Experian Data Quality for Salesforce

User Guide
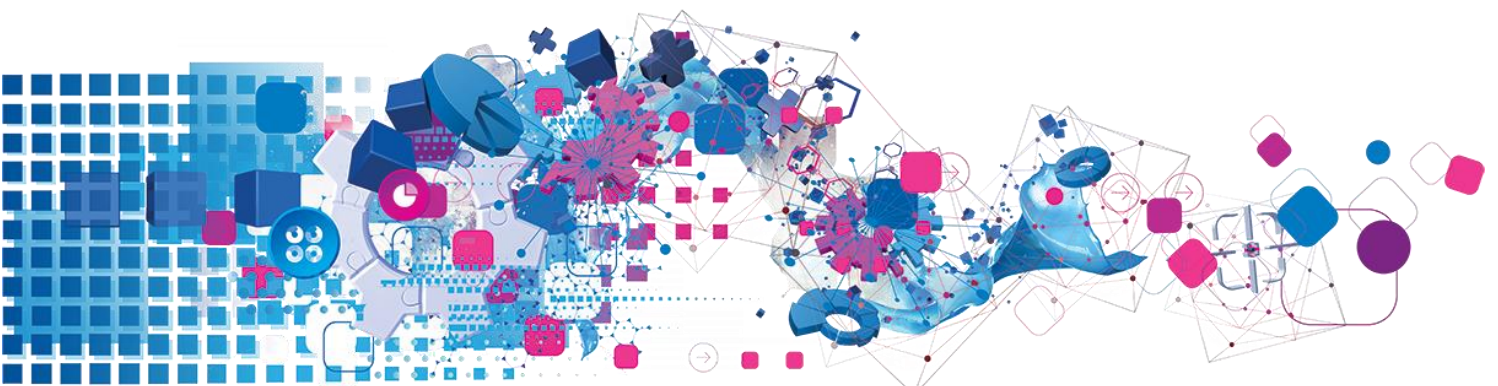
Contacts and Support

For resolutions to common issues, answers to frequently asked questions and hints and tips for using our products: https://www.edq.com/support

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AutoMapper

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CONTENTS

Introduction

Your organisation's data is a strategic asset and competitive differentiator, however actionable insights can only be achieved through proper data quality. Connect more effectively with your customers through accurate and clean data.

Global Data Quality for Salesforce enables users to verify addresses, email and phone numbers in real-time at the point of entry, instantly dectecting and removing incorrect or incomplete contact data. Batch mode address cleansing will correct any inacuracies that already exist in your database, ideal for cleaning list imports or running regular database audits.

This guide provides information on the different address, email and phone verification modes and methods available for address searching, along with insight into how Batch mode is used and searches on your addresses.

Address Validation

There are four real-time address validation modes available to meet the needs of your business workflows. Address validation can be used when creating a new record or when editing an existing record.

The required address validation mode and additional address settings can be set within the EDQ Administration tab. All address validation modes can be used when creating New records or Editing existing records.

Rapid Search Address Verification Mode

Rapid Search address verification allows you to validate an address quickly and accurately, reducing keystrokes and time. Address validation is performed within the Rapid Search pop which can be invoked either by the "Validate" button or by clicking/tabbing into an address field:

- **Invoke Rapid Search *with* a button** – the positioning of the "Validate" button and associated address validation workflow varies depending on the implementation mode you are using.
    - *Rapid Search with a button: Page Override Implementation Method* – If you are using the page override implementation method, the "Validate" button is positioned next to the address fields and will be visible within the New and Edit pages, when the user clicks the "Validate" button, the Rapid Search pop up is invoked.
    - *Rapid Search with a button: Non-Page Override Implementation Method* – If you are using the non-page override implementation method, the address verification button is added to the Button section of the page layout, the button will be available in Detail view only.

    Using the invoke Rapid Search with a button option, if the default search engine is set to Single Line, users can pass through address information from the Salesforce page to the EDQ address verification service as a starting point for address verification.

- **Invoke Rapid Search *without* a button** – The Rapid Search pop up will be invoked when the user clicks or tabs into the address field. This option is only available if you choose to override your "New" and/or "Edit" buttons (page override implementation method).

  The method in which the Rapid Search pop up is invoked is set within the EDQ Administration area.

Rapid Search pop-up window

There are four available search engines which can be used within Rapid Search mode:

- **Typedown**;
- **Single Line**;
- **Verification**;
- **Intuitive** (AUS, AUE, NZL, NZG, FRI data sets only);

Typedown, Single Line and Intuitive searching are address capture methods, designed to enable you to capture an address as quickly as possible. You enter a minimal amount of address information into the Address Search popup window, and then drill down through a series of picklists to locate the required address. The final address is then formatted and returned to Salesforce.

Verification searching is designed to verify an address after it has been typed in full. The level of confidence in the address found is returned.

To see or change the search engine used for Rapid Search address verification click the Settings Cog icon within the Rapid Search pop up. The default search engine used is set within the EDQ Administration tab
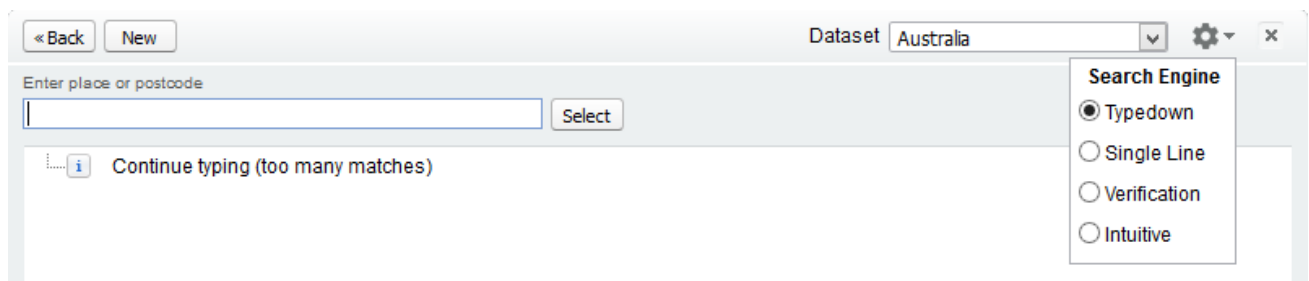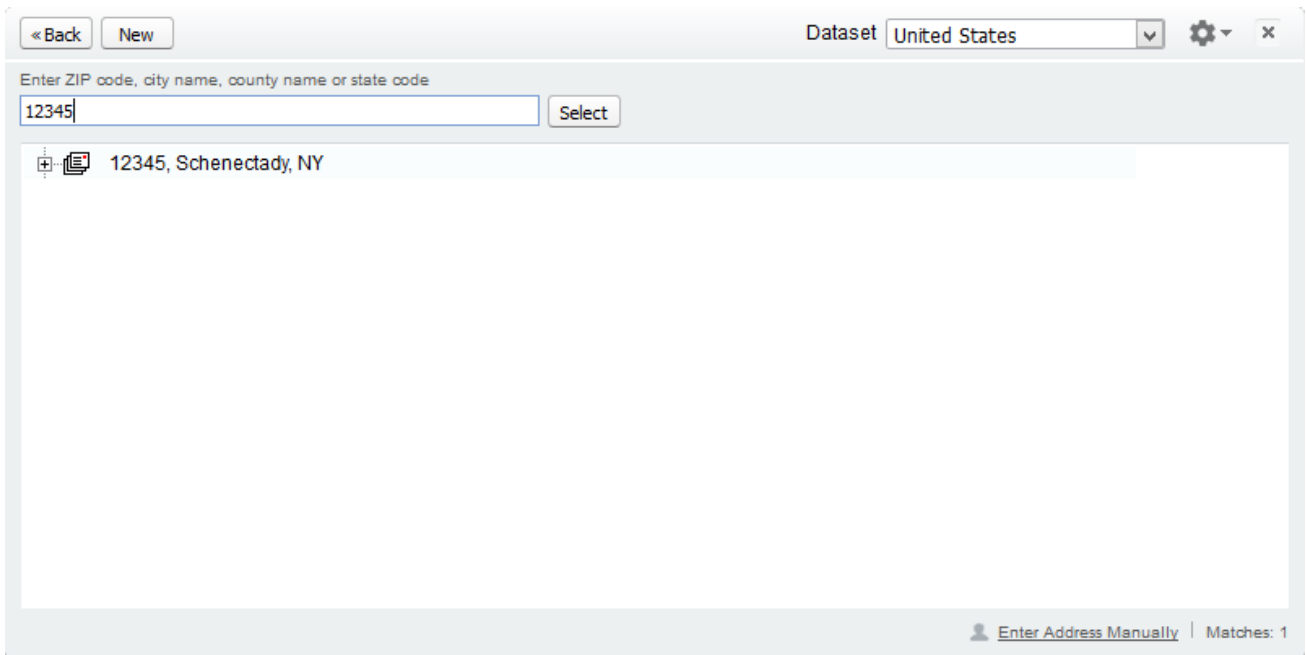

