Veeva NETWORK

Veeva Network 8.0 Release Notes

March 2016

Contents

About these Release Notes 8
Browser requirements 8
Summary 8
Network Data Quality Reports 8
Concur connector 8
Reporting 8
Data load 8
Search 8
Profile enhancements 8
User profiles 8
Recent items 9
Workflow 9
Data load 9
Data export 9
Reference data export 9
Reporting 9
Network Explorer 9
Address cleansing 9
Suspect match 10
Data lineage 10
Single sign-on 10
Profile enhancements 10
Browser support 10
UI enhancements 10
Localization 10
API 10
Data governance 10

Introduction 11
Network Customer Master 11
Workflow 12
Workflow settings 12
Parent HCO handling in unverified records 12
Resolution notes 12
Define resolution notes 12
Export resolution notes 14
Import resolution notes 14
Sorting resolution notes 14
Applying resolution notes 15
Task processing 16
Data load 17
Veeva OpenData Subscription 17
Bulk merge 17
Specify surviving records 17
Enable bulk merge 18
Bulk merge behavior 18
Merge from Custom Key value 18
Considerations 19
Data loading jobs 19
gzip support 19
Data export 20
Export source data 20
Reference data export 21
Reporting 22
Default columns 22
Report results 22

Random sorting 23
Sorting standard query results 23
Sorting advanced query results 23
Chart options 24
Advanced Queries 24
Working with sets 24
Resizing the editor 25
Network Explorer 26
Network Explorer canvas 26
Full screen mode 26
Pan and zoom 26
Adjust width and spacing of canvas objects 27
Display the legend 27
Navigate content 27
Using filters 28
Working with saved filters 29
Working with objects in Network Explorer 30
View object details 30
Expanding affiliations 31
Paging through child objects 31
Search affiliations 32
Change the tree focus 32
Highlight an object's hierarchy 33
View relationships between objects 33
Relationship search 33
Address cleansing 34
Address verification 34
Suspect match 35

Adaptive UI 36
Data lineage 37
Single sign-on 38
Mapping a Language to a Country Code 38
Identity provider button 38
Search 40
Profile enhancements 41
Compliance data 41
US Compliance target subscription 42
Source keys 43
Toggle empty fields 43
Text formatting 44
Profile summary 45
Affiliations 45
Link to child affiliations from an HCO profile 45
User profile 46
Edit your user profile 47
Update your usage feedback preference 47
Grant Support access 47
Password history 48
Recent items 48
Browser support 49
UI enhancements 49
Network Data Quality Reports 50
Key concepts 50
Data visibility and security 50
Getting started 51
Using Network Data Quality Reports 53

Email notifications 53
Data Quality Reports dashboard 53
Test case drill-through 54
Email notifications 54
Working with the Data Quality Reports dashboard 56
Viewing past report summaries 58
Configuring email notifications 59
Export or print report chart 60
Drilling down through test cases 60
Refining results by entity group 60
Refining results by owner 61
Refining results by test case 61
Drill down by test case 62
Test case details page 63
Watch a test case 63
Edit or delete a test case 64
View summary information 64
Refine results by entity group 64
Refining results by owner 65
Examine test case results 66
Re-run a test case 66
Download report results 66
View the report full screen 66
Drill down by entity group 67
Create or update the entity group query 67
Rules for defining entity groups 67
Add or update a query 68
Create an entity group in advanced mode 69

View or hide invalid records 70
Validate the query 70
Manage test cases 71
Drilling down through test cases 71
Adding or updating test cases 72
Create or update the test case query 72
Rules for defining test cases 72
Add or update a test case query 72
View or hide invalid records 74
Validate the query 75
Configure the failure threshold 75
Manage entity groups 75
API 76
Change request API 76
Search API 76

About these Release Notes

These Release Notes describe all features included in Veeva Network 8.0.

Browser requirements

The following are the minimum browser requirements:

- Internet Explorer 11+
- Google Chrome (most recent stable version at Network release)
- Safari 6+

Summary

The following key enhancements have been introduced since Veeva Network 7.5.2:

Network Data Quality Reports

- **Data quality analysis** – Generate, present, and analyze reports designed to highlight data quality issues.

Concur connector

- **Concur integration** - Search Veeva Network in real time and transfer the data to Concur expense reports. See the Concur white paper for more information.

Reporting

- **Working with sets –** Combine grouped fields (for example, specialties) include all fields for that group in counts.
- **Default columns** – Standard fields are pre-selected for report columns.
- **Chart export** – Print chart results or download them as an image file.

Data load

- **Veeva OpenData subscription –** Enable Veeva OpenData management of email address data.

Search

- **Profile previews –** Show HCO and HCP profile previews from the search results.

Profile enhancements

- **US Compliance –** Navigation includes option to display US compliance information.
- **Source keys –** The Profile summary includes details on contributing sources.
- **Toggle empty fields –** Show or hide empty fields on the Profile page.

User profiles

- **View and update your profile –** View and update your personal user profile information.
- **Password history –** Configure password history and reuse limits.

RECENT ITEMS

- **Recent jobs –** The recent items drop down list now includes recently run jobs.

The following key enhancements were introduced in Veeva Network versions 7.5.1 and 7.5.2:

WORKFLOW

- **Workflow settings** - Settings include an option to route add requests to local stewards where records contain customer-owned Parent HCO relationships.
- **Unverified Parent HCO handling** - Routing of unverified HCP records is now dependent on processing of associated unverified Parent HCO records.
- **Predefined resolution notes –** Administrators can define localized messages for data stewards to use when providing resolution notes for tasks for the relevant countries.
- **Task processing –** Preferences specified when adding a resolution note (go to next task) are saved on subsequent tasks.

DATA LOAD

- **Bulk merge on custom keys –** Bulk merge enables you to specify winning custom keys; previously you could only specify entity IDs.
- **Job details –** Job details for a source subscription job now contain additional statistics for the load.
- **Source file support –** Source subscriptions now support gzip (.gz) compressed files.

DATA EXPORT

- **Data lineage** - Export data lineage details for select systems in a target subscription.

REFERENCE DATA EXPORT

- **Country-based export –** Refine and export reference values for a specific country only, or for all countries.

REPORTING

- **Random sorting** – Sort basic and advanced query results in random order.
- **Download reference code descriptions –** You can now choose to download reference code descriptions in a specified language when downloading report results.

NETWORK EXPLORER

- **Enhanced controls –** View Network Explorer full screen, pan, zoom, and adjust spacing and sizing for the tree.
- **Filters –** Create and save filters to define which objects should appear in the tree.
- **Business cards –** Hover over objects to view summary information.
- **Navigation –** Click through entities, change the tree focus, view relationships, and highlight object hierarchies.

ADDRESS CLEANSING

- **Address provider upgrade** – The address cleansing database used by Network has been upgraded.

- **Address verification dialog –** A dialog enables you to compare and select address changes side by side when you add or update addresses.

SUSPECT MATCH

- **Accessible profile information –** View profile details for an entity without leaving the suspect match page.
- **Adaptive UI –** Suspect match page now adapts to the screen size.

DATA LINEAGE

- **Adaptive UI –** Data lineage page now adapts to the screen size.

