



Informatica® Address Verification
5.10.0

Release Notes (On-Premises)

Informatica Address Verification Release Notes (On-Premises)

5.10.0

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Abstract

This document contains important information about installation, new features, changed features, and fixed limitations for Informatica Address Verification (On-Premises).

If you connect to Informatica Address Verification in the cloud, you can use this document to learn about the current capabilities of the Address Verification engine.

CHAPTER 1

Informatica Address Verification Installation

This chapter includes the following topics:

- [Memory Requirements, 5](#)
- [System Configuration, 6](#)
- [Developer Support, 6](#)

Memory Requirements

Informatica Address Verification is designed to be highly efficient in its memory and resource usage. To ensure best possible performance, install Informatica Address Verification on a device that has fast input and output systems and sufficient memory.

The device on which you install Informatica Address Verification must have a minimum of 512 MB RAM.

Before you finalize the memory requirements, consider the size of the reference address databases that are required for your specific needs. Preloading databases significantly improves the performance of Informatica Address Verification. The device on which you install Informatica Address Verification must have sufficient RAM to preload all the required databases.

The complete set of worldwide postal reference databases including supplementary databases for address enrichments requires around 40 GB of storage space. However, for typical installations that do not require all the databases, 20 to 25 GB of RAM should be sufficient. If you need to preload databases that together have a size of 3 GB or more, use a 64-bit operating system that offers you more flexibility with the RAM size. The maximum available RAM for a 32-bit operating system is 3 GB.

Tip: If full preloading of databases is not an option, use solid-state drives to store the reference address databases. Solid-state drives are faster than hard-disk drives and can significantly improve performance especially when multithreading is used.

System Configuration

When you install Informatica Address Verification, verify that the operating system and the processor architecture are compatible on the installation host machine. Verify also that the installation host machine runs a Java Development Kit that is compatible with the processor architecture and the operating system.

The following table lists the system configurations that you can use for Informatica Address Verification installation:

Operating System	Processor Architecture	Java Development Kit
Windows Server 2008 SP2	x86 (32-bit)	Sun SE 7
Windows Server 2008 R2 Windows Server 2008 SP2 Windows Server 2012	x64 (64-bit)	Sun SE 7
SUSE Linux Enterprise Server 10 and 11	x86 (32-bit) x64 (64-bit)	Sun SE 7
RedHat Enterprise Linux 6 and 7	x86 (32-bit) x64 (64-bit)	Sun SE 7
RedHat Enterprise Linux 6 and 7	System z (64-bit)	IBM SE 7
AIX 6 AIX 7	POWER (64-bit)	IBM SE 7
Solaris 10 and 11	Intel (64-bit) SPARC (64-bit)	Sun SE 7
HP-UX 11	Intel Itanium (64-bit)	HP SE 5

Developer Support

Informatica develops Informatica Address Verification in the C++ programming language. The Informatica Address Verification software packages contain APIs in C and in Java.

The Informatica Address Verification Developer Guide contains examples for the C and Java APIs. You can use the examples to develop Informatica Address Verification implementations in other languages, such as C++, C#, Visual Basic, .Net, PHP, Perl, Ruby, and Python.

Informatica Address Verification provides technical support for C-based and Java-based APIs. Informatica Address Verification does not provide implementation-specific technical support.

For more information about or assistance with address verification projects, contact the Informatica Professional Services team.

CHAPTER 2

Informatica Address Verification Version 5.10.0

This chapter includes the following topics:

- [Highlights of Informatica Address Verification Version 5.10.0, 7](#)
- [New Features and Enhancements \(Version 5.10.0\), 8](#)
- [Fixed Issues in Version 5.10.0, 13](#)

Highlights of Informatica Address Verification Version 5.10.0

The following table lists the new features of Informatica Address Verification in version 5.10.0:

New	Additional Postal Address Code (PAC) identifier for an Ident address in Austria.
New	RUIAN ID values as enrichments to valid Czech Republic addresses.
New	Support for Post Office Box Only Delivery Zones in a United States address when you verify the address in certified mode.
New	Support for Transaction Key and Record ID values in the Key element in address code lookup mode.
New	Native support for Hong Kong addresses. Address Verification can read and write Hong Kong addresses in English and in Chinese.
Updated	Support for SHA-256-compliant CASS data files from the United States Postal Service.
Updated	Improved parsing and validation of Japan addresses in Latin character sets.
Updated	Improved parsing and validation of Kuwait addresses. Updated reference data for Kuwait.