Validate Addresses using Typedown Search Engine

Typedown searching starts with the most general address element and, once that has been found, moves on to more specific parts of the address. Typedown searching updates the matches returned after each character is entered into the Search field, so as you enter more characters, the number of matches returned becomes smaller and the matches become more exact. Typedown is the more useful address capture option when you are certain of the address information. For example, if you take address details over the phone, you can enter the caller's postcode and then, if required, search for the correct street and building number.

Users can use any mixture of upper and lower case characters, as the Typedown engine does not differentiate between upper and lower case text. Also, users do not need to include spaces, as Typedown searching ignores them.

Typedown searching will be unsuccessful if you misspell any address element.

Validate Addresses using Single Line Search Engine

Single Line searching requires a user to enter two or three address elements, each separated by a comma, in the order that they would appear on an envelope (for example, the street name followed by the town). Unlike in Typedown searching, the matches returned are not updated after each character is entered into the Search field in Single Line searching.

Single Line can use a variety of techniques to return the correct address from incomplete or misspelled information.

Users can use any mixture of upper and lower case characters, as the Single Line engine does not differentiate between upper and lower case text. Single Line searching is also useful if the address information contains one or more spelling mistakes. Even with such mistakes there is still a high likelihood that the solution will retrieve the required address.
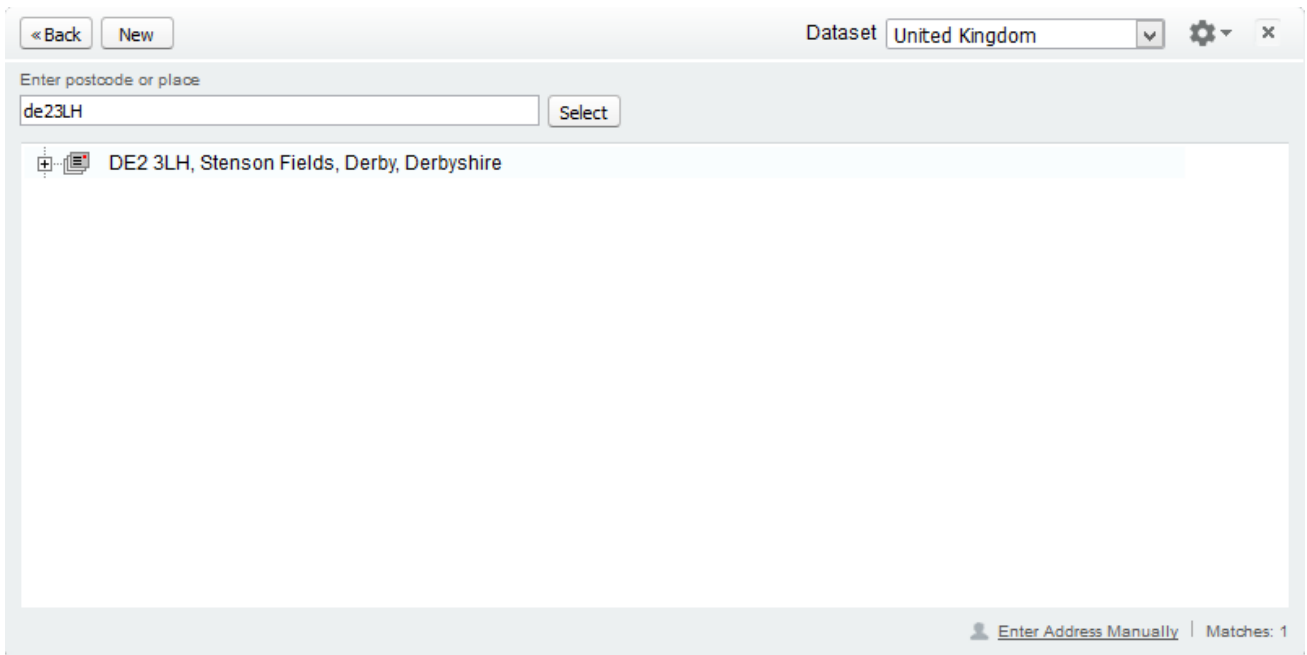
Wildcard: If you are carrying out a Single Line search, you can use wildcards to replace one or more missing letters in your address information.

There are two wildcards available:

- **Question mark wildcard** (?) –This replaces a single character in an address or postcode.
- **Asterisk wildcard** (*) – This replaces any number of characters at the end of an address element.

You can use a combination of wildcards in a single search line. Refer to the Data Guide applicable to your Dataset(s) for searching tips which include wildcards.

Validate Addresses using Verification Search Engine

Verification searching has been designed to verify an address after it has been typed in full. If an accurate match cannot be found, you are prompted to correct the address that you entered, to accept the best match, or to select an address from a picklist of possible matches. An address will be matched to one of the following verification levels, indicating the degree of confidence in the match:

- *Verified* – The address searched upon was matched to a single deliverable address in the data. The verified result may be slightly different from the address entered and searched upon, as any formatting and spelling errors will have been corrected, and any missing elements will have been added.
- *Interaction Required* – The address searched upon was matched to a single deliverable address in the data, although the engine is less confident about the match than for the "Verified" level above, and therefore user interaction is recommended to confirm that it is the correct address. No picklists are displayed for selection.
- *Premises Partial* – The address searched upon was not matched to a complete deliverable result in the data, and instead has been matched to a partially complete address. A picklist may be returned containing a range of partially matched premises.

- *Street Partial* – The address searched upon was not matched to a complete deliverable result in the data, and instead has been matched to a partially complete address. A picklist may be returned containing a range of partially matched streets.
- *Multiple* – The address searched upon was not matched to a single deliverable result in the data, and instead has matched equally to more than one result. A picklist containing matches may be returned.
- *None* – The address searched upon could not be matched to any deliverable results in the data.


Validate Addresses using Intuitive Search Engine

The **Intuitive Search** engine combines the simplicity of Single Line searching with the convenience of immediate picklists and excellent fuzzy matching.

Address searching is performed per key pressed and the results displayed in real time. In addition, the Intuitive Search engine is designed to handle inconsistent punctuation, spelling and formatting. Commas are not necessary but will be handled if they are added.