SINGLE SIGN-ON

- **Identity Provider login button –** Define and customize a login button to appear on the Network Login page for a specified identity provider.

PROFILE ENHANCEMENTS

- **Improved readability –** Values in the profile summary and drop down lists now display in full, without truncation. Affiliated parent and child objects are now displayed in alphabetical order.
- **Link to child affilations from an HCO profile** – Click a link within the **Child Affiliations** section of an HCO profile to view all child HCP affiliations in the search page.

BROWSER SUPPORT

- **Support updates –** Network supports additional browsers and versions, while earlier Internet Explorer versions are no longer supported.

UI ENHANCEMENTS

- **Top navigation menu –** The top navigation has been updated to improve usability.

LOCALIZATION

- **Additional language support –** Network now includes localization for Danish, Dutch, Finnish, Norwegian, Portuguese, and Swedish.

API

- **Change Request Retrieve –** The Change Request Retrieve and Change Request Batch Retrieve APIs include a parameter to enable return of related entities in the response.
- **Search –** Now includes the corporate name of parent HCOs in the response.
- **Retrieve Fields Metadata –** Now includes information on the last modified date for fields, as well as an indicator of whether fields were modified since a specified date.

DATA GOVERNANCE

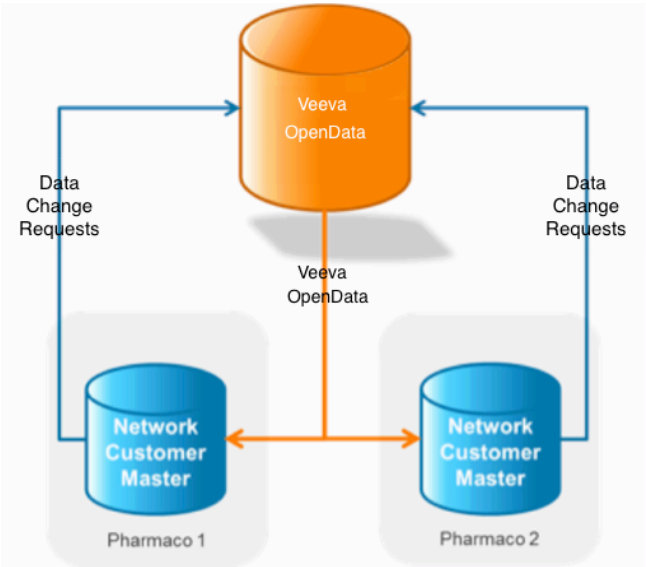
Specific updates for fields and reference data are provided in the *Veeva Network Data Governance* release notes.

Introduction

Veeva Network includes Network Customer Master, and for applicable countries, Veeva OpenData Customer Data.

Veeva OpenData provides identity, demographic, and licensure data about Healthcare Professionals and Healthcare Organizations.

Network Customer Master is a SaaS Master Data Management (MDM) application that is populated with a subset of the data from Veeva OpenData, according to each pharmaco's contract with Veeva.



Network Customer Master

Veeva Network Customer Master is a multi-tenant SaaS Master Data Management (MDM) application. Each pharmaco that subscribes to Veeva Network has its own Network Customer Master tenant (often referred to as a *Network org* similar in concept to a Veeva CRM or Salesforce.com org).

Where Veeva OpenData is enabled, each Network org comes pre-populated with data from the Veeva OpenData databases to which the pharmaco has subscribed. Veeva Network automatically keeps the data in each production Network org up-to-date and in sync with the data in Veeva OpenData.

Pharmacos can also load their own data into their Network org and match and merge it with the Veeva OpenData data. Veeva is responsible for stewarding the quality of the Veeva-provided data as well as any new records added in the Network org that can be shared with Veeva OpenData.

Records that do not match Veeva records will be loaded as customer-stewarded records and updates on those records will not be shared with Veeva OpenData.

Concur Connector

The Network Concur connector links expenses directly with customer master data. This ensures high-quality data in Concur and simplifies expense reporting. Sales and marketing can search Veeva Network and Veeva OpenData directly from Concur, then save the latest provider information with the expense report.

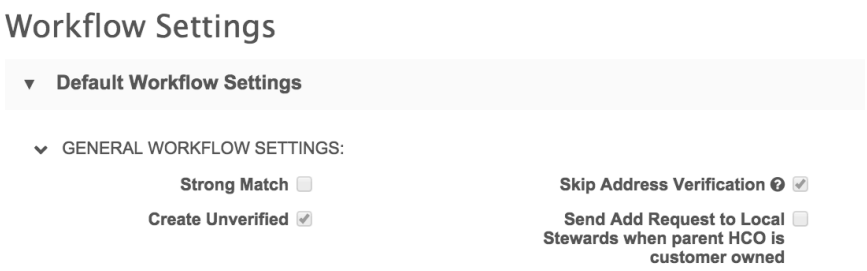
Concur uses the Network Search API to find HCPs in Network and Veeva OpenData, and returns the same data you would see if searching directly from Veeva Network. The most relevant results are displayed with duplicate records removed, based on those with duplicate Network IDs. To get started with the Veeva Network Connector for Concur, please contact your Veeva Account Executive.

Workflow

Workflow Settings

The Workflow Settings page now includes an option to route add requests that include a customer-owned Parent HCO relationship to local data stewards.

Administrators can enable this option from the Workflow Settings page by checking the **Send Add Request to Local Stewards when parent HCO is customer owned** check box for the specific country it applies to.



Parent HCO handling in unverified records

In situations where an unverified HCP has a parent HCO that is also unverified, the workflow will queue and release the related task only once the unverified parent HCO has been processed.

Resolution notes

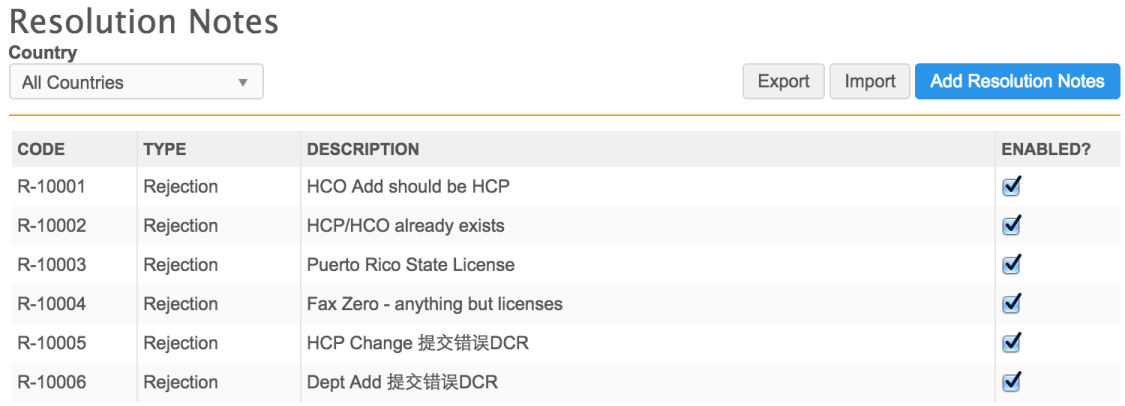
You can now import and export predefined resolution notes that data stewards can select when accepting or rejecting a task. This functionality must be configured by an administrator before predefined resolution notes are available to data stewards.

