



Informatica® Identity Resolution  
10.2

# Release Guide

Informatica Identity Resolution Release Guide

10.2

December 2020

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# Preface

Read the *Informatica Identity Resolution Release Guide* to learn about new features and enhancements, behavior changes between versions, and tasks you might need to perform after you upgrade from a previous version.

## Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

### Informatica Network

The Informatica Network is the gateway to many resources, including the Informatica Knowledge Base and Informatica Global Customer Support. To enter the Informatica Network, visit <https://network.informatica.com>.

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- Search the Knowledge Base for product resources.
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Product Availability Matrices (PAMs) indicate the versions of the operating systems, databases, and types of data sources and targets that a product release supports. You can browse the Informatica PAMs at <https://network.informatica.com/community/informatica-network/product-availability-matrices>.

## Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services and based on real-world experiences from hundreds of data management projects. Informatica Velocity represents the collective knowledge of Informatica consultants who work with organizations around the world to plan, develop, deploy, and maintain successful data management solutions.

You can find Informatica Velocity resources at <http://velocity.informatica.com>. If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at [ips@informatica.com](mailto:ips@informatica.com).

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You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

<https://www.informatica.com/services-and-training/customer-success-services/contact-us.html>.

To find online support resources on the Informatica Network, visit <https://network.informatica.com> and select the eSupport option.



# Part I: Version 10.2

This part contains the following chapter:

- [New Features and Changes \(10.2\), 10](#)

# CHAPTER 1

## New Features and Changes (10.2)

This chapter includes the following topics:

- [New Features \(10.2\), 10](#)
- [Changes \(10.2\), 13](#)

### New Features (10.2)

This section describes new features in version 10.2.

#### Overriding Database Definitions

You can override the database definitions that create connection string with the following parameters in the `odbc.ini` file:

- `connect_attributes`. Enables you to specify the connection string keywords that your ODBC driver supports for generating the connection string.
- `connect_attributes_only`. Indicates whether to use only the connection string keywords or the connection string keywords along with other data source definitions to create the connection string.
- `connect_string_odb`. Enables you to specify the database name which authenticates connection to DB2 UDB. This parameter is applicable only for DB2 UDB.

For more information about these parameters, see the *Informatica Identity Resolution 10.2 Installation and Configuration Guide*.

#### Environment Variables

Identity Resolution supports the `SSA_USE_SQLDRIVERCONNECT_ATTRIBUTES_ONLY` environment variable. It indicates whether to use only the connection string keywords specified in the `SQLDRIVERCONNECT_ATTRIBUTES` environment variable to create a connection string.

For more information about these environment variables, see the *Informatica Identity Resolution 10.2 Operations Guide*.

## Generating Record IDs in a Sequence

You can generate record IDs in a database sequence for a single identity table or all identity tables.

To generate the database sequence, set the `DATABASE-OPTIONS` parameter to `SEQUENCE` under the `SYSTEM-DEFINITION` section.

For more information about the `SEQUENCE` type, see the *Informatica Identity Resolution 10.2 Design Guide*.

## Stopping the Synchronizer Processing NSA Transaction Table

Use the `operation` code `S` to stop the synchronizer that processes the NSA transaction table.

For more information about the NSA transaction table, see the *Informatica Identity Resolution 10.2 Operations Guide*.

## Additional Privilege for Target Database

The `idsuseri.sql` script includes the `CREATE PROCEDURE` privilege for target database that requires synchronization.

For more information about the `idsuseri.sql` script, see the *Informatica Identity Resolution 10.2 Installation and Configuration Guide*.

## Additional Date Format for Transform Rules

You can convert the date format of the source field to the `MM-DD-YYYY` format in the target field.

To convert the date format to `MM-DD-YYYY`, use `4` as the `Convert-Field` transform rule.

For more information about transform rules, see the *Informatica Identity Resolution 10.2 Design Guide*.

## SSA-NAME3

This section describes new features and enhancements to SSA-NAME3.

### Additional Category Type for Edit-list Definition

The Edit-list definition supports the `7 Do Not Match` category type that disables the matching of certain pairs of words even though they are similar.

For more information about category types, see the *Informatica SSA-NAME3(EXTN) 10.2 Service Group Definition and Customization Guide*.

### Additional Category Name for Edit-list Definition

The edit-list definition supports the `EP` category name that defines the free email providers to be replaced.

The `Email` matching field uses the `EP` category name to process email addresses.

For more information about the `Email` matching field, see the *Informatica Identity Resolution 10.2 Populations and Controls Guide*.

## Additional Name Matching Options

The Name Matching method supports the following additional options:

- `ENABLDNM`. Indicates whether to disable the matching of certain pairs of words even though they are similar.
- `ORIGCSW`. Enables the edit-list category options `CATSW` and `CATSS` for matching original words.

For more information about the Name Matching method, see the *Informatica SSA-NAME3(EXTN) 10.2 Service Group Definition and Customization Guide*.