The Intuitive Search engine is currently only available for the **AUS, AUE, FRI, NZL** and **NZG** datasets.
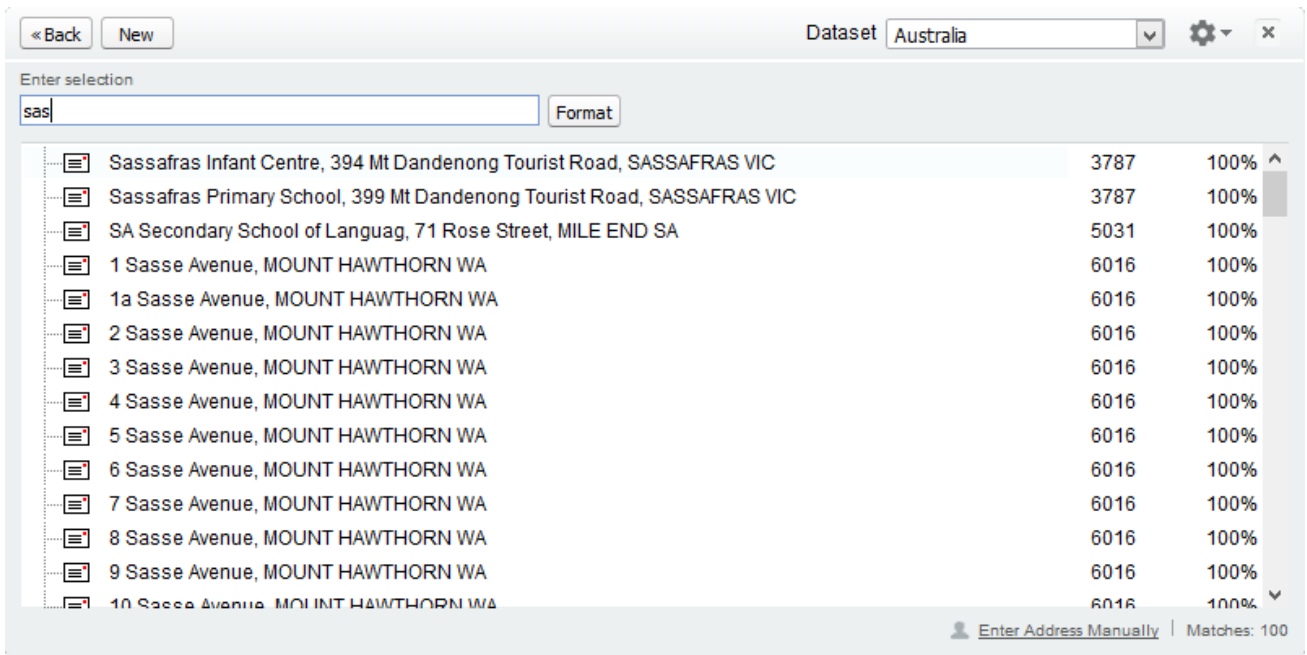
Please refer to the respective data guides available on the Experian Data Quality support site for further detail on the types of searches available, as well as step-by-step instructions and search examples for each search engine.

Dataset

A dataset is collection of proprietary data files, containing address, business and / or names information.

Within the Rapid Search pop-up you can select the required dataset from the Dataset dropdown list located in the upper right corner of the pop-up.

The default dataset is set within the EDQ Administration tab.
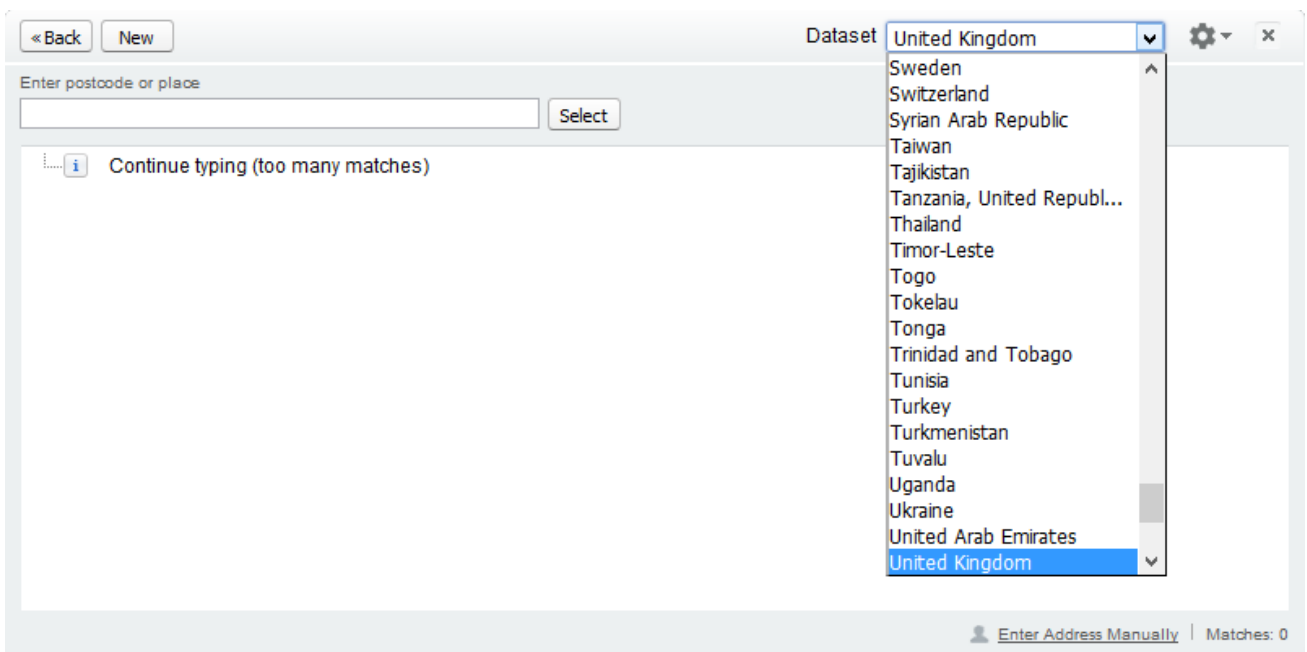
Interactive Address Verification Mode

Interactive address verification is invoked on Save, when a new record is created or the address information of an existing record is edited. On Save, the user is directed to the EDQ Interactive Verification screen to verify the address.

The Interactive address verification mode is ideally used to verify an address after it has been typed in full therefore it is advised that as much address information is entered to optimize results. If an accurate match cannot be found, you are prompted to correct the address that you entered, to accept the best match, or to select an address from a picklist of possible matches.

There are six verification levels that can be returned within the Interactive verification mode. The verification levels and associated Verification screens are described below. In some scenarios users will be required to submit additional information to proceed with the verification process.

In cases where users want to include non-postal information such as loading doc, mail stop or vanity name they can use the *"Edit"* link, however editing the address will change the validation status to User Preferred.

Users can select to use the address as entered by selecting the *"Use address as entered"* check box within the Verification screen however the validation status will return as User Preferred and the address may be undeliverable.

Verification Levels

Verified

The address searched upon was matched to a single deliverable address. The verified result may be slightly different from the address entered and searched upon, as any formatting and spelling errors will have been corrected, and any missing elements will have been added.

Your address is verified.
To proceed, please check and choose from one of the options below.

● Use suggested address	○ Use address as entered *
	Verified by Experian Data Quality.
Verified address: Edit	**You entered:** Edit
Billing Street: 12 Dakota Dr	**Billing Street:** 12 Dakota Dr
Billing City: Zebulon	**Billing City:** Zebulon
Billing State/Province: NC	**Billing State/Province:** NC
Billing Zip/Postal Code: 27597-6670	**Billing Zip/Postal Code:** 27597
Billing Country: US	**Billing Country:** United States

Continue

Interaction Required

The address searched upon was matched to a single deliverable address, although the engine is less confident about the match than for the "Verified" level above, and therefore user interaction is recommended to confirm that it is the correct address. No picklists are displayed for selection.