Note: The messages for system resolution notes cannot be configured.

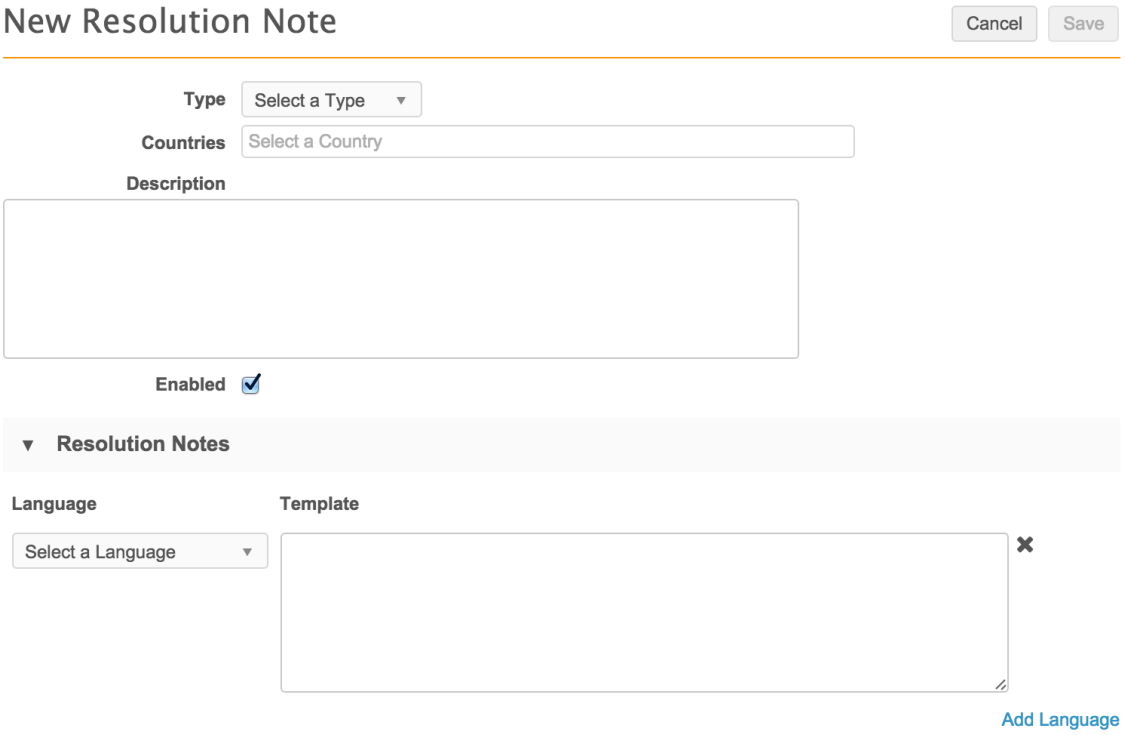
Define resolution notes

1. From the Admin console, in the top navigation, select **SYSTEM INTERFACES**.

2. In the left navigation, select **Resolution Notes**. Any notes that have been defined appear on the Resolution Notes page.



3. Select or clear the check box for a note in the **ENABLED?** column to make the note available or unavailable to data stewards during task resolution.
4. Click the **Add Resolution Notes** button to create a resolution note.



5. In the **Type** drop down list, select the type of task response (rejection or approval) for the note.
6. In the **Countries** field, type the countries applicable for the note. The drop down list refines as you type the names.
7. Provide a meaningful description for the resolution note.
8. Select the **Enabled** check box to make the note available to data stewards.

9. From the **Language** drop down in the **Resolution Notes** section, select the language for the note.
10. In the corresponding **Template** field, provide the text of the note in the specified language.
11. Click the **Add Language** link to provide additional translations for the countries specified.

12. Click the **Save** button at the top right corner of the page.

Export resolution notes

You can export defined resolution notes (or a blank template) to a spreadsheet for further update by clicking the **Export** button at the top right of the Resolution Notes page.

Import resolution notes

You can define resolution notes in a spreadsheet and import them on the Resolution Notes page.

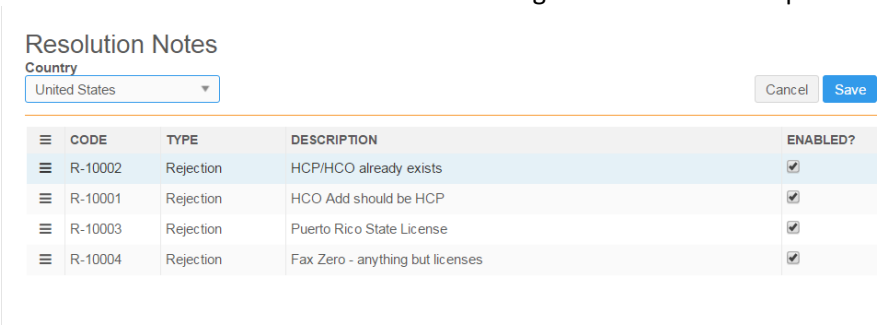
1. From the Admin console, in the top navigation, select **SYSTEM INTERFACES**.
2. In the left navigation, select **Resolution Notes**.
3. At the top right of the page, click the **Import** button.
4. In the **Resolution Note Importer**, click the **Download Workbook** button to download a file containing existing resolution notes.
5. Update the file using the format and instructions provided in the sheet.
6. Click the **Upload New File** button to import your changes. Statistics for the pending changes, including errors, are displayed before you apply the changes.
7. To apply changes, click the **Apply Changes** button.

Sorting resolution notes

Administrators can change the order in which resolution notes appear to data stewards.

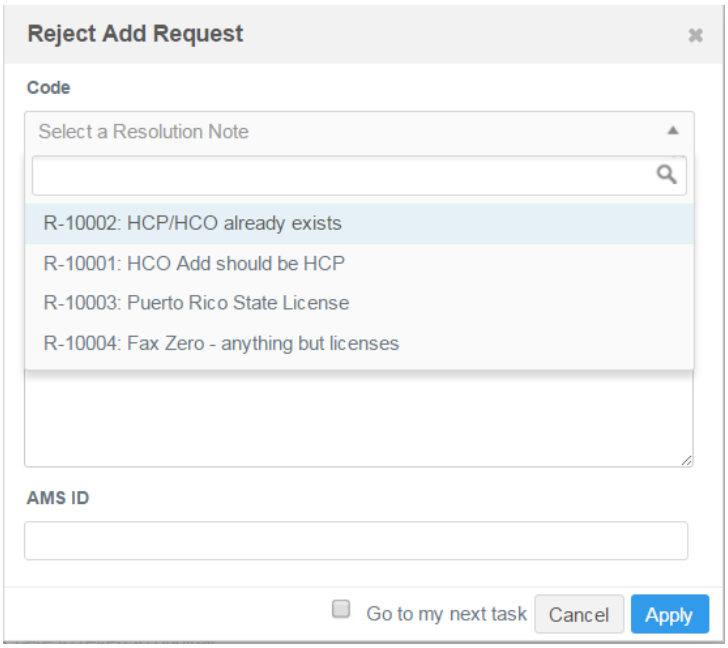
1. From the **Resolution Notes** page, select a country for which you want to change the resolution notes order.