## Additional Control for `ssan3_get_keys_encoded` Call

The `ssan3_get_keys_encoded` call supports the `NM3KEYWORDS` control.

Use one of the following values for the `NM3KEYWORDS` control:

- `KEY-TABLE`. Builds additional data that explains how SSA-NAME3 constructs each key based on the word stack order.
- `FMTOVERRIDES`. Specifies whether to disable or override a list of category names and category types.

For more information about the `NM3KEYWORDS` control, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

## Additional Control for `ssan3_get_ranges_encoded` Call

The `ssan3_get_ranges_encoded` call supports the `NM3KEYWORDS` control.

Use one of the following values for the `NM3KEYWORDS` control:

- `DEBUG`. Builds additional data that explains how SSA-NAME3 constructs each key based on the word stack order for troubleshooting purposes.
- `FMTOVERRIDES`. Specifies whether to disable or override a list of category names and category types.

For more information about the `NM3KEYWORDS` control, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

## Item Types for `ssan3_info` Call

The `ssan3_info` call supports the following additional items types:

- `results.key-table`. Retrieves the additional data that the `KEY-TABLE` keyword generates.
- `results.stab`. Retrieves the additional data that the `DEBUG` keyword generates.

For more information about the `ssan3_info` call, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

## Additional SSA-NAME3 Call

SSA-NAME3 supports the `ssan3_get_word_stack` call that retrieves the word stack containing an array of stabilized words for an input string.

For more information about the `ssan3_get_word_stack` call, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

## Additional Control for the `ssan3_match_encoded` Call

The `ssan3_match_encoded` call supports the `FMTOVERRIDES` control that specifies whether to disable or override a list of category names and category types.

For more information about the `FMTOVERRIDES` control, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

## Reverse Matching with the `ssan3_match_encoded` Call

The `SEARCH` and `FILE` controls for `ssan3_match_encoded` call supports reverse matching. The exclamation mark symbol (!) preceding the numerical value for `Field ID` triggers score reversal.

For more information about reverse matching, see the *Informatica SSA-NAME3 10.2 API Reference Guide*.

# Changes (10.2)

This section describes changes in version 10.2.

## Deprecation of High Availability with ZooKeeper

Effective in version 10.2, Identity Resolution does not support high availability with ZooKeeper.

## Session Pool Timeout

Effective in version 10.2, the default value of the `SSA_SESSION_POOL_TIMEOUT` environment variable is 7200 seconds.

Previously, the default value of the `SSA_SESSION_POOL_TIMEOUT` environment variable was 600 seconds.

For more information about the `SSA_SESSION_POOL_TIMEOUT` environment variable, see the *Informatica Identity Resolution 10.2 Operations Guide*.

# Part II: Version 10.1

This part contains the following chapters:

- [New Features and Changes \(10.1 HotFix 1\), 15](#)
- [New Features and Changes \(10.1\), 18](#)

## CHAPTER 2

# New Features and Changes (10.1 HotFix 1)

This chapter includes the following topic:

- [New Features \(10.1 HotFix 1\), 15](#)

## New Features (10.1 HotFix 1)

This section describes new features in version 10.1 HotFix 1.

### Environment Variables

You can use the following environment variables:

- `SSA_IGNORE_ODBC_SQLSTATE`. Specifies the types of errors to ignore based on the `SQLSTATE` value.
- `SSANOSORTIDX`. Indicates whether to disable sorting when you run the Table Loader utility.
- `SSA_USE_SQLDRIVERCONNECT`. Indicates whether to use the `SSA_USE_SQLDRIVERCONNECT` or `SQLConnect` function to connect to the target database.
- `SSA_USE_SQLDRIVERCONNECT_ATTRIBUTES`. Specifies the additional attributes for the `SQLDriverConnect` function.

For more information about these environment variables, see the *Informatica Identity Resolution 10.1 HotFix 1 Operations Guide*.

### Match Filters

You can use the following match filter:

- I. Turns on case insensitive match.

For more information about match filters, see the *Informatica SSA-NAME3 10.1 API Reference Guide*.

### SSA-NAME3

This section describes new features and enhancements to SSA-NAME3.

## NAMESET Function Keywords

You can use the following NAMESET function keywords:

- `CONCATPROBES1`. Concatenates all the words on the left of the major word.
- `CONCATPROBES2`. Creates two probes by performing the following tasks:
  - Concatenates all the words on the right of the major word.
  - Concatenates the initials of first minor word and all other words on the left of the major word.
- `CONCATPROBES3`. Concatenates the initials of all the words on the left of the major word.
- `CONCATPROBESLM`. Builds an additional key or range based on the concatenated words on the left of the major word. Applicable only when you specify the `CONCATPROBES1` keyword.
- `CONCATPROBESRM`. Builds an additional key or range based on the concatenated words on the right of the major word. Applicable only when you specify the `CONCATPROBES2` keyword.
- `CONCATPROBESALL`. Concatenates all the words from the left and right of the major word.
- `CONCATPROBESUSELEFT` and `CONCATPROBESUSERIGHT`. Indicates whether the major word is on the right or left, and generates probes accordingly.
- `CONCMAJORPROBES`. Concatenates two words to create the major word and builds another probe by converting the second minor to an initial.
- `EXTRAWORDPROBE`. Creates a probe by eliminating the rightmost word when the name has at least three words.
- `SINGLEWORDPROBE`. Converts a one-word range to a probe.
- `RETORIGACCN`. Generates keys for the original name when a name matches an account name pattern.