We think your address may be incorrect or incomplete.
To proceed, please check and choose from one of the options below.

● Use suggested address	○ Use address as entered *
	* Your address may be undeliverable.
We recommend the validated address: Edit	**You entered:** Edit
Billing Street: 29 Avondale Road,Palmers Green	**Billing Street:** 29 Road, Palmenrs Green
Billing City: London	**Billing City:** London
Billing State/Province:	**Billing State/Province:**
Billing Zip/Postal Code: N13 4DX	**Billing Zip/Postal Code:** n134dx
Billing Country: UNITED KINGDOM	**Billing Country:** United Kingdom

Continue

Street Partial

The search did not define a property number for the street location therefore you are prompted to enter house/building number and click on the "*Submit*" button to revalidate the address. Alternatively, users can click "*Display all potential matches*" to display a list of potential matches and select from the list.

Sorry, we don't recognize your house or building number.
To proceed, please check and choose from one of the options below.

● **Confirm number**   ○ **Use address as entered ***
                                  * Your address may be undeliverable.

Confirm your House/Building number:

[   ] [Submit]

Display all potential matches

You entered: Edit

Billing Street: Rosemont Road

Billing City: North Jackson

Billing State/Province: OH

Billing Zip/Postal Code: 44451-9631

Billing Country: united States

[Continue]

Premises Partial

There is more than one apartment at the address, the user is promoted to provide apartment/suite/unit number and click on the "*Submit*" button to revalidate the address. Alternatively, users can click "*Display all potential matches*" to display a list of potential matches and select from the list.

Sorry, we think apartment/suite/unit is missing or wrong.
To proceed, please check and choose from one of the options below.

● **Confirm number**   ○ **Use address as entered ***
                                  * Your address may be undeliverable.

Confirm your apartment/suite/unit number:

[   ] [Submit]

Display all potential matches

You entered: Edit

Mailing Street: 1825 South Main Street

Mailing City: Walnut Creek

Mailing State/Province: CA

Mailing Zip/Postal Code: 94595

Mailing Country: United States

[Continue]

Multiple Match

The address searched upon was not matched to a single deliverable result, and instead has matched equally to more than one result. A picklist of suggested matches will be displayed, users will be prompted to select one of the matches to proceed. The selected address will undergo subsequent validation and you will be shown the Address Verified Screen.

Unmatched

You will see this screen when the address searched upon could not be matched to any deliverable result.

Rapid Search + Interactive Address Verification

This verification mode uses Rapid Search for new record creation and Interactive address verification when a record is edited.

Passive Address Verification

Passive address verification is considered a high level/first pass verification technique as there is no user interaction intended, the address either returns as verified or unverified based on the data entered. On Save, address verification takes place silently with no user interaction. Passive address verification is used to power *Web-to-Object* functionality

Global Intuitive Verification

The Global Intuitive Address Validation allows you to capture validated address in real time through a predictive engine. The address validation is performed within the first mapped field for street.

Global Intuitive is the more useful address capture option when you are certain of the address information.

Global Intuitive + Interactive Verification

This verification mode uses Global Intuitive for new record creation and Interactive address verification when a record is edited.

Global Intuitive + Rapid Search Verification

This verification mode uses Global Intuitive for new record creation and Rapid Search address verification when a record is edited.

EDQ Validation Status and Validation Timestamp

Validating and capturing contact data at the point of entry is an essential and necessary step towards improved contact data quality and truly actionable insights, equally important is the ability to make informed business decisions based on actionable data.

The address, email and phone Validation Status and Validation Timestamp fields are automatically populated during the validation process and allow users and Salesforce administrators to track all records that have been reviewed and validated.

The ability to track the validity of contact data within your Salesforce org over time, can facilitate quickly gauging ROI, running regular data reviews, understanding user training requirements and improve user adoption.

Billing Address
29 Avondale Road,Palmers Green,
London, N13 4DX UNITED KINGDOM

Billing Address Validation Status
Verified by Experian

Billing Address Validation Timestamp
23/05/2017 16:09

Utilizing Validation Status and Timestamp is optional for Rapid Search Address validation and Inline Email/Phone validation modes. Mapping these fields is completed in the EDQ administration tab.

Below is a list of validation statuses and their respective meaning across address, email and phone validation.

- Verified by Experian / Verified by Experian QAS

Address Validation: The address has been verified by EDQ. This means that the address matches a valid deliverable address according to the postal authority for the respective country (for example Royal Mail, USPS, Canada Post or Australia Post).

Email Validation: For email validation the Certainty value returned by EDQ determines if the email should be listed as Verified by Experian QAS. By default email addresses which return a validation certainty level of "Verified" or "Unknown" are treated as verified, as such these emails will return a Verified by Experian QAS validation status. See the Installation & Configuration Guide to set which certainties should be considered Verified by Experian QAS.

Phone Validation: For phone validation the Certainty value returned by EDQ determines if the phone number should be listed as Verified by Experian QAS. By default phone numbers which return a validation certainty level of "Verified", "Unknown", "Absent" and "Teleservice not provisioned" are treated as verified, as such these phone numbers will return a Verified by Experian QAS validation status. See the Installation & Configuration Guide to set which certainties should be considered Verified by Experian QAS.

- *User Preferred* - the address/email/phone has been modified by the user. Whether the user modified an address we verified or accepted their original address, it may not be deliverable.
- *Could not be verified* - the address/email/phone could not be verified. This usually means there are too many errors in the address or address elements are missing.
- *Manually entered* - the address was entered manually from within the Rapid Search pop up without being validated.

Email/Phone Validation

There are three real time email/phone validation modes available. The required email/phone validation mode and additional settings can be set within the EDQ Administration tab.

Inline Email/Phone Verification

Note: Inline Email/Phone verification is only available if you choose to override your page's "New" and/or "Edit" buttons (page override implementation method).

Inline email/phone verification allows you to validate email addresses and phone numbers inline, directly within the Salesforce page. When a new email/phone number is added or an existing email/phone number is edited verification will occur. Verification is triggered once the user loses focus from the email/phone field by either clicking or tabbing out of the field.

Upon completion of the verification process, the validation status will be pasted back to the form and an inline validation message will appear on screen for five seconds (the duration of the validation message is configurable within the EDQ administration area). The validation message and additional email/phone related data can be stored within Salesforce fields to further enhance and improve decision making and email effectiveness.

Inline Email Verification

Enter the email in the appropriate form field. Change the focus to invoke the inline verification process. Your email will be validated.

Inline Phone Verification

Enter the phone number in the appropriate field. Change the focus to invoke the inline verification process. Your phone number will be validated.

Interactive Email/Phone Verification

Interactive email/phone verification is invoked on Save, when a new record is created or the email/phone number is edited. On Save, the user is directed to the EDQ Interactive Verification screen to verify the email / phone number.

Interactive Email/Phone Verification Screens

The interactive verification screen displays the verified email address/phone number on the left-hand side and the original on the right-hand side. Users can edit the email address/phone number by clicking the "*Edit*" link however the validation status will be changed to User Preferred.

Note: The Interactive Verification screen is shown when the Email/Phone **Auto Accept** option for your Object, in the EDQ Administration is set to **Disabled**. When enabled you will not see this screen if your address/email/phone was successfully verified.