2. Select the handles next to each note and drag the note to its new position.



3. Click the **Save** button.

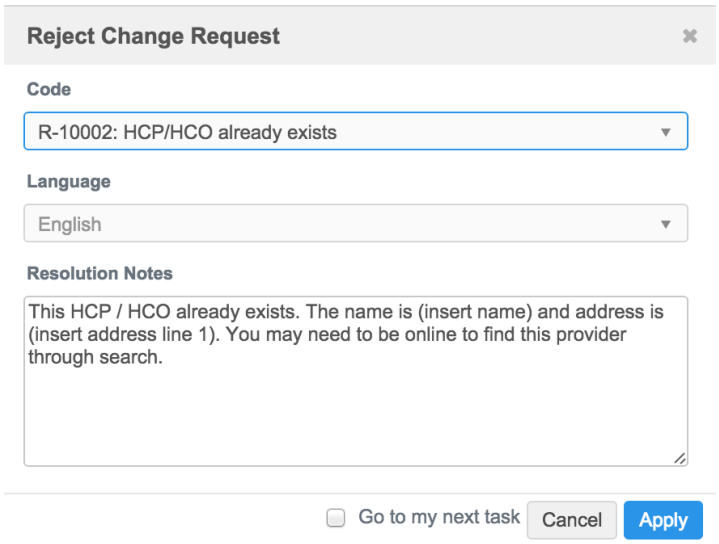
Data Stewards will see the resolution notes in the order set by the administrator.



Applying resolution notes

When data stewards accept or reject an add or change request, they now have the option of selecting a predefined resolution note by choosing a reason code from the **Code** drop down list. You can scroll through the list or begin typing a description to refine it further.

If multiple languages exist for this code, data stewards can select the appropriate language from the **Language** drop down list. The corresponding resolution note will update with the description supplied for the specified language.

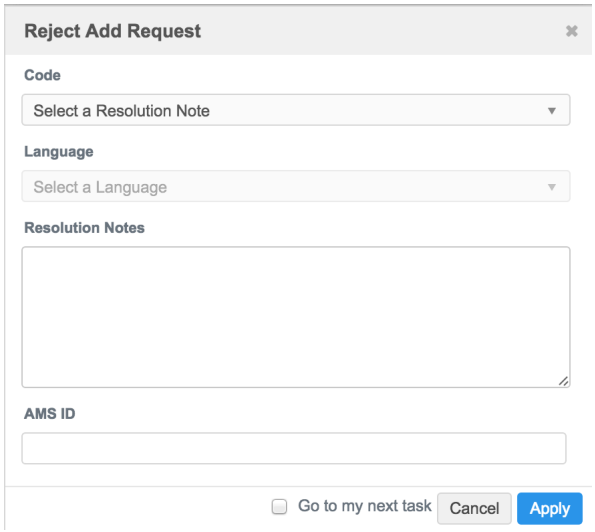


Data stewards can add or update the provided resolution note based on the specific situation. This does not affect the original resolution note template.

Task processing

When you process a task, your selection in the **Go to my next task** check box at the bottom of the dialog will be saved for subsequent task processing.

For example, if you remove the check from the check box while processing a task, the next task you process will have a clear check box as well.

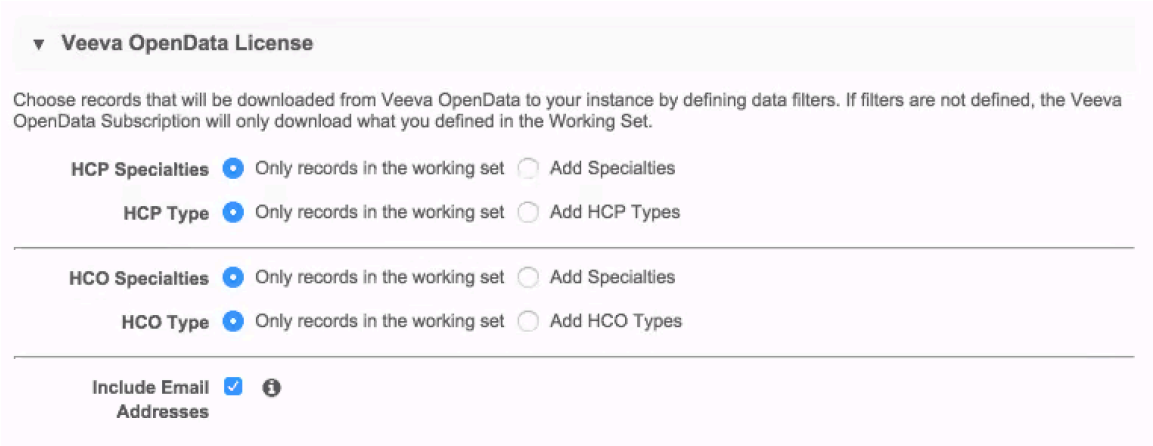


Data load

Veeva OpenData Subscription

You can now choose not to receive email address updates from Veeva OpenData. If you do not receive email address updates from Veeva OpenData, email fields in your instance effectively become customer-owned fields.

To stop receiving email address updates from Veeva OpenData, clear the **Include Email Addresses** check box in the **Veeva OpenData License** section of the Veeva OpenData subscription. For existing customers where email addresses are available in Veeva OpenData, this check box is selected by default.



For new customers who have just signed up for the Veeva OpenData email subscription, this check box is not enabled by default. Before you select this option, ensure that you back up your customer-owned emails through an export, as they may be overwritten.

This option is available if Network Support has enabled it for your customer instance, and only applies to Veeva OpenData subscriptions that offer email data as an additional offering. Contact Veeva OpenData to receive email address updates.

Bulk merge

On data load, you can now merge records in bulk through a source subscription by providing the surviving Network Custom Keys (or the Network Entity ID) in the source file feed. Keep in mind that Veeva CRM only permits merging 5,000 records at a time; most other systems have similar restrictions.

Specify surviving records

You provide the Network Custom Key of the surviving record in the merge_survivor_key column; for example:

vid__v	corporate_name__v	merge_survivor_vidkey
462313821042639872	University Health Centre	ERP:ACCOUNT:00OF0000006w4WY

Custom key	corporate_name__v	merge_survivor_vidkey
ERP:ACCOUNT:00OF0000009u0D	University Health Centre	ERP:ACCOUNT:00OF0000006w4WY

You can also provide the Network Entity ID of the surviving record in the merge_survivor_vid column, for example:

vid__v	corporate_name__v	merge_survivor_vid
462313821042639872	University Health Centre	462313820975531008

Enable bulk merge

You enable bulk merge for a particular source subscription by clicking the **Advanced** button in the source subscription and enabling the following property in the **Module Properties**:

```
"job.merge.allowSourceMerge": "true"
```

Bulk merge behavior

By default, merge does not run full survivorship; it performs the following:

- Updates record states
- Moves custom keys
- If the surviving record has no value for a particular field, it takes the corresponding value from the losing record.

