

Informatica® Address Verification 5.8.1

Release Guide (On-Premises)

Informatica Address Verification Release Guide (On-Premises) 5.8.1 November 2015

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Preface

The Informatica Address Verification Release (On-Premises) Guide lists the new features and enhancements in Address Verification (On-Premises). The guide covers the current version and earlier versions. For additional information about current product features and updates, see the Informatica Address Verification Release Notes (On-Premises).

Informatica Resources

Informatica Network

Informatica Network hosts Informatica Global Customer Support, the Informatica Knowledge Base, and other product resources. To access Informatica Network, visit https://network.informatica.com.

As a member, you can:

- · Access all of your Informatica resources in one place.
- · Search the Knowledge Base for product resources, including documentation, FAQs, and best practices.
- · View product availability information.
- Review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

Use the Informatica Knowledge Base to search Informatica Network for product resources such as documentation, how-to articles, best practices, and PAMs.

To access the Knowledge Base, visit https://kb.informatica.com. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at KB_Feedback@informatica.com.

Informatica Documentation

To get the latest documentation for your product, browse the Informatica Knowledge Base at https://kb.informatica.com/_layouts/ProductDocumentation/Page/ProductDocumentSearch.aspx.

If you have questions, comments, or ideas about this documentation, contact the Informatica Documentation team through email at infa_documentation@informatica.com.

Informatica Product Availability Matrixes

Product Availability Matrixes (PAMs) indicate the versions of operating systems, databases, and other types of data sources and targets that a product release supports. If you are an Informatica Network member, you can access 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. Developed from the real-world experience of hundreds of data management projects, Informatica Velocity represents the collective knowledge of our consultants who have worked with organizations from around the world to plan, develop, deploy, and maintain successful data management solutions.

If you are an Informatica Network member, you can access Informatica Velocity resources at https://velocity.informatica.com.

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Informatica Marketplace

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

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

http://www.informatica.com/us/services-and-training/support-services/global-support-centers.

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Version 5.8.x

This chapter includes the following topics:

- New Features and Enhancements (Version 5.8.1), 9
- New Features and Enhancements (5.8.0), 10

New Features and Enhancements (Version 5.8.1)

Informatica Address Verification introduces the following features in Version 5.8.1:

Support for Eircodes in Ireland Addresses

Effective in version 5.8.1, Address Verification supports the eircode system in Ireland. An eircode is a sevencharacter code that uniquely identifies an Ireland address. The eircode system covers all residences, public buildings, and business premises and includes apartment addresses and addresses in rural townlands.

For example, if the eircode is D04 HY45, Address Verification returns the following address in the batch, interactive, or fast completion mode:

```
Flat 37
Beech Hill Villas
Beech Hill Avenue
Donnybrook
Dublin 4
Co. Dublin
D04 HY45
```

Support for Hexaligne 3 Level of Service National de L'Adresse Certification for France Addresses

Effective in version 5.8.1, Address Verification uses the Hexaligne 3 repository of Service National de L'Adresse Certification for France Addresses to verify the France addresses in the certified processing mode.

Hexaligne 3 is a master file of France postal addresses. Hexaligne 3 lists all the features specific to the exterior of the building such as entrance, building, apartment block, and residence. Hexaligne 3 applies equally to tower blocks and housing developments.

For example, validate the following input address:

```
<Country Item="1" Type="NAME">FRA</Country>
   </AddressElements>
   <AddressLines>
      <FormattedAddressLine Line="1">BAT A2 RESIDENCE LES MARCHES DU SOLEIL
FormattedAddressLine>
      <FormattedAddressLine Line="2">67 RUE BENJAMIN ROGER/FormattedAddressLine>
      <FormattedAddressLine Line="3">34200 SETE</FormattedAddressLine>
   </AddressLines>
</InputData>
```

Address Verification returns the following verified address for the input address:

```
<?xml version="1.0" encoding="UTF-8"?>
<AddressLines>
  <FormattedAddressLine Line="1" />
  <FormattedAddressLine Line="2" />
  <FormattedAddressLine Line="3">Bât A2 Résidence les Marches du Soleil/
FormattedAddressLine>
  <FormattedAddressLine Line="4">67 rue Benjamin Roger/FormattedAddressLine>
   <FormattedAddressLine Line="5" />
   <FormattedAddressLine Line="6">34200 Sete/FormattedAddressLine>
</AddressLines>
```

New Features and Enhancements (5.8.0)

This section lists the new features and enhancements in version 5.8.0.

New Product Name

Effective in version 5.8.0, Informatica renames Informatica AddressDoctor as Informatica Address Verification.

Support for RedHat Enterprise Linux Version 7

Effective in version 5.8.0, you can install Informatica Address Verification on devices that run RedHat Enterprise Linux version 7. You can continue to install Informatica Address Verification on devices that run RedHat Enterprise Linux version 6.

You cannot install Informatica Address Verification 5.8.0 on devices that run RedHat Enterprise Linux version 5.

Enhancements to Address Code Lookup Mode

Effective in version 5.8.0, Informatica Address Verification returns all available enrichment data with an output address from any country that supports a unique identifier value as a lookup key.

You can enter a lookup key for an address in Germany, Great Britain, Japan, Serbia, South Africa, and South Korea in Address Verification 5.8.0.

To retrieve address data in address code lookup mode, install the address code lookup database for the country in which the address is located. Set the process mode in Parameters.xml to ADDRESSCODELOOKUP. Additionally, set the Type attribute of the AddressCode element in InputData.xml to an appropriate value.