Passive Email/Phone Verification

Passive email/phone verification is considered a high level / first pass verification technique as there is no user interaction intended, the email address/phone number either returns as verified or unverified based on the data entered. There are two ways to invoke passive email/phone verification.

- Upon Save;
- Using the EDQ custom button in your detail page (specific to Non-page override method);

Passive email/phone verification occurs silently with no user interaction. Refer to the *"Installation and Configuration Guide"* for more information on using a custom button to invoke Passive email/phone verification.

Email/Phone Validation Certainties

Validation Certainties indicate the confidence and status of the email address/phone number. Within the EDQ administration area (email/phone advanced settings) you can set which certainties should be considered verified (returns a validation status of *"Verified by Experian QAS"*) and which should be considered un-verified (returns a validation status of *"Could not be Verified"*).

Verified and Unknown certainties are the recommended and default values which correspond to Verified (validation status of *"Verified by Experian QAS"*) for **Email** validation.

All certainties apart from Unverified are the recommended and default values which correspond to validation status of *"Verified by Experian QAS"* for **Phone** validation.

The validation certainties and additional email/phone related data can be stored within Salesforce fields to further enhance and improve decision making and email effectiveness. Listed below is a summary of the additional data that can be returned and stored within Salesforce fields.

Additional data can be mapped to Salesforce fields from the EDQ administration area (Email/Phone Touchpoint Settings).

Email Certainties

Congratulations! You have validated your email addresses, helping to reduce bounce rates, improve sender reputation, increase deliverability, and grow email marketing results. Now that you have the results, how do you interpret them?

Your results contain six certainties that have various meanings around the deliverability of an email address. Here is what those certainties mean.

- *Verified:* Mailbox exists, is reachable and not known to be illegitimate or disposable. The address appears to be deliverable and not an illegitimate or disposable account
- *Undeliverable:* The address is not deliverable – it doesn't exist, it's suspended, or the mailbox is full.
- *Unreachable:* 'Invalid domain'; either no DNS records, invalid ones, or there isn't a mail server listing.
- *Illegitimate:* Known trap, monitoring domain, black hole, or other potentially harmful address.

- *Disposable:* Belongs to a disposable email address provider.
- *Unknown:* We were unable to conclusively verify or invalidate this email address. The address doesn't appear to be nefarious (as far as we know), but we can't determine if it is deliverable or not.

What should you do with the results?

Good news! You can mail to your verified email addresses right away. Those that were marked as undeliverable, unreachable, illegitimate, and disposable, should be removed from your list.

For results marked as unknown, we recommend that you add them to your list in small batches over time.

They may be undeliverable, but we are not sure. By adding them slowly, you will lower your risk of a high bounce rate, which could damage your sender reputation.

Additional Email Data

Validation Message – Descriptive message pertaining to the deliverability of the email address e.g. "*Mailbox exists, is reachable and not known to be illegitimate or disposable*".

Corrections – Potential suggested email address returned by the service, this should not be considered the corrected email however can be considered a suggested email to be utilized and should be submitted for email verification.

Email – the submitted email address e.g. anemailexample@gmail.com.

Message – Validation lookup message, useful for error identification purposes/troubleshooting, e.g. "Ok. Provider Failure".

Phone Certainties

- *Verified*: Number format validated and number verified.
- *Unverified*: Invalid number format supplied.
- *Unknown*: Number has been blocked from lookups.
- *Absent*: Number format validated and number verified via network lookup but not currently available (i.e. phone off, out of range).
- *Teleservice not provisioned:* Valid number but not active on network.

Additional Phone Data

You may optionally store additional data pertaining to the phone verification process which can be used to further enhance and improve decision making.

- **Validation Message -** Descriptive message pertaining to the deliverability of the phone number. e.g. "*Number format validated and number verified*".
- **CountryName -** Name of the country relating to the phone number, e.g. "United Kingdom"
- **CountryCode -** Home country relating to the phone number, e.g. "44".
- **IsRoaming -** Indicates whether the number is currently outside of the country where it is registered.

- **MCCMNC -** Mobile Country Code (MCC) and Mobile Network Code (MNC).
- **Number -** Phone number supplied.
- **OperatorName -** Company name of the MSISDN Operator, e.g. "T-Mobile".
- **Phone Type -** Type of the submitted phone number, e.g. "LandLine", "Mobile".
- **PortedCountryCode -** Home country code from which the mobile number is ported.
- **PortedCountryName -** Name of the country from which the mobile number is ported.
- **PortedOperatorName -** Operator from which the mobile number is ported.
- **Result Code -** Status code of the submitted phone (e.g. 3).
- **RoamingCountryCode -** The prefix of the country the number is currently located in.
- **RoamingNetworkName -** The network name of the Mobile Switching Centre that the number is currently connected to.
- **RoamingNetworkPrefix -** The prefix of the Mobile Switching Centre the number is currently connected to.
- **ValidatedPhoneNumber -** Verified number in international format without the leading "+", e.g. "447123456789".

Batch Address Cleansing

The need to clean and maintain contact data should be recognized by all organizations as a fundamental part of Contact Data Management (CDM). Treating data in this way helps to retain customers, enhance database analysis and improve business efficiency. Although capturing contact information accurately first time is a step in the right direction, it must be followed with regular cleaning as contact data changes.

Experian Data Quality Batch Address Cleansing solution handles address data masse rather than record-by-record and helps maintain the quality and durability of your contact data over time. It matches address information against authoritative data sources to clean and format contact records providing you with control and security over your data. A typical Batch job will check any number of records and present the before and after results, the user is able to accept or reject the changes to the Salesforce database.

The Experian Data Quality Batch Address Cleansing solution allows customers to create scheduled batch jobs to be run automatically as required and manual batch jobs which can be run manually as required.

The following steps outline the process of creating and submitting a batch job.

Step	Details
Administration	Page 20
Manage Batch Jobs	Page 22
Batch Job Results	Page 28

Administration

Before you can create and run a batch job you have to create batch job touchpoints for the objects for which you would like to batch clean addresses. Touchpoints allow users to setup a high-level point of contact/reference between Salesforce and the EDQ batch service. Users set which Object is associated with the touchpoint and define input mappings (the address fields which contain the data to be cleaned) and output mappings (where the solution returns cleaned address data) for the batch process.

> **Note:** Touchpoints creation is needed only once. Once set, the touchpoints can be utilized within any batch job created.

To create batch job touchpoints navigate to the **EDQ Batch** section within the **EDQ Administration** tab and select the **Administration** link.
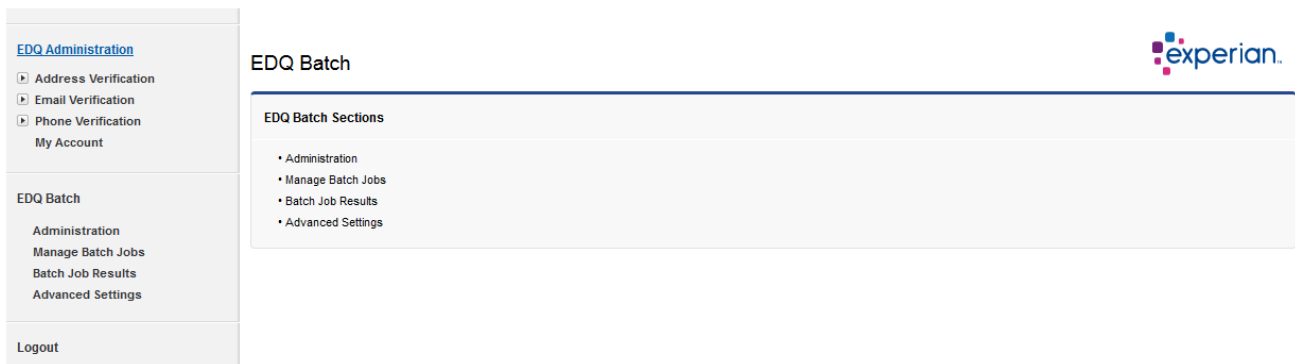
Click on the **New** button to create a new Touchpoint. The **Touchpoint Settings** page will open. The page is divided into several sections: Touchpoint Settings, Input Mapping, System Fields Output Mapping and Output Mapping, each described below.