For more information about NAMESET function keywords, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

## Item Types for `ssan3_info` Controls

The `ssan3_info` call supports the following items types:

- `analyze_match`. Analyzes the SSA-NAME3 fields that returns low match score and recommends how to improve the score.
- `column_check`. Checks for concatenated columns.
- `field_id`. Retrieves the internal ID of a field.
- `map_profile`. Recommends the columns that you can combine.
- `map_population`. Recommends a population based on the character code points present in the data.

For more information about the `ssan3_info` controls, see the *Informatica SSA-NAME3 10.1 API Reference Guide*.

## SSA-NAME3 Functions

The `ssan3_info` call supports the following items types:

- `ssan3_match_ext`. Returns a score, match decision, and match report for the search and file records.
- `ssan3_match_rescore`. Returns the score and the match decision based on the revised field weights.



- `ssan3_info_ext`. Returns information about the selected system and population for the following `ssan3_info` control items:
  - `map_profile`
  - `map_population`
  - `map_data`
  - `map_field`

For more information about the SSA-NAME3 functions, see the *Informatica SSA-NAME3 10.1 API Reference Guide*.

## CHAPTER 3

# New Features and Changes (10.1)

This chapter includes the following topics:

- [New Features \(10.1\), 18](#)
- [Changes \(10.1\), 20](#)

## New Features (10.1)

This section describes new features in version 10.1.

### Rulebase Server in the Read-Only Mode

You can start the Search Server with the read-only Rulebase Server. When you run the Rulebase Server in the read-only mode, you cannot update the Rulebase tables.

For more information about running the Rulebase Server in the read-only mode, see the *Informatica Identity Resolution 10.1 Operations Guide*.

### Environment Variables

You can use the following environment variables:

- `SSA_LITEINDEX_DONOTSEARCHNULLKEY`. Skips the null values when you use Lite Indexes to search.
- `SSA_RB_ERROR_IS_NOT_FATAL`. Converts a data integrity error to a warning.
- `SSA_LISTEN_FAILURES_ALLOWED`. Maximum number of consecutive connection failures allowed for a server.
- `SSA_LISTEN_FAILURES_ABORT`. Indicates whether to perform a forced restart of a server after the server exceeds the number of consecutive connection failures.
- `SSA_SOCKET_MAXIMUM_ALLOWED`. Maximum number of sockets that listen for connections.
- `SSA_THREAD_MAXIMUM_ALLOWED`. Maximum number of threads that process the data.

For more information about these environment variables, see the *Informatica Identity Resolution 10.1 Operations Guide*.

### Running Multiple Synchronization Servers in Parallel

When you start the Search Server, you can use the `-disable-idtlock` switch that removes the lock on the Identity Table. If the Identity Table is not locked, you can run multiple Synchronization Servers in parallel. Use

this switch with caution because multiple Synchronization Servers can process the transactions out of order and cause data integrity errors.

For more information about the `-disable-idtlock` switch, see the *Informatica Identity Resolution 10.1 Operations Guide*.

## Transform Rule to Convert the Date Format

The `Convert-Field` transform rule uses the date format of the source field and converts it to the specified date format for the target field.

For more information about the `Convert-Field` transform rule, see the *Informatica Identity Resolution 10.1 Design Guide*.

## SSA-NAME3

This section describes new features and enhancements to SSA-NAME3.

### Fuzzy Matching on the Extended Fields

You can perform fuzzy matching on the fields that you extend. Fuzzy matching returns scores that can range from 0 through 100% based on how close the search data and file data values match.

You can use one of the following algorithms to perform fuzzy matching:

- Levenshtein
- Dice
- JaroWinkler

For more information about fuzzy matching on the extended fields, see the *Informatica Identity Resolution 10.1 Populations and Controls*.

### Item Types for the `ssan3_info` Call

The `ssan3_info` call supports the following additional items types:

- `results.name_in`. Retrieves the input data that you specify in the `Key Field Data` field.
- `results.cleaned`. Displays the input data after cleansing the data.
- `suggest_population`. Recommends the population file to use for the specified sample data.

For more information about the `ssan3_info` call, see the *Informatica SSA-NAME3 10.1 API Reference Guide*.

### Custom Keys

You can generate custom keys based on the Customset keywords that you configure.

For more information about the keys, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

### FIRSTMINORPROBE Keyword for the NAMESET Function

The `FIRSTMINORPROBE` keyword builds an additional probe for the first minor word. For example, if the name is `PEPE JONES`, the `FIRSTMINORPROBE` keyword builds an additional probe for the first minor word, `PEPE`.