You can run merge to use full survivorship by updating the following property in the **Module Properties** for the source subscription:

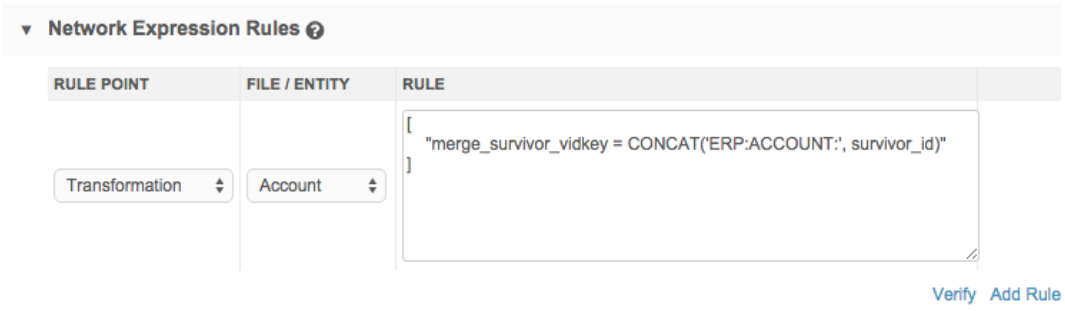
```
"job.merge.mergeInstruction": "InclusiveMerge"
```

Merge from Custom Key value

In most cases the source file will only include the custom key value. You can use a Network Expression to construct a full Custom Key from the value. For example if your incoming file is:

loser_id	corporate_name__v	survivor_id
00OF0000004d9XQ	University Health Centre	00OF0000006w4WY

Using a transformation Network expression you can define the merge_survivor_vidkey:



```
[
   "merge_survivor_vidkey = CONCAT('ERP:ACCOUNT:', survivor_id)"
]
```

Considerations

A single source subscription can process additions, updates, merges, and invalidations.

You should ensure that no circular merges exist. For example, a merge of A > B > C > D will work properly, but a merge of A > B > C > A results in an error. The latter merge operations will not be processed, but all other updates and merges will be unaffected.

DATA LOADING JOBS

Job results now include details on the total number of each entity type loaded, added, updated, merged, or invalidated.

1. From the Admin console, in the top navigation, select **SYSTEM INTERFACES**.
2. In the left navigation, select **Source Subscriptions**.
3. On the Source Subscriptions page, select a job's status in the **LAST JOB STATUS** column.
4. On the Job Details page, scroll down to the **Job Result Summary** section to view detailed statistics.

▼ **Job Result Summary**

	TOTAL	ADDED	CANDIDATES ADDED	UPDATED	MERGED	INVALIDATED	NOT LOADED
HCPs	5053	0	0	5053	0	0	0
HCOs	12614	0	0	12614	0	0	0
Addresses	42418	20	0	42398	0	0	0
Licenses	18843	39	0	18804	0	0	0
Relationships	0	0	0	0	0	0	0

Specifically, the job results include the following totals for each entity type:

- records processed
- records added
- candidate records added
- records updated
- records merged
- records that were invalidated
- records that were not loaded

GZIP SUPPORT

Source subscriptions can now load .csv files compressed using the gzip (.gz) compression format.

Note: .tar.gz supported was added in Network 7.0.

Data export

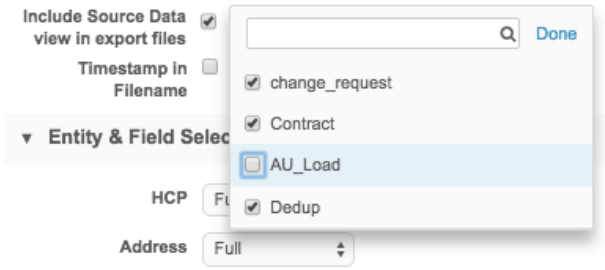
You can export data lineage information for selected data sources from the target subscription page.

EXPORT SOURCE DATA

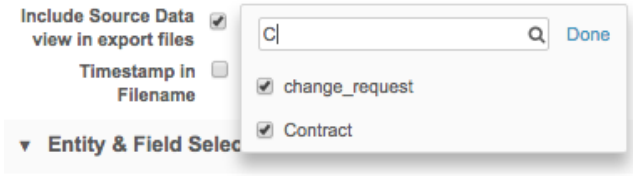
You enable source data export from the Target Subscription page.

In the target subscription, select the **Include Source Data view in export files** check box. By default, all data sources are selected for the export.

To exclude data sources from the export, click the drop down list and clear the check box from the data sources you want to exclude.



To refine the list of data sources for easier selection or deselection, begin typing in the search field at the top of the list.



The list updates automatically to display matching data sources.

Note: When this functionality is enabled, target aliases are not included in the export file.

When you export source data, additional files are exported along with the standard six export files: hcp_source.csv, hco_source.csv, address_source.csv, parenthco_source.csv, license_source.csv, and customkey_source.csv.

In the entity source files (hcp_source.csv and hco_source.csv), two additional fields are added to the export files:

- **source –** the source system name
- **primary_ref –** the entity ID of the golden record

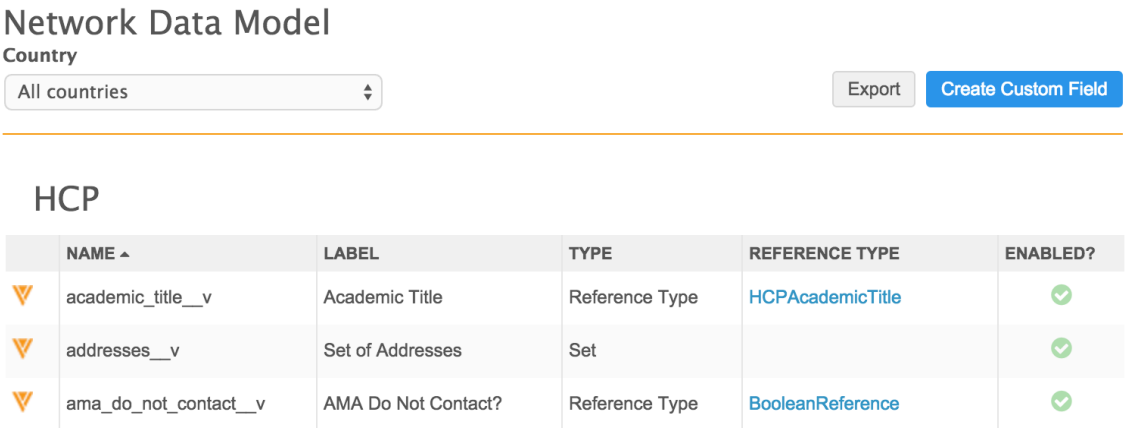
In child object files (address_source.csv, parenthco_source.csv, license_source.csv, and customkey_source.csv), three additional fields are added:

- **primary_ref –** a system-generated value based on data lineage
- **entity_source_vid –** the entity ID of the golden child record
- **entity_source_type –** the type of entity it is linked to (HCO or HCP)