Enhancements to Rooftop Geocoding Support for United Kingdom Addresses

Effective in version 5.8.0, Informatica Address Verification introduces the following changes to rooftop geocoding support:

- To retrieve high-precision rooftop geocoordinates for United Kingdom addresses, add the ROOFTOP value to the EnrichmentGeoCodingType attribute of the PROCESS element in Parameters.xml.
- Informatica Address Verification delivers the rooftop geocoordinates in a new reference address database of type Rooftop Geocoding (GCRT) .

To retrieve rooftop geocoordinates for United Kingdom addresses, install the GBR5GCRT.MD database. Address Verification uses a new GEO_ROOFTOP unlock code for the database. Address Verification returns a geocoding status value of EGCB to indicate that the output address contains rooftop geocoordinates.

Reference Data Support for Individual House Numbers in Germany

The latest reference address databases for Germany support the verification of individual house numbers in Germany addresses. To verify individual house numbers in Germany, install the latest reference address databases for Germany.

Additional Enrichment to Germany Addresses

Effective in version 5.8.0, you can retrieve the three-digit street code part of the Frachtleitcode (or Freight Code) as an additional enrichment to verified Germany addresses. Street codes identify streets in Germany. Positions 6, 7, and 8 of the Frachtleitcode form the street code and identify a street. A street code value of 994 indicates that the address points to a packstation. (A packstation is a service delivery point of DHL Parcel Germany).

To retrieve the street code as an enrichment to verified Germany addresses, install the premium database package for Germany. For more information about the premium database package, contact your Informatica sales representative. To receive the street code as an enrichment, you must also set the EnrichmentSupplementaryDE attribute of the Process element in Parameters.xml to ON. Informatica Address Verification returns the street code in the STREET_CODE field.

Reference Data Support for Individual House Numbers in Italy

The latest reference address databases for Italy support the verification of individual house numbers in Italy addresses. To verify individual house numbers in Italy, install the latest reference address databases.

Enhancements to South Korea Address Verification

Effective in version 5.8.0, Informatica Address Verification introduces the following changes to South Korea address verification:

Address ID values as an Enrichment to South Korea Addresses

You can retrieve address ID values as an enrichment to valid South Korea addresses. The address ID value is a unique string that Address Verification assigns to South Korea addresses. Use the address ID value to obtain a South Korea address in the current, street-based format or in the older, land lot-based format. You can also use the address ID value to obtain the six-digit post code or the five-digit post code for the address.

To receive the address ID as an enrichment, install the South Korea supplementary reference address database (KOR5E1.MD). After you install, set the EnrichmentSupplementaryKR attribute of the Process element in Parameters.xml to ON.

Address Code Lookup Support for South Korea

When you use the address ID value to retrieve South Korea address information, configure Address Verification to run in address code lookup mode. To enable address code lookup for a South Korea address, set the Type attribute of the AddressCode element in the InputData.xml to KOR_ADDRESS_ID.

Support for the Hangul Script in South Korea Addresses

The default script of the South Korea reference address database is Hangul. You can use Address Verification to verify South Korea addresses in the Hangul script and to receive the result output in Hangul script. Alternatively, you can configure the PreferredScript attribute of the Result element in Parameters.xml to an appropriate value to receive the output in the ASCII script.

Support for New Postal Codes in South Korea

Address Verification supports the new, five-digit postal codes and the older, six-digit postal codes in South Korea. To verify the six-digit post codes, set the MatchingExtendedArchive attribute of the Process element in Parameters.xml to ON. If you do not set MatchingExtendedArchive to ON, Address Verification identifies the six-digit post codes as not valid.

Verification of Outdated South Korea Addresses

You can verify older, land lot-based addresses and addresses with older, six-digit post codes in South Korea. To verify the address and post code data, set the MatchingExtendedArchive attribute of the Process element in Parameters.xml to ON. When you set MatchingExtendedArchive to ON, Address Verification returns an extended element result status of F if the address or the post code uses the older format. Address Verification does not return older address information if you set MatchingExtendedArchive to OFF.

Support for Macau

Effective in version 5.8.0, you can use Informatica Address Verification to verify addresses from Macau. You can verify Macau addresses in the batch, interactive, and fast completion modes.

To verify Macau addresses in the batch or interactive mode, you must install the MAC5BI.MD database. To verify Macau addresses in the fast completion mode, install the MAC5FC.MD database. The reference address databases for Macau contain address information up to the building level. Macau does not have a postal code system. The reference address databases for Macau are in Portuguese language and use the Latin script.

Support for Eircodes in Ireland addresses

Effective in version 5.8.0, Address Verification supports the eircode system in Ireland. An eircode is a sevencharacter code that uniquely identifies an Ireland address. The eircode system covers all residences, public buildings, and business premises and includes apartment addresses and addresses in rural townlands.

The eircode reference database is not generally available. To obtain the eircode reference database, contact an Informatica Address Verification account manager.

Support for Non-Postal Addresses in New Zealand

Effective in version 5.8.0, you can use Informatica Address Verification to verify non-postal addresses, such as prison addresses, graveyards, highways, and community post boxes, in New Zealand.