For more information about the `NAMESET` function, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

## L Break Rule Category Type for the Edit-List

The `L Break Rule` category type adds space after a set of characters that you specify. You can specify multiple sets of characters.

For more information about the `L Break Rule` category type, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

## Level 3 for the MAJMOD Option

The `MAJMOD` option supports level 3 that indicates to use the `MAJMOD` processing when the major words in two names match and share the same position.

For more information about the `MAJMOD` option, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

## Formatting Option 11

To ignore skip words and codes while selecting the major word, set the `FORMATTING-OPTIONS #11` to `C`.

For more information about the formatting options, see the *Informatica SSA-NAME3(EXTN) 10.1 Service Group Definition and Customization Guide*.

# Changes (10.1)

This section describes changes in version 10.1.

## SOAP Response

Effective in version 10.1, a SOAP response groups the search results based on the output view name. If you do not configure the output view name, the SOAP response groups the search results based on the search name.

The following SOAP response displays the search results that are grouped based on the search name, `Search01`:

```
<Search01Result>
  <Search01>
    <score>85</score>
    <ID>1617</ID>
    <Name>M J SMITH</Name>
    <DOB>19491018</DOB>
    <Address>4/157 CARTHAGE STREET</Address>
    <CL_ID />
  </Search01>
  <Search01>
    <score>80</score>
    <ID>0000001617</ID>
    <IDS-IDX-IO>00000023</IDS-IDX-IO>
    <IDS-IDT-IO>00000000</IDS-IDT-IO>
    <IDS-KSL-ACCEPTED-COUNT>00000000</IDS-KSL-ACCEPTED-COUNT>
    <IDS-KSL-UNDECIDED-COUNT>00000001</IDS-KSL-UNDECIDED-COUNT>
    <IDS-KSL-REJECTED-COUNT>00000019</IDS-KSL-REJECTED-COUNT>
    <IDS-KSL-TOTAL-COUNT>00000020</IDS-KSL-TOTAL-COUNT>
  </Search01>
  (more...)
</Search01Result>
```

Previously, a SOAP response grouped the search results based on the name of the Identity Table.

# Part III: Version 10.0

This part contains the following chapters:

- [New Features and Enhancements \(10.0 HotFix 1\), 22](#)
- [New Features and Changes \(10.0.0\), 26](#)

## CHAPTER 4

# New Features and Enhancements (10.0 HotFix 1)

This chapter includes the following topics:

- [New Features \(10.0 HotFix 1\), 22](#)
- [Changes \(10.0 HotFix 1\), 24](#)

## New Features (10.0 HotFix 1)

This section describes new features in version 10.0 HotFix 1.

### Rulebase Server Group

In an environment that uses Rulebase Server Group, when you start a Rulebase or Search Server, you can use the following additional parameters:

- `-e`. Indicates not to shut down the secondary servers when the primary server shuts down.
- `-o<Restart Option>`. Defines the behavior of the server after the connection to the database is lost.
- `-t<Number of Retries>,<Frequency>`. Maximum number of attempts for the secondary server to establish the database connection and the time interval between two attempts.
- `-w<Frequency>,<Priority>`. Polling frequency and the priority for the server.

For more information about the Rulebase Server Group, see the *Informatica Identity Resolution Operations Guide*.

### Relate Client

When you start the Relate client from the command line, you can use the following additional parameters:

- `--append-to-output-file`. Appends the matching records to the output file.
- `--failed-searches-log`. Absolute path and file name for the log file that contains details about the failed searches.
- `--failed-searches-count`. Maximum number of searches that can fail.
- `--skip-input-records`. Number of input records that you want to skip.

- `--retry-options=<Number of Retries>,<Time Interval>,<Number of Retries for Intermittent Errors>`. Maximum number of retry attempts for a search request and the time interval between each retry attempt.

For more information about the Relate client, see the *Informatica Identity Resolution Operations Guide*.

## SSA-NAME3

This section describes new features and enhancements to SSA-NAME3.

### Edit-List Category Types

You can list the replacement and noise words based on the position of the words.

To specify the position of the replacement and noise words in the Edit-list definition file, use the following category types:

- 1 Delete At Start
- 2 Delete In Middle
- 3 Delete At End
- 4 Replace At Start
- 5 Replace In Middle
- 6 Replace At End

For more information about the category types, see the *Informatica SSA-NAME3(EXTN) Service Group Definition and Customization Guide*.

### NOUNCOMMONVOWELS Keyword for the NAMESET Function

The NOUNCOMMONVOWELS keyword retains the vowels in the uncommon words during the key building process. For example, with the NOUNCOMMONVOWELS keyword, the name GHALIB stabilizes to GALAB. Otherwise, the name stabilizes to GLB after removing the vowels.

For more information about the NAMESET function, see the *Informatica SSA-NAME3(EXTN) Service Group Definition and Customization Guide*.