Updated	Support for the latest software certification standards from Australia, Canada, and New Zealand.
Updated	Support for single-line address verification in batch and interactive modes in addition to fast completion mode. Support for single-line address verification in fast completion mode in additional countries.

New Features and Enhancements (Version 5.10.0)

This section lists the new features and enhancements to Informatica Address Verification in different countries in version 5.10.0.

Austria

Effective in version 5.10.0, Informatica Address Verification can return an additional Postal Address Code (PAC) for an address in Austria if the address receives mail at another address. The additional code is the PAC_ID (Postal Address Code Identifier).

An Austria address has a PAC_ID value when the address identifies a mailbox that receives mail at another address. For example, a building at an intersection of two streets might have an address on both streets and might specify one of the addresses as the mailbox address.

Note: The address that gives access to the mailbox is called the Ident address.

A street address that does not receive mail has a PAC value and a PAC_ID value. The PAC_ID value is the PAC value of the Ident address that receives the mail. The postal carrier delivers mail to the address that the PAC_ID identifies.

You can use the PAC_ID value to return the corresponding address from the reference data in Address Code Lookup mode. Address Verification reads the address from the `AUT5AC.MD` database.

The following table lists street addresses that identify a single mail destination:

Address	PAC Value	PAC_ID Value
Hauptplatz 4 8010 Graz AUT	100001915	100004254
Neue-Welt-Gasse 2 8010 Graz AUT	100004254	Not applicable

The address "Hauptplatz 4" does not receive mail because the mailbox is at another address at the same location. The building receives mail at "Neue-Welt-Gasse 2" and therefore "Neue-Welt-Gasse 2" is the Ident address. The PAC_ID is the PAC of the address that receives the mail. The PAC value for the Ident address is 100004254.

Czech Republic

Effective in 5.10.0, you can configure Informatica Address Verification to add RUIAN ID values as enrichments to a valid Czech Republic address.

Address Verification reads the enrichment data from the `CZE5E1.MD` database.

The RUIAN ID enrichment comprises the following codes:

- RUIANAM_ID. Uniquely identifies the address delivery point.
- RUIANSO_ID. Identifies the address to building level.
- RUIANTEA_ID. Identifies the building entrance.

The supplementary database for the Czech Republic includes RUIANAM_ID and RUIANSO_ID values for ninety-nine percent of Czech Republic addresses. The database includes RUIANTEA_ID values for a small percentage of addresses.

Before you enable the enrichment for Czech Republic addresses, license and install the supplementary database and include the corresponding unlock code in `SetConfig.xml`.

Example: RUIAN ID Codes in Address Output

The supplementary database stores all types of RUIAN ID data for the following address:

```
Musorgského 320/2  
Kohoutovice  
623 00 Brno 23  
CZE
```

Address Verification returns the following RUIAN ID codes for the address from the database:

```
<SupplementaryCZ Type="RUIANAM_ID">19382481</SupplementaryCZ>  
<SupplementaryCZ Type="RUIANSO_ID">19204035</SupplementaryCZ>  
<SupplementaryCZ Type="RUIANTEA_ID">76838</SupplementaryCZ>
```

Hong Kong

Effective in version 5.10.0, Informatica Address Verification provides native support for Hong Kong addresses. Address Verification can read and write Hong Kong addresses in the Chinese language or the English language. Use the `PreferredLanguage` attribute to select the preferred language for the addresses. Use the `PreferredScript` attribute to select the preferred character set for the address data.

For example, Address Verification can match the following Hong Kong addresses with address information in the reference data:

```
Flourish Industrial Building  
33 Sheung Yee Rd.  
Kowloon Bay  
Kowloon  
HKG
```

By default, Address Verification returns Hong Kong addresses in Chinese. The `DATABASE` option on the `PreferredLanguage` attribute specifies the default language. To return Hong Kong addresses in English, set the `PreferredLanguage` attribute to `ENGLISH`.

By default, Address Verification returns Chinese-language addresses in the Hanzi character set. The `DATABASE` option on the `PreferredScript` attribute specifies the default character set. If you specify `ENGLISH` as the preferred language, set the `PreferredScript` attribute to any Latin or ASCII option. When you select a Latin script, Address Verification transliterates the address data into Pinyin.

You can find the `PreferredLanguage` attribute and the `PreferredScript` attribute in the `Result` element in the `Parameters.xml` file.

Japan

Effective in version 5.10.0, Informatica Address Verification improves the parsing and validation of Japan addresses in Latin character sets.

Address Verification also returns more accurate Process Status codes and Element Result Status codes for Japan addresses in Latin character sets.