Address Verification verifies non-postal addresses in the same way that it verifies postal addresses. You can verify non-postal addresses in batch, interactive, and fast completion modes. Note that New Zealand Post neither recognizes the non-postal addresses nor provides such addresses. To verify non-postal addresses, install the premium reference address database package that Informatica provides. For more information about the premium database package for New Zealand addresses, contact your Informatica sales representative.

Multilanguage Support for Province Information in Switzerland Addresses

Effective in version 5.8.0, Informatica Address Verification extends multilanguage support to province information in Switzerland addresses. Address Verification can return the province information in English, German, French, or Italian.

You can specify the language in the PreferredLanguage attribute of the Result element in Parameters.xml. To return the information in the different languages, download the latest reference data for Switzerland.

By default, Informatica Address Verification returns the information in the main language of the region to which the address belongs. This is the default language in the reference address database. If the reference database does not contain the information in the language that you specify, you receive the information in the default language.

Subbuilding Support for Spain

Effective in version 5.8.0, you can use Informatica Address Verification to return subbuilding information for addresses in Spain. Address Verification supports up to three subbuilding levels in Spain addresses.

To return the subbuilding information, download the latest reference data for Spain.

Support for House Number Verification in Taiwan Addresses

Effective in version 5.8.0, Informatica Address Verification verifies the house number information in Taiwan addresses. To verify house numbers in Taiwan addresses, you must install the latest reference address databases for Taiwan.

Address Verification verifies the house number information when you verify addresses in Mandarin Traditional Chinese or in English. However, in the interactive and fast completion modes, you receive the best results for house numbers when you enter Taiwan addresses in Mandarin Traditional Chinese.

Support for Timor-Leste

Effective in version 5.8.0, you can use Informatica Address Verification to verify addresses from Timor-Leste (East Timor). You can verify addresses from Timor-Leste in batch, interactive, and fast completion modes.

To verify Timor-Leste addresses in the batch or interactive mode, you must install the <code>TLS5BI.MD</code> database. To verify Timor-Leste addresses in the fast completion mode, you must install the <code>TLS5FC.MD</code> database. The reference address databases for Timor-Leste contain address information up to the street level. Timor-Leste does not have a postal code system. The reference address databases for Timor-Leste are in the Portuguese language and use the Latin script.

Additional Enrichments for United Kingdom Addresses

Effective in version 5.8.0, you can retrieve delivery point type and organization key information as additional enrichments to verified United Kingdom addresses. The organization key is a unique eight-digit code that Royal Mail assigns to small organizations. The delivery point type is a single-character code that indicates whether the address points to a residence (R), a small organization (O), or a large organization (L).

To receive the delivery point type and organization key, install the supplementary reference address database for the United Kingdom and set the EnrichmentSupplementaryGB attribute of the Process element in Parameters.xml to ON.

Support for UPRN in the AddressCodeLookUp mode.

Effective in version 5.8.0, you can use the Unique Property Reference Number (UPRN) codes to retrieve the corresponding United Kingdom addresses in the AddressCodeLookUp mode. In the AddressCodeLookUp mode, you can enter a UPRN and receive the corresponding address in the result output. UPRN is a numeric code that uniquely identifies a land or property unit in the United Kingdom.

To retrieve United Kingdom addresses using UPRN, you must install the address code lookup (AC) database for the United Kingdom, and set the process mode to ADDRESSCODELOOKUP. You must also set the Type attribute of the AddressCode element in InputData.xml to GBR_UPRN.

Version 5.7.0

This chapter includes the following topic:

• New Features and Enhancements (5.7.0), 15

New Features and Enhancements (5.7.0)

This section lists the new features and enhancements in version 5.7.0.

NIS Code as Enrichment to Belgium Addresses

Effective in version 5.7.0, you can retrieve the NIS code as an enrichment to validated Belgium addresses. Informatica AddressDoctor returns a combination of the five-digit NIS code and a four-digit Neighborhood ID along with the validated output for Belgium addresses.

To receive NIS codes in the validated output for Belgium addresses, license and install the supplementary reference address database, and configure EnrichmentSupplementaryBE in Parameters.xml.

For more information about configuring Informatica AddressDoctor to return the NIS code as enrichment to Belgium addresses, see *Informatica AddressDoctor Developer Guide*, *Version 5.7.0*.

Bulgaria Addresses in Cyrillic Script

Effective in version 5.7.0, you can validate Bulgaria addresses in the Cyrillic script. By default, you receive the validated results in the Cyrillic script.

To receive the results in the Latin script, you can set the PreferredScript attribute of the Result element in Parameters.xml to ASCII_EXTENDED, ASCII_SIMPLIFIED, LATIN, LATIN_1, or LATIN_ALT.

Other improvements to the Bulgaria address validation include high-quality reference address data and improved parsing of locality information.

China and Japan Addresses without Locality and Province Descriptors

Effective in version 5.7.0, you can receive validated result output for China and Japan addresses without locality and province descriptors.

To remove the locality and province descriptors from China and Japan addresses, set the PreferredLanguage attribute of the Result element in Parameters.xml to ENGLISH, and the PreferredScript attribute to one of the following values:

- ASCII_SIMPLIFIED
- ASCII_EXTENDED
- LATIN
- LATIN_1
- LATIN ALT

FIAS ID as Enrichment to Russia Addresses

Effective in version 5.7.0, you can retrieve the Federal Information Addressing System (FIAS) ID as an enrichment to validated Russia addresses. FIAS ID is a 16-character alphanumeric string.