### Custom Keys

You can generate custom keys based on the Customset keywords that you configure. You can use the custom keys in combination with the positive or negative keys.

For more information about the keys, see the *Informatica SSA-NAME3(EXTN) Service Group Definition and Customization Guide*.

### Name Matching Method

The Name Matching method includes the following options:

- `SKIPVOWL`. Matches vowels or ignores a vowel when compared with a consonant.
- `SKIPCONS`. Matches multiple consonants with a single consonant.

For more information about the Name Matching method, see the *Informatica SSA-NAME3(EXTN) Service Group Definition and Customization Guide*.

## Session Pooling

You can configure the level of logging that you want for a search request. Use the `SSA_SESSION_POOL_LOGGING` environment variable to configure the logging level.

For more information about the `SSA_SESSION_POOL_LOGGING` environment variable, see the *Informatica Identity Resolution Operations Guide*.

## Population Files

All the standard population files are updated to accommodate the SSA-NAME3 changes. The updated population files do not affect the keys except the standard Arabic population file, which affects the keys.

The Identity Resolution installation directory contains another version of the USA and International population files that affect the keys in the following directory: `<Identity Resolution Installation Directory>/populations`

You can replace the standard USA and International populations files with these files.

## Query Timeout

You can time out a search that takes a longer time to query the database.

To time out the searches, perform one of the following tasks:

- Set the `SSADB_QUERY_TIMEOUT` environment variable.
- Specify the `--query_timeout` parameter when you run the Relate client.
- Use the `ids_set_timeout` function.

For more information about the `SSADB_QUERY_TIMEOUT` environment variable and the `--query_timeout` parameter, see the *Informatica Identity Resolution Operations Guide*. For more information about the `ids_set_timeout` function, see the *Informatica Identity Resolution Developer Guide*.

## db\_util Utility

You can use the `db_util` utility to unlock a Rulebase Server after the server shuts down unexpectedly. When you run the `db_util` utility, it internally runs an SQL script that deletes the `IDS_nn_INUSE` table and removes the lock related entry in the `IDS_FDT_META` table.

For more information about the `db_util` utility, see the *Informatica Identity Resolution Operations Guide*.

# Changes (10.0 HotFix 1)

This section describes changes in version 10.0 HotFix 1.

## Record Identifiers

Effective in version 10.0 HotFix 1, you can set the incremental value for the record identifiers. Use the `SSADB_RECID_INCREMENT` environment variable to set the incremental value. The incremental value is applicable only for the synchronization process.

Previously, the record identifiers were incremented by one.



## Session Pooling

Effective in version 10.0 HotFix 1, the default value of the `SSA_SESSION_POOL_MAX` environment variable is set to 100, and the `SSA_SESSION_POOL_HEARTBEAT` environment variable is deprecated.

Previously, the `SSA_SESSION_POOL_MAX` environment variable had no default value, and the Search Server retained all the search requests in the pool.

## CHAPTER 5

# New Features and Changes (10.0.0)

This chapter includes the following topics:

- [New Features \(10.0.0\), 26](#)
- [Changes \(10.0.0\), 27](#)

## New Features (10.0.0)

This section describes new features in version 10.0.0.

### High Availability with ZooKeeper

Identity Resolution uses Apache ZooKeeper to achieve high availability for Rulebase Servers, updsync utility, and updmulti utility in a distributed environment. High availability refers to the availability of the resources without any service interruption if a failure occurs.

For more information about high availability with ZooKeeper, see the *Informatica Identity Resolution Operations Guide*.

### SEARCH and FILE Definitions

This section describes new features in the search and file definitions.

#### Extended Fields

You can extend any of the key fields and set the weight for the extended fields. The extended fields use the algorithm of the key fields. Use the extended fields to override the weight of the key fields in the run time.

For more information about the extended fields, see the *Informatica Identity Resolution Populations and Controls*.

## Range Matching on the Date Fields

In the SCORE-LOGIC controls section, you can specify a range for the dates in the search data, the file data, or both to perform matching. The matching returns 100% score if the search data and file data values are within the specified range.

For more information about the range matching, see the *Informatica Identity Resolution Populations and Controls*.

## Matching Against Zero or a Null Value

In the SCORE-LOGIC controls section, you can perform matching between data and zero, a null value, or both in the Search Data and File Data fields.

For more information about the matching against zero or a null value, see the *Informatica Identity Resolution Populations and Controls*.

# Changes (10.0.0)

This section describes changes in version 10.0.0.

## License Server

Effective in version 10.0.0, you do not require a license server to install Identity Resolution and to start the Identity Resolution Server.

Previously, you installed the license server before installing Identity Resolution and started the license server before starting the Identity Resolution Server.

## Address Verification Libraries

Effective in version 10.0.0, Identity Resolution includes Address Verification version 5.8.0.33948 libraries.

Previously, Identity Resolution included the earlier versions of the libraries.