Touchpoint Settings
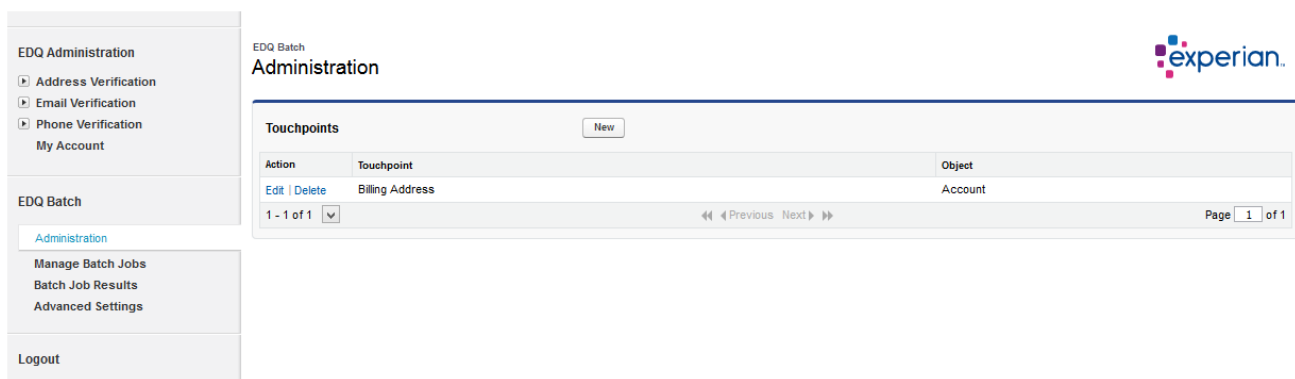
- **Object Name** – Select the Object from which you would like to clean addresses.
- **Touchpoint Name** – Enter a unique name for your touchpoint.

Input Mapping

Input Mapping allows you to describe which fields in Salesforce contain the address data to be verified by the batch service. Correctly mapping the fields of your Salesforce form to a set of standard address fields enables the solution to find the best match against your existing address data.

Use the Address Field picklist on the left side to select an address field and map it to the corresponding Object field from the pick list on the right side. You can create a new mapping using the **Add Another Mapping** link if needed.

System Fields Output Mapping

- **Validation Status** - The Validation Status filed is a Text field which stores the current validation status.
- **Validation Timestamp** - The Validation Timestamp field is a Date/Time field which stores the timestamp of the last validation attempt by EDQ.

You may optionally map the object fields which will hold the Validation Status and the Validation Timestamp data associated to your address after committing your batch results.

Output Mapping

Output Mappings control the way the solution returns the accepted address into your Salesforce fields. You need to configure an output mapping for each dataset for which you would like to cleanse addresses.

To create an Output Mapping for a dataset, follow the steps below:

1. Click the **New** button to open the Per Dataset Output Mapping page.
2. Please fill in the following fields in the Per Dataset Output Mapping page:

Dataset – Select the dataset for which you would like to create an output mapping.

Note: The supported datasets for Batch mode address cleansing are AUS (Australia), AUG Australia G-NAF), CAN (Canada), FRX (France), IRL (Ireland), NZL (New Zealand), NZG (New Zealand with Geocodes), SGF (Singapore), GBR (United Kingdom) and USA (United States).

Layout - Choose your preferred Layout from the dropdown. A layout describes the format of an address, arranged with the Address Elements in an order specific to the convention of the country or user requirements. After you select a layout from the drop down the structure of the Layout will be listed on the right.

You may also build custom layouts via the **EDQ SaaS Self-Service Portal**: https://portal.experianmarketingservices.com. To use a custom layout, select **Custom** from the Layout drop down and enter the exact name of the custom layout created within the EDQ SaaS Self-Service Portal.

3. Use the pick list on the left to select the Object field and the pick list next to it to select the layout line which should be mapped to it. If you are using a custom layout you need to manually enter the Address Field values by copying and pasting the indexes of your layout from the Clean On Demand portal.

4. Click **Save & Close**.

Note: Repeat the steps for creating a Touchpoint for each Object address configuration you would like to cleanse using batch mode functionality**.**

Manage Batch Jobs

Before you can run a batch job you need to create it. To create a new batch job follow the steps below.

Create New Batch Job

1. Go to the EDQ Administration area and select the **Manage Batch Jobs** link under **EDQ Batch.** The manage batch job page will open as shown on the below screenshot.

The page displays all configured batch job templates presented in a table summarizing their state. For a description of the table columns go to **Manage Batch Jobs** table section on .

2. Click on the **New** button on the top of the View Batch Jobs section. Fill in the information as described below.

> **Note**: Your batch job will be retained for 90 days upon its creation. After that period, it will be permanently deleted.

Batch Settings

- **Job Name** - Enter a unique name for your batch job template.
- **Object -** Select the Object from which you would like to cleanse addresses. Only the Object(s) which you have created Touchpoint(s) for (see Administration section above) will appear within the Object picklist.
- **Touchpoint** – Select the address mapping configuration for your Object. The picklist will contain the available Touchpoints for the respective Object (see Administration section).

> **Note**: Only one type of address (e.g. Billing Address or Shipping Address) can be submitted for batch cleansing within a single batch job. The address mapping configuration setting is used to select address type to be cleaned.

- **Dataset** – For the selected Touchpoint select the dataset which will be used to clean against. The selectable datasets will be based on the number of configured Per Dataset Output Mappings created (see Administration section).
- **Type** - There are two types of batch jobs:
  - *Manual* – Set this option when the creation and the submission of the batch job is manual, pre-created batch templates can be run at any time however this is a manual process which requires the user to click Run Now from the Manage Batch Jobs screen.
  - *Scheduled* – A scheduled batch job can be run automatically on a regular basis based on preset date and time conditions. Use the Schedule Settings section to set the preferred date and time of the job.

Schedule Settings

Frequency	○ Daily ◉ Weekly ○ Monthly	Recurs Every Week on	☐ Sunday ☑ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday
Start	28/04/2015	[28/04/2015]	
End	28/05/2015	[28/04/2015]	
Preferred Start Time	-- None -- ▼ [i]		

Next

Choose the preferred batch job type and click **Next** to proceed.

Filter Records to Clean

After clicking the **Next** button the Filter Records to Clean step will be loaded which allows you to hone in on which records you want to submit as part of the batch job.

1. Use the **Country Filter** section to use the Country value in Salesforce to determine which records will be submitted, The Country Filter section consists of several filter fields listed below.

Step 2. Filter Records to Clean   **Step 2 of 2**

Country Filter ▲

We strongly recommend using the country filter to ensure you only submit AUS addresses. Other addresses that are submitted cannot be cleaned and may cause errors in processing.

Country	AU,AUSTRALIA,OZ
Include Addresses With an Empty Country	☐
Do Not Filter by Country	☐

- **Country** – The solution will include records which contain the Country filter aliases listed, within the Salesforce Country field. By default, the solution will utilize the Country aliases to filter records, we recommend using the Country filter to ensure only addresses belonging to the Country selected in the Create New Batch Job step will be submitted for batch cleansing.
- **Include Address With an Empty Country** – As well as utilizing the Country filter described above, the solution will also include addresses which do not have a Country value.