To receive FIAS IDs in the validated output for Russia addresses, license and install the supplementary reference address database, and configure EnrichmentSupplementaryRU in Parameters.xml.

For more information about configuring Informatica AddressDoctor to return FIAS ID in the validated result output, see *Informatica AddressDoctor Developer Guide, Version 5.7.0*.

Multilanguage Support for Locality Information in Switzerland Address Output

Effective in version 5.7.0, you can configure Informatica AddressDoctor to return the locality information in Switzerland address results consistently in French, German, or Italian. Previously, Informatica AddressDoctor returned the Switzerland address results in the main language of the region to which the address belonged.

You can configure the PreferredLanguage attribute of the Result element in Parameters.xml to one of the following values and receive the locality information in the corresponding language:

ALTERNATIVE_1

German

ALTERNATIVE_2

French

ALTERNATIVE_3

Italian

Additionally, Informatica AddressDoctor returns the Street information for addresses in Biel/Bienne in the alternative language you configured for the PreferredLanguage attribute.

For more information about configuring the PreferredLanguage attribute for Switzerland addresses, see Informatica AddressDoctor Developer Guide, Version 5.7.0.

UPRN as Enrichment to the United Kingdom Addresses

Effective in version 5.7.0, you can retrieve the Unique Property Reference Number (UPRN) as an enrichment to validated United Kingdom addresses. UPRN is a unique number that the United Kingdom government assigns to land and property units. UPRN can have up to 12 digits.

To receive UPRN in the validated address output, license and install the supplementary reference address database for the United Kingdom, and configure EnrichmentSupplementaryGB in Parameters.xml.

For more information about configuring Informatica AddressDoctor to return UPRN as an enrichment in United Kingdom addresses, see *Informatica AddressDoctor Developer Guide, Version 5.7.0*.

Building-Level Rooftop Geocoordinates for the United Kingdom Addresses

Effective in version 5.7.0, Informatica AddressDoctor extends the rooftop geocoding support up to building level. You can retrieve building-level rooftop geocoordinates for the United Kingdom addresses even when the input address does not contain a house number.

For more information about retrieving geocoordinates, see *Informatica AddressDoctor Developer Guide*, *Version 5.7.0.*

Comprehensive Coverage of Business Names and Addresses in the United Kingdom

Effective in version 5.7.0, Informatica AddressDoctor extends the coverage of business names and addresses in the United Kingdom.

To access the additional data, you need to license and install the premium on-demand package of the reference address database for the United Kingdom. Effective in version 5.7.0, United Kingdom reference address databases have the following different versions:

- GBR5BI_03.ZIP and GBR5FC_03.ZIP, which contain the extended data for business names and addresses. These packages work with version 5.7.0 and later.
- GBR5BI_02.ZIP and GBR5FC_02.ZIP, which contain the Royal Mail data with subbuilding descriptors. These packages work with version 5.7.0 and later.
- GBR5BI_01.ZIP and GBR5FC_01.ZIP, which contain the Royal Mail data without subbuilding descriptors. These packages work with version 5.6.0 and earlier.

Province ISO Codes in Batch, Interactive, and Fast Completion Results

Effective in version 5.7.0, you receive the ISO 3166-2 province codes in batch, interactive, and fast completion results for addresses from the following countries:

- Canada
- France
- United States

Informatica AddressDoctor returns only the province part, an alphanumeric string of up to three characters, of the ISO 3166-2 code.

For a complete list of countries for which you receive province ISO codes, see the *Informatica AddressDoctor Developer Guide*.

Version 5.6.0

This chapter includes the following topic:

• New Features and Enhancements (Version 5.6.0), 18

New Features and Enhancements (Version 5.6.0)

This section lists the new features and enhancements in version 5.6.0.

Enhancements to Brazil Address Validation

Effective in version 5.6.0, Informatica AddressDoctor adds the following improvements to validation of Brazil addresses:

- Addition of the third-level subbuilding information to the Delivery Address Line (DAL) and Formatted
 Address Line (FAL) output of a valid address. The Brazil address system contains three levels of
 subbuilding information. Informatica AddressDoctor returns the third level of the subbuilding information
 in the DAL and FAL elements of valid addresses.
- Validation of kilometer (KM) information in Brazil addresses as additional information in the Street
 Complete element. Informatica AddressDoctor can also validate the KM information in the input address
 against a KM range in the reference address database. For example, if the reference database contains
 the KM information as 20-30 range and the input contains 25 KM, Informatica AddressDoctor marks the
 input as valid because 25 is within the 20-30 range.

Note: Informatica AddressDoctor uses a comma, and not a decimal point, in KM information for Brazil addresses. For example, 23,5 KM, and not 23.5 KM.

Enhancements to Address Validation in the DACH Region

Effective in version 5.6.0, Informatica AddressDoctor recognizes keywords such as *Zimmer* and *App* in the House Number field for addresses from Germany, Austria, and Switzerland.

Informatica AddressDoctor parses the Zimmer and App information in the House Number field as subbuilding information.

INSEE Code as Enrichment to France Addresses

Effective in version 5.6.0, you can configure Informatica AddressDoctor to add the INSEE-9 code to a validated France address. The INSEE-9 code is also called the IRIS code. INSEE, or the National Institute for

Statistics and Economic Research in France, defines IRIS codes to divide France into geographical units. France has approximately 16,000 IRIS units.

To add the INSEE-9 code to a France address, license and install the France supplementary reference address database, and set the EnrichmentSupplementaryFR attribute in Parameter.xml to ON.