## ODBC Drivers for Oracle

Effective in version 10.0.0, Identity Resolution installer does not bundle the custom ODBC drivers for Oracle and does not update the ODBC driver details in the `odbc.ini` file. You must manually configure the ODBC drivers for Oracle in the `odbc.ini` file.

Previously, Identity Resolution installer bundled the custom ODBC drivers for Oracle and updated the ODBC driver details in the `odbc.ini` file.

## Dropped Support

Effective in version 10.0, Identity Resolution dropped support for 32-bit Windows, HP-UX IA64, and IBM DB2 UDB on Solaris SPARC.

For more information about product requirements and supported platforms, see the Product Availability Matrix on Informatica Network:

<https://network.informatica.com/community/informatica-network/product-availability-matrices>

## Dumpshr Utility

Effective in version 10.0.0, the dumpshr utility is deprecated.

Previously, you could use the dumpshr utility to view the call stacks of all the Identity Resolution servers and utility programs.

# Part IV: Version 9.5.4

This part contains the following chapter:

- [New Features and Changes \(9.5.4\), 30](#)

## CHAPTER 6

# New Features and Changes (9.5.4)

This chapter includes the following topics:

- [New Features \(9.5.4\), 30](#)
- [Changes \(9.5.4\), 31](#)

## New Features (9.5.4)

This section describes new features in version 9.5.4.

### iirconfig-tool Utility

Use the iirconfig-tool utility to retrieve or update the configuration metadata of a system. The configuration metadata includes details about the system, identify table, identity index, identity fields, search configuration, and other system-related configuration.

For more information about the iirconfig-tool utility, see the *Informatica Identity Resolution Operations Guide*.

### loggrabr Utility

Use the loggrabr utility to retrieve the log entries from log files, error files, environment scripts, and configuration files and load the entries into a single output file. You can use the output file to troubleshoot any issues without having to refer multiple files.

For more information about the loggrabr utility, see the *Informatica Identity Resolution Operations Guide*.

### logfrmat Utility

Use the logfrmat utility to format the log entries in an output file of the loggrabr utility and load the formatted entries into an XML output file. You can use the logfrmat utility to improve the readability of its input file, which is an output file of the loggrabr utility.

For more information about the logfrmat utility, see the *Informatica Identity Resolution Operations Guide*.

## SEARCH and FILE Definitions

In the SCORE-LOGIC controls section, you can specify the type of matching to perform between the data in the Search Data and File Data fields.

You can use the following matching types:

- Exact matching
- Range matching

For more information about the matching types, see the *Informatica Identity Resolution Populations and Controls*.

## FILTER\_SEARCHVALUES Control

Use the FILTER\_SEARCHVALUES control to specify a list of values to match with the data in the Search Data field, File Data field, or both the fields. Use the Filter purpose to specify the data in the Search Data and File Data fields.

For more information about the FILTER\_SEARCHVALUES control, see the *Informatica Identity Resolution Populations and Controls*.

## Changes (9.5.4)

This section describes changes in version 9.5.4.

### Updated Libraries

Effective in version 9.5.4, Identity Resolution includes updated AddressDoctor® and third-party libraries.

The following table lists the updated libraries and their versions:

Library	Current Version
AddressDoctor	5.6.0.30153
libxml2	2.9.2
OpenSSL	1.0.2a

Previously, Identity Resolution included the earlier versions of the libraries.

### XML Search Service

Effective in version 9.5.4, the numeric fields of an identity table are set to the xsd:nonNegativeInteger data type. In an environment that uses XML Search Service, if you recompile a proxy, you must change the data type of the numeric fields in the clients to avoid any data type mismatch.

Previously, the numeric fields of an identity table were set to the xsd:int data type.

# Part V: Version 9.5.3

This part contains the following chapters:

- [New Features and Changes \(9.5.3 HotFix 2\), 33](#)
- [New Features and Changes \(9.5.3\), 35](#)



## CHAPTER 7

# New Features and Changes (9.5.3 HotFix 2)

This chapter includes the following topics:

- [New Features \(9.5.3 HotFix 2\), 33](#)
- [Changes \(9.5.3 HotFix 2\), 34](#)

## New Features (9.5.3 HotFix 2)

This section describes new features in version 9.5.3 HotFix 2.

### Geocode Support

SSA-NAME3 performs a location-based search to index and search records. You can provide an exact location or create a search range by specifying a search radius. Use the latitude and longitude coordinates with an optional elevation to specify the location.

For more information about Geocode, see *Informatica Identity Resolution Populations and Controls*.

### Company\_Name Field

Most of the standard populations include the `Company_Name` field, which is similar to the `Organization_Name` field. The `Company_Name` field does not include the person name rules, but the `Organization_Name` field includes the person name rules. All the purposes that contain the `Organization_Name` field include the `Company_Name` field.

For more information about the `Company_Name` field, see *Informatica Identity Resolution Populations and Controls*.

### Lightweight Matching in SDF Wizard

In the SDF Wizard, you can configure the lightweight matching controls when you create or edit a search and add these controls to a system definition file. As a result, you do not have to manually add these controls to the system definition file.