Kuwait

Effective in version 5.10.0, Informatica Address Verification improves the parsing and validation of Kuwait addresses. Additionally, Address Verification issues updated reference data for Kuwait.

The reference data includes the following enhancements:

- The reference data follows the postal standards of Kuwait.
- The reference data includes city names, zone numbers, street names, house numbers, and postal codes.

For example, Address Verification matches the following Kuwait address with the address information in the reference data:

```
Block 6  
21 Street 5  
65006 Ali Subah Al Salem  
KWT
```

United States

Informatica Address Verification introduces the following features and enhancements for the United States:

Support for the Secure Hash Algorithm-compliant versions of CASS data files

Effective in version 5.10.0, Address Verification reads CASS certification data files that comply with the SHA-256 standard.

To identify the files that comply with the SHA-256 standard, Address Verification updates the naming convention for the CASS certification files. The current CASS certification files are numbered `USA5C101.MD` through `USA5C126.MD`. To verify United States addresses in certified mode, you must use the current files.

Note: The SHA-256-compliant files are not compatible with older versions of Address Verification.

Support for Post Office Box Only Delivery Zones

Effective in version 5.10.0, Address Verification can recognize ZIP Codes that contain post office box addresses only. When all addresses in a ZIP Code are post office box addresses, the ZIP Code represents a Post Office Box Only Delivery Zone. Address Verification adds the value Y to the address to indicate that it identifies a ZIP Code as a Post Office Box Only Delivery Zone.

Use the indicator value to determine when a ZIP Code represents a Post Office Box Only Delivery Zone. For example, online address verification software can use the presence of the value to prompt users for a valid address when a P.O. Box address is not provided.

Note: A post office box street address (PBSA) does not qualify for inclusion in a Post Office Box Only Delivery Zone. A PBSA address and a non-post office box address can share the same ZIP Code.

Address Verification introduces Post Office Box Only Delivery Zone indicators to support the standards of CASS Cycle O. The United States Postal Service has not implemented Cycle O at the time of the 5.10.0 release. Address Verification introduced additional features in version 5.9.0 to prepare for the implementation of CASS Cycle O.

Single-Line Address Verification in Multiple Countries

Effective in version 5.10.0, Informatica Address Verification extends single-line address verification in fast completion mode to many countries. Address Verification also enables single-line address verification in batch and interactive modes.

New Countries for Single-Line Address Verification

Informatica Address Verification increases the number of countries for which you can perform single-line address verification.

The following table lists the countries that Address Verification supports for single-line address verification and identifies the newly-supported countries in version 5.10.0:

Country Name	Fast Completion Support	Batch and Interactive Support
Australia	Supported prior to version 5.10.0	New
Austria	New	New
Belgium	New	New
Canada	Supported prior to version 5.10.0	New
China	Supported prior to version 5.10.0	New
Denmark	New	New
Finland	New	New
France	New	New
Germany	Supported prior to version 5.10.0	New
Ireland	New	New
Italy	New	New
Japan	Supported prior to version 5.10.0	New
Luxembourg	New	New
Netherlands	New	New
New Zealand	Supported prior to version 5.10.0	New
Norway	New	New
Spain	New	New
Sweden	New	New
Switzerland	New	New

Country Name	Fast Completion Support	Batch and Interactive Support
United Kingdom	Supported prior to version 5.10.0	New
United States	Supported prior to version 5.10.0	New

Support for Single-Line Address Verification in Batch and Interactive Modes

Address Verification supports single-line address verification in batch and interactive modes in addition to fast completion mode. In earlier versions, Address Verification supported single-line address verification in fast completion mode only.

To verify single-line addresses, enter the addresses in the `AddressComplete` element that the `InputData.xml` file specifies. If you verify single-line addresses in batch or interactive mode, you must also set the `FormatAddressComplete` parameter in the `Parameters.xml` file to `SINGLE_LINE`.

When you submit a single-line address in interactive mode or fast completion mode, Address Verification can return multiple address suggestions from the reference data. When you submit a single-line address in batch mode, Address Verification returns a single address.

Note: Address Verification processes single-line addresses in the same way as any other type of address in batch, interactive, or fast completion mode.

Transaction Key and Record ID Values in Address Code Lookup Mode

Effective in version 5.10.0, you can add the `Key` element to an input address in address code lookup mode. The `Key` element has the types `TRANSACTION_KEY` and `RECORD_ID`.

When you include transaction key or record ID values in the input addresses, Address Verification passes the values through to the output addresses. You can use the values to match an address in the output data to the source address in the input data.