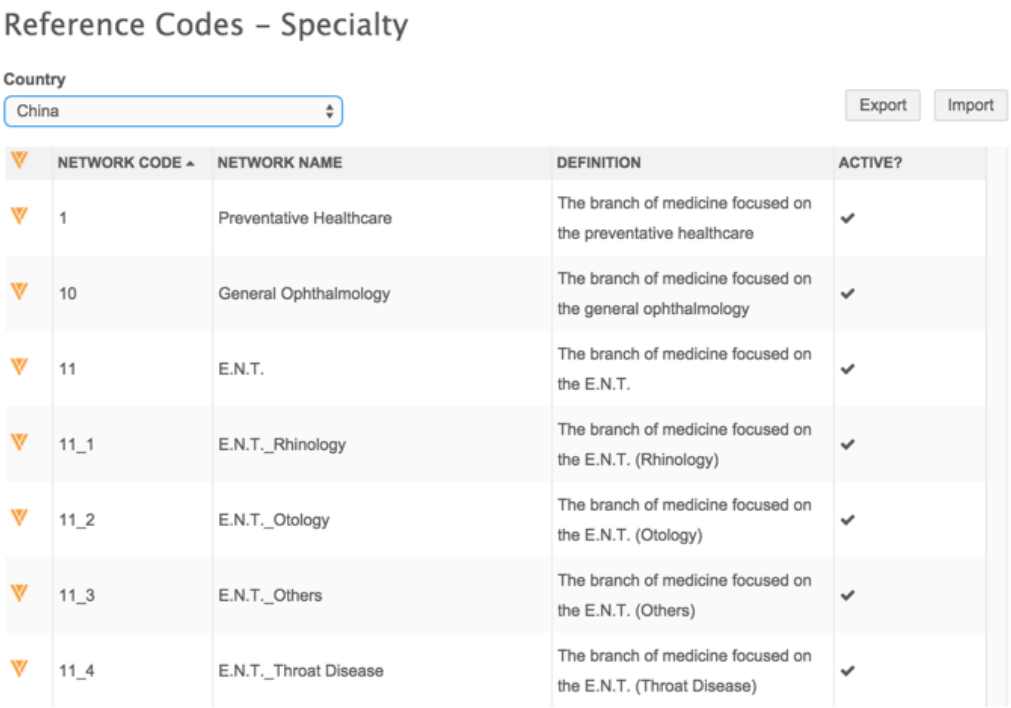
Reference data export

When you export reference data, only codes available for the selected country are exported in the resulting file.

1. From the Admin console, in the top navigation, select **DATA MODEL**.
2. In the **REFERENCE TYPE** column of the data model, select a reference type.



3. On the page for that type, click the **Country** drop down list and select a country to refine the list of codes.



4. At the top right of the page, click the **Export** button to export that specific list of codes to a CSV file. The selected country name is also used in the file name.

Note that the **DEFINITION** column on the Reference Codes page displays additional information provided in the **Definition** field for each reference code.

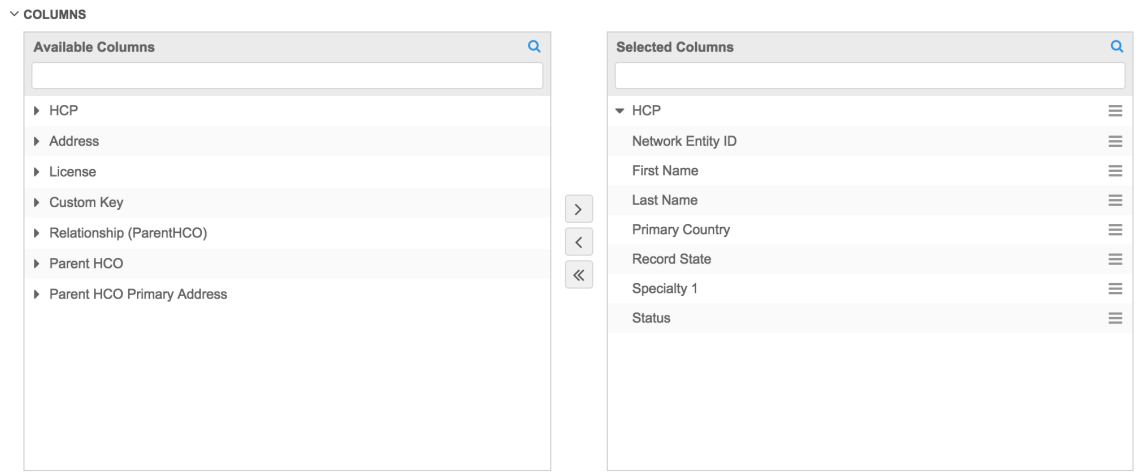
Reporting

Reporting includes the following functionality for this release:

- Standard fields are pre-selected for report columns
- Download reference code descriptions with results
- Sort basic and advanced query results in random order
- Print or export chart as image
- Combine grouped fields as sets

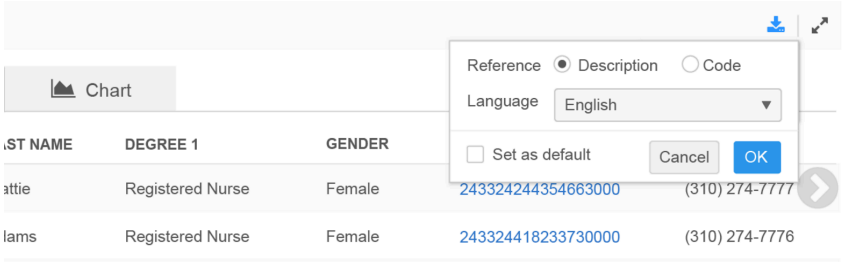
DEFAULT COLUMNS

By default, columns are now populated with standard fields. The fields that appear in the **Selected Columns** list change depending on the report type you choose.



REPORT RESULTS

When you download report results, you now have the option of specifying whether reference codes appear in the results, or their corresponding localized descriptions.



When you choose to download description, you also specify the language to use for those descriptions. You can select the **Set as default** check box to use these settings for subsequent downloads.

RANDOM SORTING

Reporting now enables you to randomly sort results for both standard and advanced queries.

Random sorting can be helpful for sampling from large result sets. For example, analyzing a random subset of 100 records from a set of over 100,000 records can provide you with an unbiased representation of the results.