Enhancements to India Address Validation and Parsing

Informatica AddressDoctor continues to fine tune the parsing and validation processes for India addresses. Informatica AddressDoctor also refines the address validation codes for India addresses to return more accurate process status and validation codes.

Address element correction of India address elements has been standardized to use the same logic that Informatica AddressDoctor uses for correcting addresses from other countries. Informatica AddressDoctor now considers inputs that follow a different casing than what is used in the reference database as exact match and validates the addresses accordingly.

Informatica AddressDoctor does not correct delivery addessline elements such as street, building, and organization if the reference address database does not contain these details for the address. In such situations, Informatica AddressDoctor copies the input to the output and downgrades the status codes and mailability values. Such addresses typically receive a C2 or V2 process status code. However, if the delivery addressline contains some other elements that Informatica AddressDoctor could validate, Informatica AddressDoctor might return higher values.

Seven-Digit Postal Codes in Israel

Effective in version 5.6.0, Informatica AddressDoctor supports the seven-digit postal codes that Israel Post defines for addresses in Israel.

The seven-digit postal codes replace the five-digit postal codes that Israel post previously defined.

Enhancements to Japan Address Validation

Effective in version 5.6.0, Informatica AddressDoctor introduces the following enhancements to Japan address validation:

- You can configure Informatica AddressDoctor to add the Gaiku code to validated Japan addresses. The Gaiku code is a four-digit code that identifies the block to which an address belongs. To add the Gaiku code to an address, set the EnrichmentSupplementaryJP attribute in Parameters.xml.
- You can use a combination of the new Choumei Aza code and Gaiku code in the address code lookup mode to retrieve a Japan address.
- You can retrieve both new and old Choumei Aza codes of an outdated address if you set the MatchingExtendedArchive attribute to ON. If the new and old Choumei Aza codes are different, you can use the new Choumei Aza code to retrieve the current address.

Extended Data Support for Japan

Effective in version 5.6.0, Informatica AddressDoctor can validate *Ban* or block information in a Japan address.

Informatica AddressDoctor parses the Ban data from the input address to the dependent street field or the Street 2 field. A Japanese address lists the address elements in order of size, from the largest or most general unit to the smallest or most specific unit. The *Ban* element follows the *Chome* element and precedes the *Go* element in the address

New and Improved Reference Address Database for Spain

Effective in version 5.6.0, Informatica AddressDoctor delivers new and improved reference data for addresses in Spain.

The reference data contains the most up-to-date address information for Spain, including subbuilding-level information.

Taiwan Addresses in the Mandarin Traditional Chinese Script

Effective in version 5.6.0, you can use Informatica AddressDoctor to validate Taiwan addresses in the Mandarin Traditional Chinese script. You can process an address in the Mandarin Traditional Chinese script as a fielded address or as a partially-fielded address. You can also process a Taiwan address in the native script as a single-line address by using the Fielded Address Line (FAL) element.

When you validate Taiwan addresses in the native script as a single-line address in the FAL element, enter the address elements in the following order:

Locality 1, Locality 2, Locality 3, Street 1, Street 1 (Supplementary Information), Street 2, Street 3, House Number, Building, SubBuilding.

Improved Data Coverage and Address Validation for Turkey

Effective in version 5.6.0, Informatica AddressDoctor delivers improved reference data for addresses in Turkey.

Informatica AddressDoctor also introduces the following improvements to address validation for addresses in Turkey:

- Identification of the building name and street name in the Delivery Address Line 1 field.
- Addition of a slash symbol (/) between a building element and a subbuilding element when the subbuilding element is a number.

New and Improved Reference Address Database for UAE

Effective in version 5.6.0, Informatica AddressDoctor delivers new and improved reference data for addresses in the United Arab Emirates.

Informatica AddressDoctor offers the new reference address data for the United Arab Emirates as a premium on-demand package that requires an unlock code.

Address Key Codes as Enrichment to the United Kingdom Addresses

Effective in version 5.6.0, you can retrieve Address Key codes as an enrichment in validated United Kingdom addresses. Address Keys are eight-digit numeric codes that map to addresses in the Postcode Address File from the Royal Mail.

To add an Address Key to an address, license and install the United Kingdom supplementary reference database, and set the EnrichmentSupplementaryGB attribute in Parameters.xml.

Rooftop Geocoordinates for the United Kingdom Addresses

Effective in version 5.6.0, you can configure Informatica AddressDoctor to return rooftop-level geocoordinates for addresses in the United Kingdom.

Rooftop geocoordinates are the measured coordinates for the center of the roof for the primary building on a parcel of land. Rooftop geocoordinates help you pinpoint an address with the highest level of precision.

To include the rooftop geocoordinates for the United Kingdom addresses, license and install the GBR5GCAP.MD database, and set the EnrichmentGeoCodingType attribute of the Process element in Parameters.xml to ARRIVAL POINT.

