for a project's source and target resources, which would allow you to switch between environments quickly and easily.

A function library allows you to declare functions that can be included and reused in multiple projects.

For more information about variable sets and function libraries, see the *Advanced options* section of *ViewDS Identity Bridge: Getting Started*.

### IB-298

Some of the checkboxes in Identity Bridge Studio used to require a double-click rather than the conventional single click to select or clear. This has been resolved.

### IB-301

The palette has been removed from Identity Bridge Studio.

To allow resources to be copied between projects, the context-sensitive menu for a resource in the Workspace Explorer now includes a Copy command.

### IB-303

The *ViewDS Identity Bridge: Getting Started* guide now includes step-by-step tutorials to help new users become familiar with the application quickly.

### IB-309

A Linux `.sh` installation file is no longer supplied with the Identity Bridge distribution media. Instead, a `.tar.gz` file is supplied (along with a `.zip` and Windows installer).

### IB-310

Several issues relating to OpenJDK 11 have been resolved.

### IB-311

There is now a built-in JavaScript function that converts a binary Active Directory ObjectGUID to its string representation:

```
fromActiveDirectoryObjectGUIDToStringObjectGUID()
```

The string representation can be used as the key in a database, and it is easy to visually compare it against Active Directory.

### IB-312

Previously, the built-in function `searchByLDAP` would re-use an existing connection, but unbind after each invocation. This was inefficient for a task that called the function many times, especially over a connection using StartTLS.

The bind and StartTLS operations are now only performed for the first invocation of a given task, and the unbind is delayed until task clean-up.

### IB-313

When a task's source is a Delta data store, the option to 'Fetch unconfirmed changes (temporary hashed values)' is now available in the Source area of the Task tab.

When this option is selected, all the changed but as yet unconfirmed entries are fetched.

This is useful when evaluation and confirmation need to be in separate tasks. For example, it is useful when multiple steps are required, or when multiple target systems need to be updated, before delta changes can be confirmed.

### IB-318

The Processes area of the Task tab allows you to declare the functions to be executed in the task. It includes a table that can contain a series of Per Entry/Record functions, each with an index that defines the order of processing. In the previous release, the index was ignored. This anomaly has been resolved.

### IB-319

If an attribute in a data source is absent from the corresponding Schema tab, then a warning is displayed.

Previously, however, when an attribute was included in the Schema tab but with its Ignore Reading checkbox selected, the same warning was erroneously displayed. This anomaly has been resolved.

### IB-321

When a task's target is an SQL resource, the Target area of the Task tab includes the field DDL Script Execution. Previously, when this field was set to `DROP_TABLE_AND_RECREATE`, the action was only performed successfully when the table already existed. This anomaly has been resolved.

### IB-322

There are several new built-in functions that return information relating to the status of projects and tasks:

- `$context.getProjectName()`
- `$context.getProjectStartedTime()`
- `$context.getTaskName()`
- `$context.getTaskStartedTime()`
- `$context.getTaskStatusCode()`
- `$context.getTaskStatusMessage()`

These functions are useful to capture when the Delta Deletion Threshold (see IB-267) has been exceeded.

For further information, see Identity Bridge Studio's in-application help.

### IB-326

Task variables are redundant in this version of Identity Bridge. During the upgrade to version 1.4, any task variables in your existing projects will become project variables (displayed in the Properties area of the Project tab). The processing of these projects will be unaffected.