Sorting standard query results

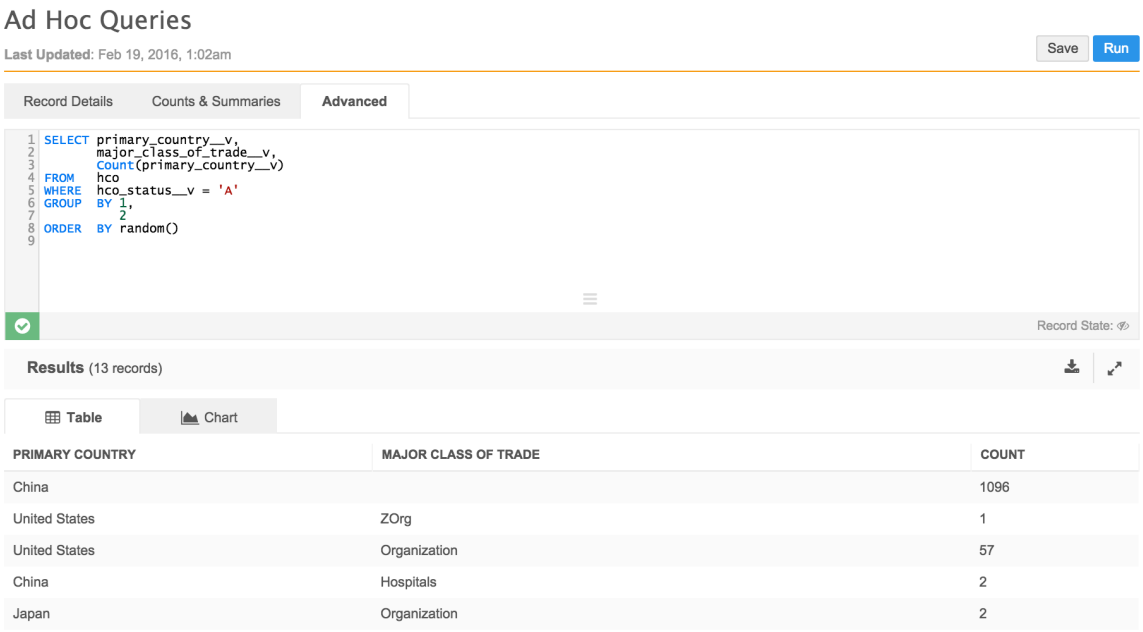
From the Ad Hoc Queries page, the **Record Details** and **Counts & Summaries** query forms now include an option to randomize in the **SORT BY** section.

Select **RANDOM** from the **SORT BY** drop down list.

Each time you run the query, the results will be sorted in a different random order.

Sorting advanced query results

From the Ad Hoc Queries page, the **Advanced** query now supports the random() function for the ORDER BY clause.



Each time you run the query, the results refresh in random order.

PRIMARY COUNTRY	MAJOR CLASS OF TRADE	COUNT
United States	Home Health Care Agencies	1
United States	Organization	57
China	Hospitals	2
United States	Managed Care	1
Japan	Organization	2

CHART OPTIONS

You can now easily print chart results or export them as an image file. Click the icon at the top right of a chart to select options.

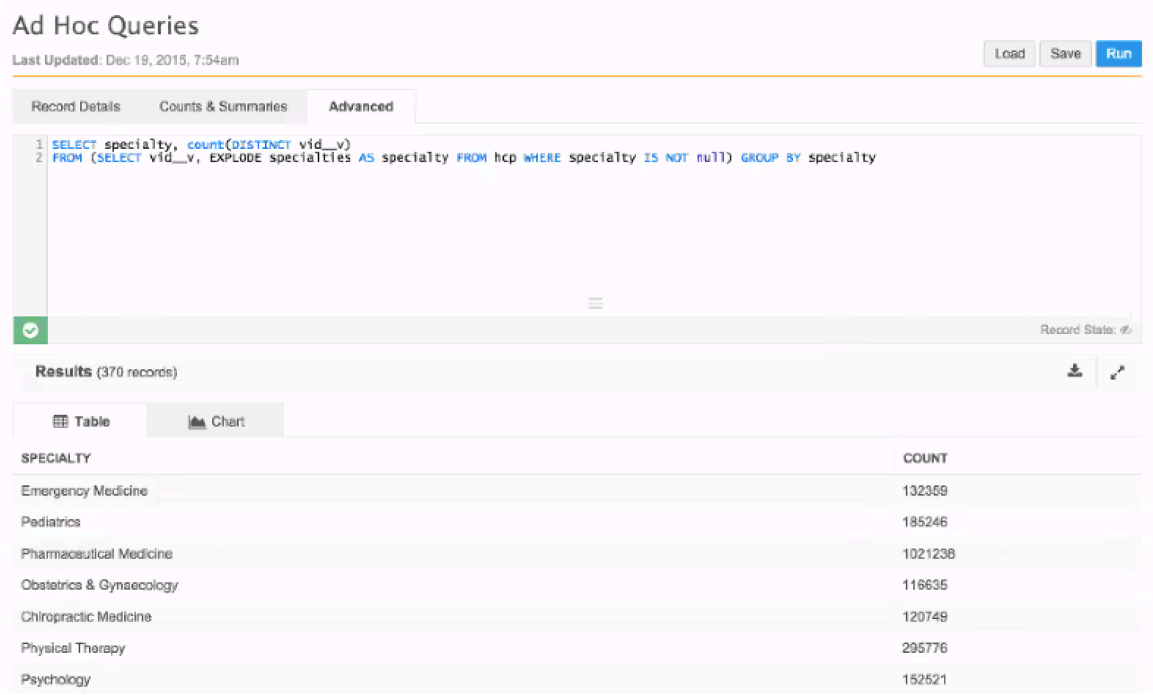
If you choose to print the chart, your system print dialog appears. If you choose to download an image, the file downloads to your local file system.

ADVANCED QUERIES

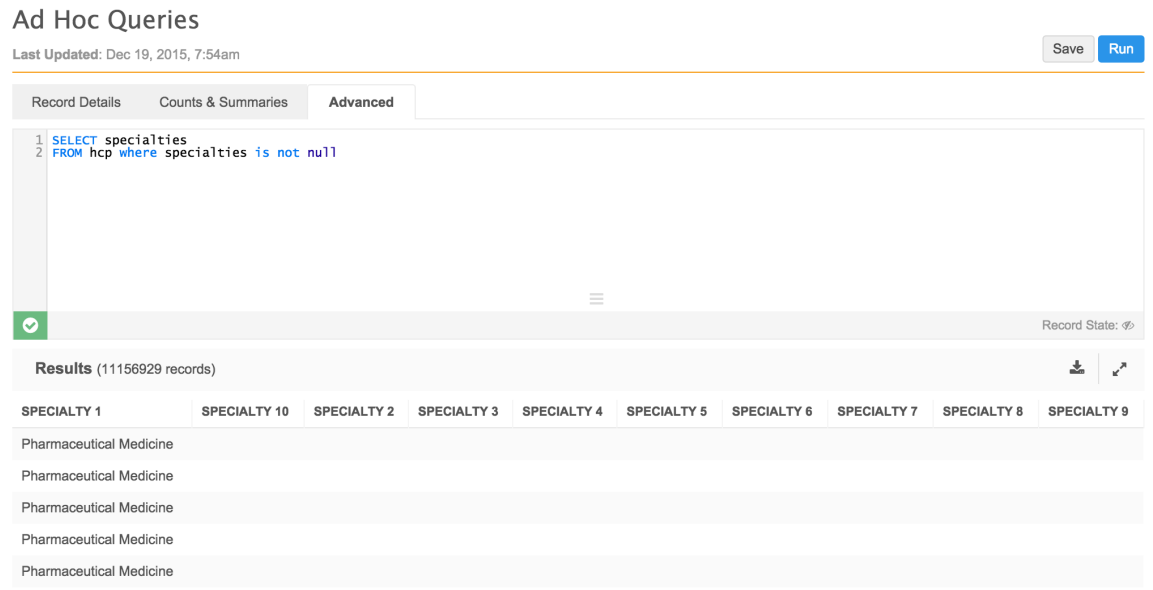
Working with sets

The EXPLODE operator enables you to obtain counts for groupings of numbered fields, for example, specialty_1__v through specialty_10__v. These groupings (or sets) include fields such as specialty, credentials, medical degree, and others.