Enhancements to United States Address Validation

Effective in version 5.6.0, Informatica AddressDoctor introduces the following enhancements to the United States address validation:

- Informatica AddressDoctor adds county information and subbuilding information to the address output
 when you perform address validation in batch mode, certified mode, fast completion mode, and
 interactive mode. Previously, Informatica AddressDoctor returned this information only in batch mode,
 certified mode, and interactive mode. Informatica AddressDoctor adds the county information to the
 Province 2 element in the address output. Informatica AddressDoctor also adds the subbuilding
 information to the SubBuilding element in the address output.
- When you validate a United States address that contains a valid ZIP code and a valid locality, Informatica
 AddressDoctor adds the county to the address output. Informatica AddressDoctor can add the county
 information regardless of an Ix process status for the address. Informatica AddressDoctor adds the
 county information to the Province 2 element. If the Province 1 element is missing from the input address,
 Informatica AddressDoctor also adds the province information in the Province 1 field of the output
 address.
- When you validate a United States address that contains hyphenated house numbers, Informatica AddressDoctor moves the second part of the house number to the SubBuilding element.

Configurable Output Format for Element Descriptors

Effective in version 5.6.0, you can specify the output format for street, building, and subbuilding element descriptors and directionals in Australia and New Zealand addresses. You can also configure the output format for the *Strasse* element descriptor in Germany addresses.

To specify the output format for the element descriptors and directionals, configure one of the following values for the GlobalPreferredDescriptor attribute in the Parameters.xml file:

- DATABASE. Returns the element descriptor that the reference database specifies for the address. If the database does not specify a descriptor for the address, Informatica AddressDoctor copies the input value to the output address. DATABASE is the default value.
- LONG. Returns the expanded form of the element descriptor in the input address.
- SHORT. Returns the abbreviated form of the element descriptor in the input address.
- PRESERVE_INPUT. Copies the element descriptor from the input address to the output address. If the input
 element descriptor is not an official synonym, Informatica AddressDoctor returns the corresponding value
 from the reference database.

Support for New Versions of Operating Systems

Effective in version 5.6.0, Informatica AddressDoctor adds support for the following operating system versions:

- AIX versions 6 and 7
- RedHat Linux version 6
- Solaris version 11
- SUSE Linux version 11

Note: Informatica AddressDoctor supports the older versions of these operating systems only until the next major release of Informatica AddressDoctor.

Version 5.5.0

This chapter includes the following topic:

• New Features and Enhancements (Version 5.5.0), 23

New Features and Enhancements (Version 5.5.0)

This section lists the new features and enhancements in version 5.5.0.

Single Line Address Validation

Effective in version 5.5.0, Informatica AddressDoctor can parse and validate single-line addresses that you enter in the AddressComplete element in the fast completion mode.

You need a separate unlock code for single-line address validation. For a complete list of countries for which you can do single-line address validation, see the *Informatica AddressDoctor Developer Guide*.

Support for Taiwan

Effective in version 5.5.0, you can use Informatica AddressDoctor to validate Taiwan (Republic of China) addresses.

Note that Informatica AddressDoctor currently supports Taiwan addresses in the Latin script only.

Support for Locality Aliases

Effective in version 5.5.0, you can retain locality aliases, also known as vanity names, in the validated output.

Support for Java Version 7

Effective in version 5.5.0, Informatica AddressDoctor uses version 7 of the Java Run-Time Environment. To develop your own applications, you must install the Java Development Kit SE 7 on the development machine.

Note: You can continue to use the HP SE 5 version of the Java Development Kit on a machine that runs the HP-UX operating system.

New Enrichments

Effective in version 5.5.0, Informatica AddressDoctor introduces the following enrichments:

- · Postal Address Code (PAC) in validated Austria addresses.
- INSEE code in validated France addresses.
- Gmina codes, Locality TERYT IDs, and Street TERYT IDs in validated Poland addresses.

New Addresses in South Korea

Effective in version 5.5.0, Informatica AddressDoctor supports the new street name-based address system in South Korea.

Support for Preserving Input Scripts

Effective in version 5.5.0, you can preserve the input script of addresses from Belarus, China, Greece, Kazakhstan, Macedonia, Russia, and Ukraine.

Support for Cyrillic Script in Belarus and Macedonia Addresses

Effective in version 5.5.0, Informatica AddressDoctor extends Cyrillic transliteration support to Belarus and Macedonia addresses.

You can enter and validate Belarus and Macedonia addresses in the native script.

Enhancements to United States Address Validation

Effective in version 5.5.0, Informatica AddressDoctor introduces the following improvements to the United States address processing:

- Support for default unique ZIP code assignments.
- · Support for locality name override.
- · Improved handling of delivery instructions.
- Improved handling of leading zeros in sub-building number elements.

Version 5.4.x

This chapter includes the following topics:

- New Features and Enhancements (Version 5.4.2), 25
- New Features and Enhancements (Version 5.4.1), 25
- New Features and Enhancements (Version 5.4.0), 26

New Features and Enhancements (Version 5.4.2)

This section lists the new features and enhancements in version 5.4.2.

SERP 2014

Effective in version 5.4.2, Informatica AddressDoctor becomes SERP 2014-compliant.

New Features and Enhancements (Version 5.4.1)

This section lists the new features and enhancements in version 5.4.1.

Address Code Lookup

Effective in version 5.4.1, you can enter a country-specific address code and retrieve the complete or partial address for the code in the address code lookup (ADDRESSCODELOOKUP) mode of Informatica AddressDoctor.

For a complete list of countries for which you can retrieve addresses from the address code lookup mode, see the *Informatica AddressDoctor Developer Guide*.

Address Enrichments

Effective in version 5.4.1, Informatica AddressDoctor introduces the following address enrichments:

- National Address Database ID as an enrichment to South Africa addresses.
- Brazilian Institute of Geography and Statistics (IBGE) code as an enrichment to Brazil addresses.