For more information about lightweight matching, see *Informatica Identity Resolution Populations and Controls*.

## Performance Improvements

The core components of Identity Resolution are optimized to achieve improved load and search performance. Performance results will vary depending on your environment.

## Changes (9.5.3 HotFix 2)

This section describes changes in version 9.5.3 HotFix 2.

### Organization\_Name Field

Effective in version 9.5.3 HotFix 2, the `Organization_Name` field includes the person name rules, which can impact the SSA-NAME3 score and search results.

Previously, in version 9.5.3, the `Organization_Name` field did not include the person name rules. However, in versions earlier than 9.5.3, the `Organization_Name` field included the person name rules.

## CHAPTER 8

# New Features and Changes (9.5.3)

This chapter includes the following topics:

- [New Features \(9.5.3\), 35](#)
- [Changes \(9.5.3\), 36](#)

## New Features (9.5.3)

This section describes new features in version 9.5.3.

### Session Pooling

The Search Server incorporates session pooling for all searches. Session pooling eliminates Rulebase access when a client switches between searches within the same session or when a new client connects. Session pooling improves search performance and eliminates the need for the clients to implement the session pooling logic within their own application code.

By default, session pooling is enabled. You can disable it by setting the `SSA_SESSION_POOL_MAX` environment variable to 0 on the machine hosting the Search Server.

For more information about session pooling, see *Informatica Identity Resolution 9.5.3 Operations Guide*.

### Search Transaction Retry

The Search Server retries failed search transactions. This feature eliminates the need for the clients to implement retry logic within their application code and simplifies the implementation of Identity Resolution.

For more information about the Search Server, see *Informatica Identity Resolution 9.5.3 Operations Guide*.

### Lightweight Matching

SSA-NAME3 matching performs a lightweight pre-scoring step, which uses a fast score estimate to reject the obvious mismatches. SSA-NAME3 performs full scoring for the accepted records. Dependent on the nature of the data, this enhancement improves the performance of the following processes:

- Search

- Create PID
- SSA-NAME3 match API
- IR for Hadoop
- Run Clustering

By default, lightweight matching is disabled.

For more information about lightweight matching, see *Informatica Identity Resolution 9.5.3 Populations and Controls*.

## SDF Wizard Search Client

The SDF Wizard includes a tab to perform searches. After you define and deploy a system, you can test the searches within the same utility by using the Search tab. This feature eliminates the need to run a separate client to test the searches.

## New Field Types in Standard Populations

Standard Populations include the following field types, which support both searching and matching:

- Telephone number
- Date
- Credit card
- Vehicle Identification Number (VIN)
- International Standard Book Number (ISBN)
- Generic numeric and alphanumeric strings (for example, SSN)

These field types increase the number of entity types that the Informatica Identity Resolution supports.

For more information about these field types, see *Informatica Identity Resolution 9.5.3 Populations and Controls*.

## Changes (9.5.3)

This section describes changes in version 9.5.3.

### Timeout Duration

Effective in version 9.5.3, you can control the timeout duration through the `SSA_SOCKET_TIMEOUTS` environment variable.

Previously, the Table loader failed after 7200 seconds because of the socket timeout error.

For information about `SSA_SOCKET_TIMEOUTS`, see *Informatica Identity Resolution 9.5.3 Operations Guide*.

## SDF Validation

Effective in version 9.5.3, when you create a system by using an existing SDF, the application validates all section statements and displays an appropriate error message if it identifies any of the following errors:

- An empty section definition
- An unrecognized section type
- A duplicate section type

Previously, you could create a system with an empty section definition.

## Standard Populations

Effective in version 9.5.3, SSA-NAME3 standard populations include new data structures, so the populations are not backward compatible with the earlier versions of Identity Resolution.

Previously, the standard populations were compatible with the earlier versions of Identity Resolution.

# Part VI: Version 9.5.2

This part contains the following chapter:

- [New Features and Changes \(9.5.2\), 39](#)

## CHAPTER 9

# New Features and Changes (9.5.2)

This chapter includes the following topics:

- [New Features \(9.5.2\), 39](#)
- [Changes \(9.5.2\), 40](#)

## New Features (9.5.2)

This section describes new features in version 9.5.2.

### Performance

This section describes new features and enhancements to performance.

#### Socket Layer Resilience

The socket layer reliability and resilience improves due to an increase in tolerance to network quality variations.

#### Loader

Database performance improves through Array Fetch. When the database layer fetches a row from the database, it fetches a predetermined number of rows in a single call. You can enhance the performance of initial loads from a database source, to reindex an Identity Table, and to create a Persistent ID.

#### System Deployment

You can deploy a system through the SDF wizard. When you deploy a system, you create the Rulebase, Database, and System. The SDF wizard loads the Identity Table and indexes.

### Logging

This section describes new features and enhancements to logging.

## Timestamp

The resolution of the time is increased to a microsecond level. You can measure performance and also correlate client program output with server activity reported in the logs.