- **Do Not Filter by Country** – The solution will ignore Country filters all together.

In the **Custom Filters** section, you can use additional fields to further filter your batch job. For each filter, set the Field, Operator and Value.

- **Add Filter Logic** – Use this link to apply Boolean conditions to your Custom Filters to further hone in on the records you would like to submit for batch processing.

    For example: (1 OR 2) AND (3 OR 4).

2. Once you have built your filter logic, click on the **Apply Filter** button to preview the records that match your filters. A summary of the total number of records which will be submitted for batch processing based on your applied filter will be displayed.

    - **Edit Column Layout** – If you would like to add additional fields to the Filter Records Preview Pane select the Edit Column Layout link. This is particularly important if you would like to export

additional data in CSV format (e.g. email address, account phone number) during the Review and Commit stage.

Note: Add additional Salesforce fields such as Email Address, Phone Number and Account Owner using the Edit Column Layout link to ensure the data is available for export during the Review and Commit stage once Batch processing has been completed. If you do not add the required fields during this stage, they cannot be accessed later on in the process.

3. Once you have configured your filters and are ready to proceed you have two options:

    o   *Save* – this will save the batch job template however the job will **not be executed**, in this case you will be directed to the Manage Batch Jobs page, where you can modify the template (Manage), delete the template (Delete) and run the batch job (Run now). The batch job can be run at any time and as many times as required.

    o   *Save and Run* – this will **save and execute** the batch job, in this case you will be redirected to the Batch Job Results page where you can monitor progress.

When a batch job is run, you do not have to remain within the EDQ Administration area, you can navigate away or logout of Salesforce and return to view status/progress at any time.

Note: If you are cleaning leads, converted leads will be excluded as they cannot be updated from the Salesforce functionality.

Manage Batch Jobs Table

Below is a description of each of the batch job table columns:

- *Action* – Allows you to edit the batch job (*"Manage"*), delete the batch job (*"Delete"*) or run the batch job (*"Run Now"*)
- *Job Name* –The name of the batch job.
- *Submitted By* – The name of the user who created the batch job.
- *Submitted* – The date and time at which the batch job was originally submitted
- *Next Scheduled Run* – The next date and time at which the batch job will run. This column will only be populated for Scheduled batch jobs and is displayed in your Salesforce time zone.
- *Type* – The type of Batch job template ("*Manual*" or "*Scheduled*").

Batch Job Results

When you run a batch job you may monitor the progress and review the results in the Batch Job Results section. Scheduled batch jobs will also appear in this section as they are periodically completed.

Each batch job run consists of two stages – *Processing* and *Review* **and** *Commit*.

Processing

During this stage, the addresses which match the filter criteria configured in the **Filter Records to Clean** step are exported from Salesforce and sent to the EDQ batch address service for processing.

While the Processing step is in progress you can monitor the progress in the Batch Job Results table if you wish, you are not required to remain within the *EDQ Administration* area or remain logged into Salesforce, you can navigate away or logout of Salesforce and return to view status/progress at any time.

Once the **Processing** stage has completed the next stage is **Review and Commit,** you will see a **Review and Commit** link in the *Action* column.

Review and Commit

After clicking on the **Review and Commit** link in the *Action* column you will be directed to the **Review and Accept Records** page where you can view the results of your batch job and accept or reject the cleansed records.

Accept Records

Users can accept or reject results by either using the *Accept Status* checkbox within the Batch Jobs results table or by clicking the **View** link within the *Action* column to view a side by side comparison of the Input (Current) Address against the Cleaned Address returned from the EDQ service. Accepting or Rejecting records within the table allows you to action all records within a particular match profile filter (please note this could accept / reject records across multiple pages depending on the Match Profile Filter used)

Experian Data Quality advises using the View link to review Good Premise Partial and Tentative Match profiles as these generally require users to review and make a decision on accept status. See Match Profile Filter definitions below for more details

1. Accept a record by checking (✔) the checkbox in the *Accept Status* column or reject the record by setting the checkbox to an unchecked state (X).

2. If you would like to view additional address information for a particular record click the **View** link within the *Action* column to view a side by side comparison of the Input (Current) Address against the Cleaned Address returned from the EDQ service. You can accept or reject the EDQ matched address by using the Accept or Reject buttons.

Preview Address Information   ✕

Match Type   Tentative Match
Date Verified   12/6/2015 1:19:20 PM

Input (Current) Address Fields		Cleaned Address Fieds	
Billing Street	99 Clinton St1	Billing Street	99 Clinton St # ST1
Billing City	Schenectady	Billing City	Schenectady
Billing State	New York	Billing State	NY
Billing Postal Code	12305-2083	Billing Postal Code	12305-2083
Billing Country	United States of America	Billing Country	United States of America

Accept   Reject

Only records which have been accepted will be updated in Salesforce. The actual action of updating the Salesforce record varies depending on the Match Profile of the respective record, see below match profile definitions for further detail on the *Committed Action* in Salesforce if a record is Accepted. If a record is Rejected no update will be made to Salesforce.

Match Profile Filter - You can filter the Batch Jobs results table by Match Profile(s) to ensure only required match profile results are displayed. You can then individually accept records using **View** or use the checkbox in the **Accept Status** column to accept all records matching your filter.

Note: Clicking on the **Accept Status** heading will accept all records across multiple pages. We recommend accepting *Verified* and *Good Match* profiles using this method as these addresses are considered deliverable. *Good Premise Partial* and *Tentative Match* generally require user review and should be reviewed and then actioned accordingly based on the preference of the user. *Multiple Match, Poor Match, Partial Match, Foreign Address, Unmatched* and *Blank* match profiles can also be actioned using the **Accept Status** method, these match profiles are very likely to be undeliverable / unverified addresses and require attention therefore many users prefer to review these and take action accordingly.

Match Profiles

- ***Verified Correct*** – EDQ verified the input address as a good-quality match to a complete address. No corrections or formatting changes were necessary.
    - o Committed Action in Salesforce if Accepted:
        - ▪ Address updated with Cleaned Address
        - ▪ Validation Status updated to Verified by Experian QAS
        - ▪ Validation Timestamp updated with updated date / time

- ***Good Match*** – EDQ verified the input address as a good-quality match to a complete address, although minor corrections or formatting changes may have been applied.
    - o Committed Action in Salesforce if Accepted:
        - ▪ Address updated with Cleaned Address
        - ▪ Validation Status updated to Verified by Experian QAS
        - ▪ Validation Timestamp updated with updated date / time

- *Good Premise Partial* - EDQ was not able to find a full match to a correct address, but found a good match to premise level by excluding organization or sub-premise details.
  - o Committed Action in Salesforce if Accepted:
    - Address updated with Cleaned Address
    - Validation Status updated to User Accepted
    - Validation Timestamp updated with updated date / time

- *Tentative Match* – EDQ found a match to a complete address, but the overall differences between the input and Cleaned addresses are significant enough to reduce EDQ's confidence in the match.
  - o Committed Action in Salesforce if Accepted:
    - Address updated with Cleaned Address
    - Validation Status updated to User Accepted
    - Validation Timestamp updated with updated date / time

- *Multiple Matches* – EDQ found more than one correct address which matched the input address. This generally means that no single address could be matched with high confidence.
  - o Committed Action in Salesforce if Accepted:
    - Address is not updated
    - Validation Status is updated to Could not be Verified
    - Validation Timestamp is updated with updated date / time