Updated Certification Standards in Multiple Countries

Effective in version 5.10.0, Informatica Address Verification supports the following certification standards for address verification software:

- Address Matching Approval System (AMAS) certification for Australia Post. Address Verification updates support to Cycle 2017.
- SendRight certification for New Zealand Post. Address Verification updates support to Cycle 2017.
- Software Evaluation and Recognition Program (SERP) certification for Canada Post. Address Verification updates support to Cycle 2017.

Address Verification continues to the current versions of the Coding Accuracy Support System (CASS) from the United States Postal Services and Service National de L'Adresse (SNA) certification for La Poste of France. The United States Postal Services specifies Cycle N as the current CASS certification standard.

Fixed Issues in Version 5.10.0

The following table describes customer-reported issues that are fixed in version 5.10.0:

Country	CR Number	Description
Australia	458212	Address Verification can parse house number information to a sub-building element and parse sub-building information to a house number element in an Australia address. The issue arises when the input address includes the information on a single delivery address line.
Australia	455912	If an Australia address concatenates the final word on a formatted address line and the first word on the next formatted address line, Address Verification fails to verify the address.
Australia	450728	Address Verification fails to parse province information from an Australia address if the input address record uses multi-line elements.
Austria	457145	The casing style of the global preferred descriptor that you set for Strasse or Straße in an Austria address can conflict with the casing style for the rest of the address. The descriptor might appear in allcaps while the rest of the address uses mixed case.
Austria	434991	Address Verification might fail to parse house number and sub-building information correctly from an Austria address that contains the information on a single delivery address line.
Brazil	451552	Address Verification can drop sub-building information from a Brazil address if the input house number or building number is concatenated with a word or an alphabetic string.
Brazil	449598	Address Verification fails to validate the string "BL" as a building or sub-building descriptor in a Brazil address. Address Verification might parse "BL" as part of the street name.
Canada	447305	When you verify a Canada address in interactive mode, Address Verification can return the same address more than once.
Canada	446715	Address Verification can parse the information from a single sub-building element in a Canada address to separate sub-building fields. The issue can arise when the sub-building number contains multiple characters separated by a dash character.
China	460781	Address Verification fails to recognize N, S, E, and W as English-language street direction indicators in a China address.
Democratic Republic of the Congo	455361	Address Verification fails to recognize COD as an ISO country code for the Democratic Republic of Congo. Address Verification returns COG as the three-letter ISO country code.
France	452994	Address Verification might make an excessive number of corrections to an incorrect France address in order to return an address with a Cx process status value.
Germany	460021	Address Verification does not recognize "zone" as a sub-building identifier in a Germany address that contains sub-building information on the same line as house number or building information.

Country	CR Number	Description
Hong Kong	442787	Address Verification does not return the correct city information in a Hong Kong address if the street and province information is correct but the locality information is absent. The issue arises in batch mode.
India	463350	Address Verification can copy sub-building and post code information from an India input address to the house number element in the output address.
Italy	448843	Address Verification might fail to update an input street name correctly in an Italy address when the street name lacks the article "AL." The issue arises when Address Verification can match the input address to more than one reference address.
Japan	454760	Address Verification can return the incorrect Choumei Aza code for a Japan address. The issue arises when the input address includes information that the reference data does not associate with the address.
Japan	454437	Address Verification fails to validate a Japan address correctly when one or more of the following conditions are true: <ul style="list-style-type: none"> - The address includes a comma as a separator between two elements. - The address includes a dash between number values.
Japan	451253	Address Verification fails to parse the information in a Japan address correctly when you enter the address in delivery address lines.
Japan	446362	Address Verification returns an Ix process status for a valid Japan address when the input locality does not contain <code>-shi</code> .
Luxembourg	442516	Address Verification can fail to recognize street information in a Luxembourg address if the street name includes descriptor terminology. For example, Address Verification might return an Ix process status value for a valid address with the street information RUE DE FAUBOURG.
Mexico	425823	Address Verification can encounter problems when it verifies a Mexico address that includes alphanumeric house number data in batch or interactive mode.
Netherlands	464150	Address Verification does not correct the post code in a Netherlands address when the following conditions are true: <ul style="list-style-type: none"> - The four-digit number in the postcode is correct but the alphabetical suffix is incorrect. - The other information in the address matches the address reference data.
Russia	445538	Address Verification fails to recognize "Дом" as a house number indicator in a Russia address.
Russia	440130	Address Verification might parse a sub-building number as a house number in a Russia address.
Turkey	461425	When you enter a Turkey address in delivery address line format, Address Verification might parse house number information as locality information. Address Verification might drop the poorly-parsed information from the output address.
Turkey	461384	Address Verification might parse house number, street 2, and locality information in a Turkey address as locality information. The issue arises when the input address contains the information on a single delivery address line.