Amtliche Gemeindeschlüssel (AGS), the locality ID, and the street ID as enrichments to Germany addresses.

Country-Specific Improvements

Effective in version 5.4.1, Informatica AddressDoctor introduces the following country-specific address validation and parsing improvements:

- · Native parsing for China. The parsing improvements enable better-quality address validation for China.
- Support for the additional two characters that Swiss Post has added to the Swiss postal codes.
- Ability to return new address code for deprecated or outdated addresses for Japan.
- Parsing and validation improvements for Japan addresses, including the following:
 - Transliteration of the JIS-2004 Japanese character set into the Latin character set.
 - Preserve input script configuration for Japan addresses.
- Support for additional variations of Post Office Box values in Australia addresses.
- Performance improvements for India address validation.
- · Ability to return suggestions for partial or incomplete Indian addresses in Interactive mode.

Logical Sorting of House Numbers

Effective in version 5.4.1, Informatica AddressDoctor returns a list of house numbers in logical order instead of alphanumeric order.

For example, Informatica AddressDoctor now sorts and returns numbers in the following logical order:

1, 2, 3, 11, 12, 13, 14, 21, 22

Unlock Codes and Engine Expiration

Effective in version 5.4.1, Informatica AddressDoctor introduces new unlock codes for supplementary databases. You must reinitialize the 5.4.1 engine with the new unlock codes in order to enable the supplementary databases.

In addition, the GetConfig.xml file reflects the status of the engine at the time of the AD_Initialize call.

SendRight Certification

Effective in version 5.4.1, Informatica AddressDoctor becomes SendRight 2014-compliant.

New Features and Enhancements (Version 5.4.0)

This section lists the new features and enhancements in version 5.4.0.

Point Address Geocoding

Effective in version 5.4.0, you can configure Informatica AddressDoctor to provide point-address geocoordinates in the result output. Point Address Geocoding enables highly accurate and precise "to the premise" geocoding points for properties and premises. Informatica AddressDoctor supports the following types of point-address geocoding:

- Arrival Point geocoding. The geocoordinates are calculated for a point that is placed in the center of a street segment in front of the house.
- Parcel Centroid geocoding. The geocoordinates are calculated for a point that is at the geographic center of the parcel of land.

For a complete list of countries for which you can receive point address geocoding, see the *Informatica AddressDoctor Developer Guide*.

Version 5.3.x

This chapter includes the following topics:

- New Features and Enhancements (Version 5.3.1), 28
- New Features and Enhancements (Version 5.3.0), 29

New Features and Enhancements (Version 5.3.1)

This section lists the new features and enhancements in version 5.3.1.

Address Enrichments

Effective in version 5.3.1, you can retrieve the following address enrichments:

- The Choumei Aza code as an enrichment to Japan addresses.
- The Unique Delivery Point Reference Number as an enrichment to the United Kingdom addresses.
- The Postal Address Code as an enrichment to Serbia addresses.

Address Resolution Codes

Effective in version 5.3.1, Informatica AddressDoctor extends support to the address resolution code (ARC).

Extended Element Result Status

Effective in version 5.3.1, Informatica AddressDoctor provides Extended Element Result Status (EERS) values in the result output.

Enhancements to Canada Address Validation

Effective in version 5.3.1, Informatica AddressDoctor introduces the following enhancements to Canada address validation:

- · Multilanguage support
- · Thirteen-character abbreviation for localities
- · Rural Route information

Country Improvements

Effective in version 5.3.1, Informatica AddressDoctor offers improved address validation logic for the following countries:

- France
- South Africa
- China
- Japan
- United Kingdom
- Serbia

New Features and Enhancements (Version 5.3.0)

This section lists the new features and enhancements in version 5.3.0.

Address Resolution Code

Effective in version 5.3.0, Informatica AddressDoctor introduces the address resolution code (ARC), a twenty-character output string that is similar to the element result status field.

Informatica AddressDoctor populates the ARC for all non-valid (process status = Ix) records. The address resolution code explains why an address is rejected and directs you to possible solutions.

Extended Element Result Status

Effective in version 5.3.0. Informatica AddressDoctor introduces the extended element result status (EERS) code, a twenty-character output string that is similar to the element result status field.

Informatica AddressDoctor populates the EERS value for valid or corrected addresses. The code indicates that additional information may be available in the reference database for the given address.

Standardization of Non-valid Address Elements

Effective in version 5.3.0, you can configure Informatica AddressDoctor to standardize address elements for non-valid (process status = Ix) addresses. Standardized addresses can improve downstream business processes such as matching and de-duplication.

Dual Address Priority

Effective in version 5.3.0, you can specify the type of address against which Informatica AddressDoctor should validate an address. This is useful if the input address contains more than one type of address such as street address and delivery service or rural route address.

Additional Results in Fast Completion and Interactive Modes

Effective in version 5.3.0, Informatica AddressDoctor increases the upper limit of the suggestion list from twenty to one hundred results. In addition, you can configure Informatica AddressDoctor to expand house number ranges for countries where individual house numbers exist.

Support for Ireland

Effective in version 5.3.0, Informatica AddressDoctor supports validation of Ireland addresses.

British Forces Postal File

Effective in version 5.3.0, Informatica AddressDoctor implements the Royal Mail British Forces Post Office (BFPO) data.

Multilanguage Support for Belgium

Effective in version 5.3.0, Informatica AddressDoctor introduces multilanguage support for Belgian addresses.