- *Poor Match* – EDQ found a match to an address, but with low confidence. This often means that the Cleaned address is not deliverable.
  - o Committed Action in Salesforce if Accepted:
    - Address is not updated
    - Validation Status is updated to Could not be Verified
    - Validation Timestamp is updated with updated date / time

- *Partial Match* – EDQ was unable to find a full correct address which matched the input address. This often occurs when the property number is missing from the input address.
  - o Committed Action in Salesforce if Accepted:
    - Address is not updated
    - Validation Status is updated to Could not be Verified
    - Validation Timestamp is updated with updated date / time

- *Foreign Address* - EDQ could not find a matching address because the input address referred to a country other than that which you ran your clean against.
  - o Committed Action in Salesforce if Accepted:
    - Address is not updated
    - Validation Status is updated to Could not be Verified
    - Validation Timestamp is updated with updated date / time

- *Unmatched* – EDQ was unable to match the input address to any correct address.
  - o Committed Action in Salesforce if Accepted:
    - Address is not updated

- Validation Status is updated to Could not be Verified
- Validation Timestamp is updated with updated date / time

- **Blank** – The submitted address was blank.
  - Committed Action in Salesforce if Accepted:
    - Address is not updated
    - Validation Status is updated to Could not be Verified

Validation Timestamp is updated with updated date / time.

> **Note**: If you are cleaning leads, converted leads will be excluded as they cannot be updated from the Salesforce functionality.

Edit Column Layout - You may use the Edit Column Layout link to add fields, reorder and show or hide the columns which are displayed in the table.

Export to CSV - Use the Export to CSV link to export all of the records currently filtered to a .csv file. You can use this feature for audit purposes, to retain address details for your records or action records outside of Salesforce. This can be particularly useful when managing records which require attention, many users find exporting records with Multiple Match, Poor Match, Partial Match, Foreign Address, Unmatched and Blank profiles particularly useful as these addresses require attention and should be pro-actively managed.

When you are ready to proceed with committing accepted records to Salesforce click **Next** to proceed to the Commit Records page of the Review and Commit process.

Commit Records

The Commit Records page shows you a summary of the records you have accepted and rejected.

EDQ Administration
- ▶ Address Verification
- ▶ Email Verification
- ▶ Phone Verification
  - My Account

EDQ Batch
- Administration
- Manage Batch Jobs
- Batch Job Results

Batch Job Results
Commit Records

Below is a summary of records you accepted by Match Profile Filter. If you would like to commit these records to your database please click **Commit Records** button at the bottom of this screen.

Match Profile	Records	Accepted	Rejected
Verified Correct	52	52	0
Good Match	40	40	0
Tentative Match	31	31	0
Multiple Matches	1	1	0
Foreign Address	2	2	0
Unmatched	44	44	0
Total	**170**	**170**	**0**

Back | Commit Records

1. To commit the accepted records to Salesforce, click on the **Commit Records** button at the bottom of the page.

> **Note**: You can only commit records once per batch job and will not be able to return, so make sure all the addresses you would like to commit are accepted before continuing.

For the accepted records the values committed varies depending on the Match Profile of the respective record, see Match Profile (page 30) definitions for further information on the Committed Action in Salesforce if Accepted.

For the rejected records there will be not further action or update in Salesforce.

2. You will be directed to the View Batch Jobs page where you may monitor the progress of the commit stage for your batch job. When the commit stage completes the stage of your batch job will be set to "*Completed*".

Note: We recommend that you delete batch jobs once they are Completed.

For more detailed information on the status of the commit you may click on your Job name which will take you to the Batch Job Stages page.

Batch Job Stages

The Batch Job Stages page provides insight into a specific stage of a batch job, the page is divided into 3 sections.

Batch Job Settings – This section provides high level information on the batch job including the Object from which records were cleansed, name of the touchpoint used and the Salesforce user who originally submitted the batch job

Processing Stage – In this section you can view the start and end date, the number of records exported and process, and status of the Processing stage.

Review and Commit Stage – In this section you can review the start and end date, status and progress of the Review and Commit stage you are also shown a Summary table of your batch job results broken down by Match Profile.

Batch Job Results Summary Table

Below is a description of each column of the batch job results summary table:

- *Records* – Total records processed per match type.
- *Accepted* – Total records accepted per match type.
- *Rejected* – Total records rejected per match type.
- *Not Verified* – Total records which were not actioned per match type (the user did not accept or reject these records).
- *Committed* – The number of successfully committed records.
- *Unable To Commit* – The number of uncommitted records. This column is visible only if there were records which could not be committed. A record may not be committed due to one of the following reasons:

1. **An address is *updated* in Salesforce after you run the batch job.**

If an address is edited after you run the batch job it will not be committed during the commit stage to avoid overriding your changes in Salesforce.

In this case, the *Unable To Commit* column will appear on the right side of the table which will show you the number of uncommitted records per profile due to this reason.

Review and Commit Stage

	Start Date	22/06/2015 07:55:50
	Finish Date	22/06/2015 07:55:51
	Status	Completed
	Percent Complete	100%

Match Profile	Records	Accepted	Rejected	Not Verified	Committed	Unable To Commit Updated After Batch Run ⓘ
Good Premises Partial	2	0	0	0	0	0
Verified Correct	2	2	0	0	1	1
Partial Match	1	1	0	0	1	0
Total	**5**	**3**	**0**	**1**	**2**	**1**

[Back]   [Export Unable To Commit Records]

Use the **Export Unable To Commit Records** button to see a detailed list of all the records were not committed to Salesforce.

2. **An address is *deleted* in Salesforce after you run the batch job.**

If an address or record is deleted after you run the batch job it will not be committed during the commit stage because it no longer exists.

In this case the *Unable To Commit column* will appear on the right side of the table which will show you the number of uncommitted records per profile due to this reason.

Review and Commit Stage

	Start Date	22/06/2015 08:03:47
	Finish Date	22/06/2015 08:03:48
	Status	Completed
	Percent Complete	100%

Match Profile	Records	Accepted	Rejected	Not Verified	Committed	Unable To Commit Deleted After Batch Run [i]
Good Premises Partial	2	0	0	0	0	0
Good Match	1	1	0	0	0	1
Partial Match	1	1	0	0	1	0
Total	4	2	0	1	1	1

Back   Export Unable To Commit Records

Use the **Export Unable To Commit Records** button to see a detailed list of all the records which were not committed to Salesforce.

3. A *Validation Rule* is violated during commit.

Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record. Refer to Salesforce documentation / help for more information on validation rules.

If a validation rule is violated for a record the *Unable To Commit* column will appear on the right side of the table which will show you the number of uncommitted records due to this reason.

You may re-modify the violated validation rule and click on the **Retry** button to try and commit the records again. You can also use the **Export Unable To Commit Records** button to see a list of all records which were not committed to Salesforce.

Review and Commit Stage

	Start Date	17/06/2015 11:42:45
	Error Date	17/06/2015 11:42:46
	Status	Error
	Percent Complete	100%

⚠ **There are one or more uncommitted records!**

Retry

Match Profile	Records	Accepted	Rejected	Not Verified	Commited	Unable To Commit Validation Rule Failure
Verified Correct	2	2	0	0	1	1
Partial Match	2	2	0	0	0	2
Total	4	4	0	2	1	3

Back   Export Unable To Commit Records

4. Other.

Although unlikely, it is possible record(s) may fail to commit for other reasons, you can view the exact error message by clicking the **Export Unable To Commit Records** button which will export a .csv file containing all uncommitted records along with the reason or message returned from the service.

Delete a Batch Job

To delete a batch job select the **Delete** link in the Actions column next to your batch job. Deleting a batch job will remove all current data related to the batch job.

We advise regularly deleting completed batch jobs to ensure ease of maintenance and management.