Country	CR Number	Description
Turkey	453546	Address Verification might make an excessive number of corrections to an incorrect Turkey address in order to return an address with a Cx process status value.
United Kingdom	452392	Address Verification might not write dependent street information to a delivery address line in a United Kingdom address.
United Kingdom	450737	Address Verification can return a lower-than-expected process status value for a valid United Kingdom address that does not contain province information.
United Kingdom	450324	Address Verification can return the following status codes for building data in a United Kingdom address when the input address contains no building data: <ul style="list-style-type: none"> - An ElementInputStatus code of 2 - An ElementResultStatus code of 4
United Kingdom	429108	Address Verification can drop house number data from a United Kingdom address when the following conditions are true: <ul style="list-style-type: none"> - The house number, building number, or sub-building number data includes a forward slash (/) character. - The input address includes the data on a delivery address line.
United Kingdom	16024	Address Verification does not return the building name from the reference data in batch or interactive mode when the remaining information in a United Kingdom address matches a unique address in the reference data.
United States	461850	Address Verification can return a different locality for a United States address when the address uses the long form or the short form of a street descriptor.
United States	461150	When an input United States address does not contain street name information, Address Verification returns a series of zeros as AddressResolutionCode property values.
United States	460631	When you verify a United States address in fast completion mode, Address Verification can return addresses outside the ZIP Code that the input data specifies.
United States	457701	Address Verification does not update an incorrect ZIP Code in a United States address when the remaining address information matches a unique address in the reference data. The issue arises when you run Address Verification in batch mode.
United States	457037	Address Verification does not separate house number and street information in a United States address when the following conditions are true: <ul style="list-style-type: none"> - The house number is spelled out, for example ONE. - The house number is concatenated with the street name, for example ONETOWN CENTER RD.
United States	457027	Address Verification can fail to correct a United States address that contains highway information if the input address includes an incorrect highway descriptor.
United States	457025	Address Verification does not recognize "SWT" as a variant spelling of the descriptor "Suite" in a United States address.
United States	457024	Address Verification fails to recognize "Suth" as the direction "South" in a United States address.
United States	457009	Address Verification fails to recognize "MLK JR" as an abbreviation for the street name "MARTIN LUTHER KING JR" in a United States address.

Country	CR Number	Description
United States	457007	Address Verification fails to correct a street name in a United States address if the input address contains zero in place of an uppercase letter O.
United States	456860	Address Verification fails to recognize street name information in a United States address when the following conditions are true: <ul style="list-style-type: none"> - The valid street name contains a cardinal number, for example "SEVEN LOCKS RD." - The input address contains an ordinal number in place of the cardinal number, for example "7TH LOCKS RD."
United States	456858	When a United States address uses a state abbreviation in a street name, Address Verification fails to match the abbreviation with the full state name in the reference data. Similarly, Address Verification fails to match a full state name in an input street address with the abbreviated state name in the reference data. For example, Address Verification fails to match the input street name "VERMONT" with the reference street name "VT."
United States	456857	Address Verification does not recognize "FIRSTS" as a variant spelling of "FIRST" in a United States street name.
United States	456126	Address Verification does not recognize "PB," "P BOX," and "PBOX" as abbreviations of "P.O. Box" in United States addresses.
United States	455918	Address Verification fails to validate a United States address that places sub-building information between the house number and the street information on a delivery address line.
United States	454408	When you validate a United States address twice, Address Verification can copy part of the street name to a sub-building field. The issue arises when the street name includes a term that is also a sub-building identifier.
United States	453020	Address Verification might not recognize a street descriptor as an alias street name in a United States address. For example, Address Verification does not recognize Boulevard as an alias for Roanoke Boulevard in Salem, Virginia.
United States	453018	Address Verification fails to validate a United States address if the house number information begins with a zero.
United States	451755	Address Verification can encounter problems when it matches Puerto Rico address data with reference data in interactive mode. For example, Address Verification might not provide house number suggestions if the input data omits the house number.
United States	451751	Address Verification returns different process status values for the same output address in Puerto Rico when you set different values for the MatchingScope attribute in interactive mode.
United States	450502	Address Verification can parse street and locality information from a United States address as residue when the input address is a comma-delimited string.
United States	443914	Address Verification can make parsing errors when a United States highway address contains the descriptor "BOX." Address Verification omits the street information when it writes the address to delivery address lines.