## Log Collection Utilities

You can use the following log collection utilities to diagnose problems with MDM-RE installations:

- The Log Grabber (loggrabr) utility searches the MDM-RE installation directories for any log files that contain useful diagnostic information and gathers them into a single file. The loggrabr utility also copies to the same file all configuration information like environment variables and the contents of odbc.ini and other configuration files.
- The Log Formatter (logformat) utility creates an XML output from the file the Log Grabber utility creates.

Both these utilities accept date and time parameters, which you may provide to restrict the included logging information to a specific time period.

## Web Services

This section describes new features and enhancements to Web services.

### HTTP Compression

The XML servers support RFC 2616 HTTP gzip compression and use compression when the web clients indicate that they will accept it.

### HTTP Authentication

You can add RFC 2617 HTTP authentication, both Basic and Digest authentication.

To enable this support, set the environment variable `SSAHTTPAUTHENTICATION` to Basic or Digest, and set `SSATHHPREALM` to a desired value. Define the userid and password by adding a DBDICT entry with the name of the realm and a value of the userid and password separated by a slash (/).

## Software Asset Management

This section describes new features and enhancements to Software Asset Management.

### Support for ISO-19770-2 Software Identification Tags

You can manage software assets through ISO/IEC 19770-2 software identification tags.

## Changes (9.5.2)

This section describes changes in version 9.5.2.

### Rulebase Server Groups

This section describes updates and changed behavior to Rulebase Server Groups.



## idsdown

Effective in version 9.5.2, you can use the enhanced `idsdown` command to accept a subsequent `idsdown hard` command.

Previously, if an `idsdown` command failed to stop a server because one or more clients were still connected, you could not issue an `idsdown hard` command to force those clients to close.

## Connection Reuse

Effective in version 9.5.2, to balance the resource utilization and reliability, the database connection is reused for a period before being reallocated. To change the default value, set the environment variable `SSA_RBGRP_DB_REUSE` to the number of minutes to keep the connection alive.

Previously, a database connection was created for each interaction to ensure maximum reliability.

# Synchronizers

This section describes updates and changed behavior to the synchronizers.

## updmulti

Effective in version 9.5.2, you can use `updmulti` to synchronize the Identity Table and Persistent ID when you use triggers to propagate updates from the source tables.

Use `updmulti` instead of `updsync` as your synchronization tool.

Previously, you had to use `updsync` whenever triggers were used.

# Part VII: Version 9.5.0

This part contains the following chapter:

- [New Features and Changes \(9.5.0 HotFix1\), 43](#)

## CHAPTER 10

# New Features and Changes (9.5.0 HotFix1)

This chapter includes the following topics:

- [New Features \(9.5.0 HotFix 1\), 43](#)
- [Changes \(9.5.0 HotFix 1\), 44](#)

## New Features (9.5.0 HotFix 1)

This section describes the new features in version 9.5.0 HotFix 1.

### Simple Search

The Simple Search feature allows multiple input fields to be combined into a single input field, giving a Google-like search experience. Additional search clients including Default search, Lite search, HTTP search, Deployable search, and Batch search clients are now able to use Simple Search. Applications that use Informatica Identity Resolution APIs to provide search functionality can now use the Simple Search feature. You can use the System Definition Wizard to define the search labels associated with simple search in the System Definition File.

### Rulebase Server Connection

When you start the Synchronizer with the `--rbcheck` switch, the Update Synchronizer periodically checks its communication channel to the Rulebase Server. You can now specify the connection retry period with the `-d` option.

### Search Performance

Informatica Identity Resolution now compresses Unicode fields (type 'W') stored in an IDX by removing trailing Unicode spaces. The reduced IDX size improves both load and search performance.

### Update Synchronizer

The Update Synchronizer performs extra validation of NSA transactions to verify the format of the IDT records provided. Advanced validation may also be requested to help identify truncation, misalignment, and incorrect padding.

## Console Server

The `-y` parameter has been added to the Console Server executable, `ssacsrv`. The Console Server uses this parameter to pass a timeout value to the Connection Server.

## Changes (9.5.0 HotFix 1)

This section describes the changes in version 9.5.0 HotFix 1.

### Rulebase Server Group

Effective in version 9.5.0 HotFix1, use the **rbsgdown** utility to shut down Rulebase Servers running in a Rulebase Server Group. The **rbsgdown** utility automatically identifies the active Rulebase Server in the group and directs the shutdown command to it.

Previously, an administrator would need to determine which Rulebase Server was active prior to executing the `idsdown` script.

### Name3 Workbench User Interface

Effective in version 9.5.0 HotFix1, both the Name3 Workbench and Population Override Manager will accept input in both text and hexadecimal form and allow conversion between the two formats. This enhancement facilitates working with multi-byte and Unicode data in scripts such as Chinese, Japanese and Korean without the need to change input locale to enter data in its native character set.

Previously, it was necessary to change the input locale to enter data in the native character set.