You can specify the language of the output, or you can preserve the language of the input address. Use the PreferredLanguage attribute to write the output address in French, Flemish or German.

Language ISO Code Output

Effective in version 5.3.0, Informatica AddressDoctor can write the ISO code language as output when the output address contains data from the reference database.

The output is an ISO 639 3-letter code. For example, DEU for German. For transliterated output, Informatica AddressDoctor reports the original language. For example JPN for romanized Japanese output.

Austrian Postal Changes

Effective in version 5.3.0, Informatica AddressDoctor supports the latest address format for Austria. Austrian Post changed its address format in 2011.

Additional Countries and Territories

Effective in version 5.3.0, Informatica AddressDoctor extends support to the following countries and territories:

- Curacao (CUW)
- Sint Maarten (SXM)
- · Bonaire, Sint Eustatius and Saba (BES)
- Montenegro (MNE)
- Serbia (SRB)
- South Sudan(SSD)

Effective in version 5.3.0, Informatica AddressDoctor discontinues support for the following countries and territories:

- · Serbia and Montenegro (SCG)
- Netherlands Antilles (ANT)

SubBuilding Changes in Australia Addresses

Effective in version 5.3.0, Informatica AddressDoctor validates addresses with sub-building information for Australia addresses in batch and interactive modes.

Subbuilding data is available in the Australia reference address database released in August 2012 and later. Note that Informatica AddressDoctor supports two versions of the Australia reference address databases to ensure compatibility with previous versions of Informatica AddressDoctor. Australia reference address databases that contain the subbuilding information are DB5_AUS5BI_02_YYMMDD.zip and DB5_AUS5FC_02_YYMMDD.zip. The Australia reference address databases that do not contain the subbuilding information are DB5_AUS5BI_01_YYMMDD.zip and DB5_AUS5FC_01_YYMMDD.zip.

Singapore Updates

Effective in version 5.3.0, Informatica AddressDoctor validates floor, suite, and door values in Singapore addresses. This is supported in all process modes. You require the <code>DB5_SGP5BI_02_YYMMDD.zip</code> database package and a separate unlock code to receive the subbuilding information.

Japan Updates

Effective in version 5.3.0, Japan reference data includes house numbers and address codes for Japan. Due to these changes, Informatica AddressDoctor introduces a new format of the Japan reference address database:

- DB5_JPN5BI_02_YYMMDD.zip
- DB5 JPN5FC 02 YYMMDD.zip

Certifications

Effective in version 5.3.0, Informatica AddressDoctor is officially certified by five postal organizations around the globe: the United States Postal Service, Canada Post, Australia Post, New Zealand Post, and La Poste of France.

Version 5.2.x

This chapter includes the following topics:

- New Features and Enhancements (Version 5.2.9), 32
- New Features and Enhancements (Version 5.2.8), 33

New Features and Enhancements (Version 5.2.9)

This section lists the new features and enhancements in version 5.2.9.

Country Improvements

Effective in version 5.2.9, Informatica AddressDoctor offers improved address validation for the following countries:

- Italy
- Netherlands
- Singapore
- Hong Kong
- Malaysia
- United Kingdom
- Germany
- United States.
 United States improvements include support for eLOT sequence numbers and street name aliases.

Enhancements to India Address Validation

Effective in version 5.2.9, Informatica AddressDoctor provides enhanced parsing and validation operations and also provides enhancements to the India reference database.

Informatica AddressDoctor does not support the parse-only (PARSE) mode for India address validation.

Note that older versions of the database are incompatible with version 5.2.9. Use the older database for version 5.2.8 and earlier versions, and use the new database for version 5.2.9 and later versions.

Enhancements to Transliteration, Parsing, and Formatting for Japan Addresses

Effective in version 5.2.9, Informatica AddressDoctor has made significant improvements to the way Japan addresses are processed and validated.

Due to these changes, the format of the Japan reference address database has changed. To obtain the new functionality, download the new database for Japan.

If you use a previous version of the API with the new database, you do not benefit from the enhancements in version 5.2.9.

New Features and Enhancements (Version 5.2.8)

This section lists the new features and enhancements in version 5.2.8.

CAMEO Social and Demographic Profiles

Effective in version 5.2.8, Informatica AddressDoctor returns CAMEO code values for addresses from a number of countries. CAMEO codes from the Callcredit Information Group provide consumer classification systems that indicate the socio-economic and geo-demographic profiles of neighborhoods across the world.

For a complete of list of countries for which you can receive the CAMEO codes, see the *Informatica AddressDoctor Developer Guide*.

Australian Localities and Vanity Names

Effective in version 5.2.8, Informatica AddressDoctor retains a valid vanity name from an input in the output when you validate an Australia address in the certified mode.

Incremental Change File for Australia

Effective in version 5.2.8, Informatica AddressDoctor supports the Incremental Changes File through the AMAS Certified Software Program. The file contains a list of delivery point IDs that have changed between releases of the Postal Address File.

Czech Republic Address Validation Enhancements

Effective in version 5.2.8, Informatica AddressDoctor provides district numbers in the Czech Republic reference address database.

AddressType Output Field

Effective in version 5.2.8, Informatica AddressDoctor returns the AddressType information for all countries whose reference data supports the identification of the address type.

SERP and AMAS Certification

Effective in version 5.2.8, Informatica AddressDoctor is compliant with the respective requirements for SERP and AMAS 2012 certification.