The following example illustrates usage of this operator with specialties.



The following shows a similar query without the EXPLODE operator.



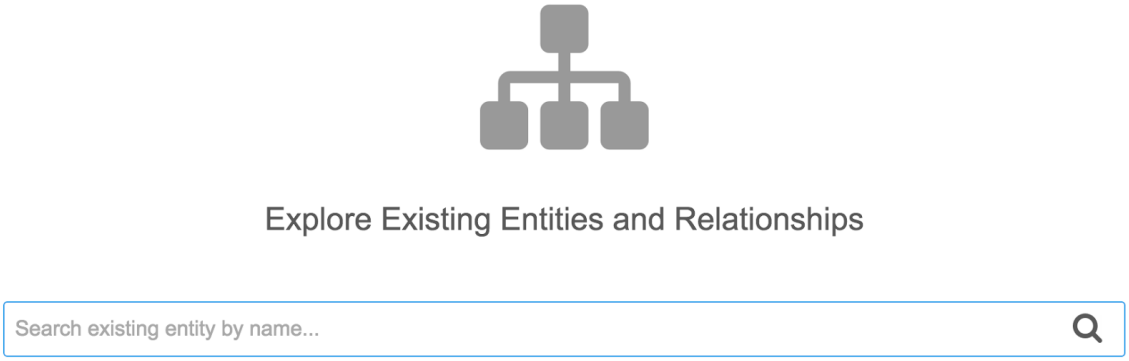
Resizing the editor

Users can now resize the Advanced Query input area.

Network Explorer

Network Explorer now includes a number of enhancements.

When you access Network Explorer by clicking **Network Explorer** in the top navigation, a search page appears.



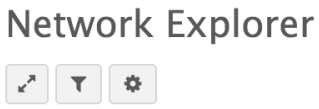
As you type in the search field, a list of matching profiles appears below. You can select any of these profiles to open them in Network Explorer. Note that if you press Return after typing a search term, the Network search results page appears.

Network Explorer canvas

The Network Explorer canvas now includes various enhancements to provide you with more control.

Full screen mode

You can open Network Explorer in full screen mode by clicking the left-most icon at the top left of the Network Explorer page.



You can exit full screen mode at any time by clicking the icon again or pressing the Escape key.

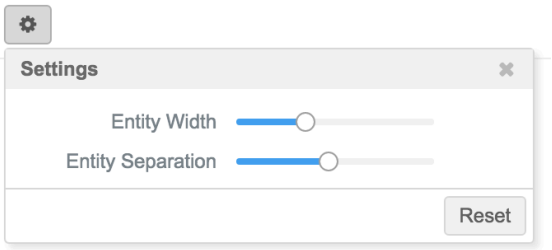
Pan and zoom

You can zoom in or out of your Network Explorer view by sliding the zoom control to the left of the canvas.

On the canvas, the cursor appears differently to indicate that you can pan the view. Pan across the Network Explorer canvas by clicking and dragging the canvas to reposition the view.

Adjust width and spacing of canvas objects

You can increase or decrease the spacing between objects, as well as the width of objects. Click the gear icon at the top left of the Network Explorer canvas.

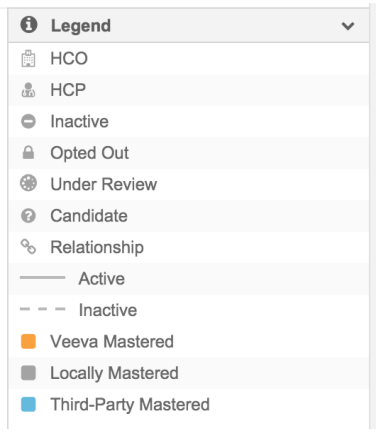


In the settings pane, you can click and drag the **Entity Width** slider to increase the width of all objects in the view. Click and drag the **Entity Separation** slider to increase the overall spacing between objects in the view.

Display the legend

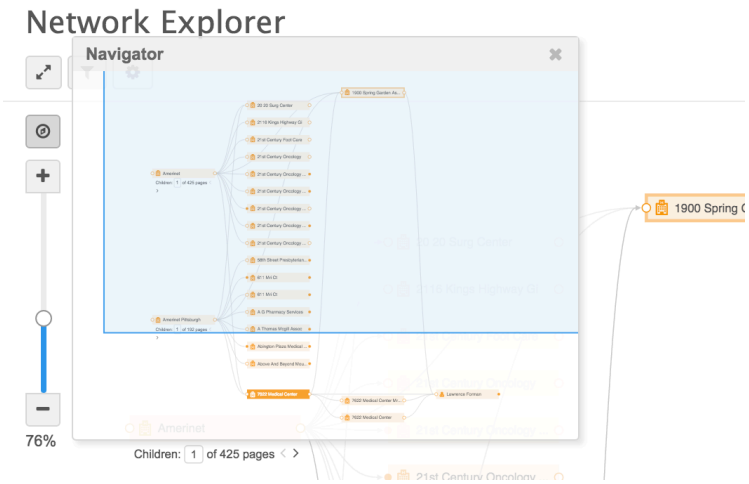
You can click the tab to the right of the canvas to expand the legend.

The legend gives you information on the various icons and indicators that may appear for objects on the canvas.



Navigate content

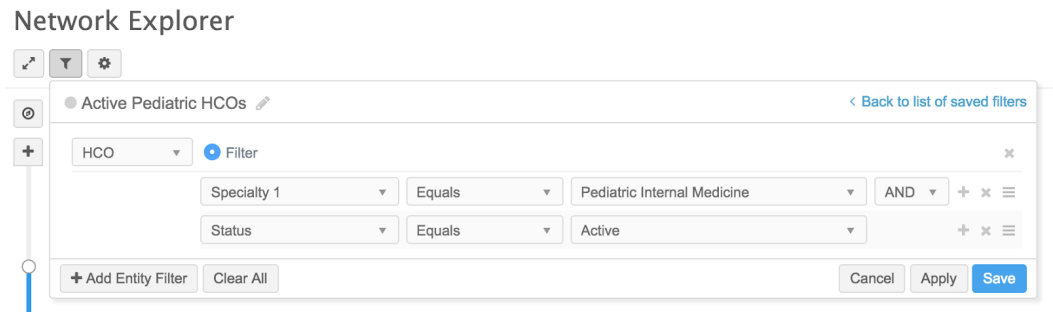
From the Network Explorer canvas, you can click the Navigator button above the zoom control to quickly view a portion of the canvas. This is helpful when you have a lot of entities expanded and a view that doesn't entirely fit on the screen.



From the Navigator pane, click and drag the highlighted frame to the location you want to view on screen. The Network Explorer view moves as you do this.

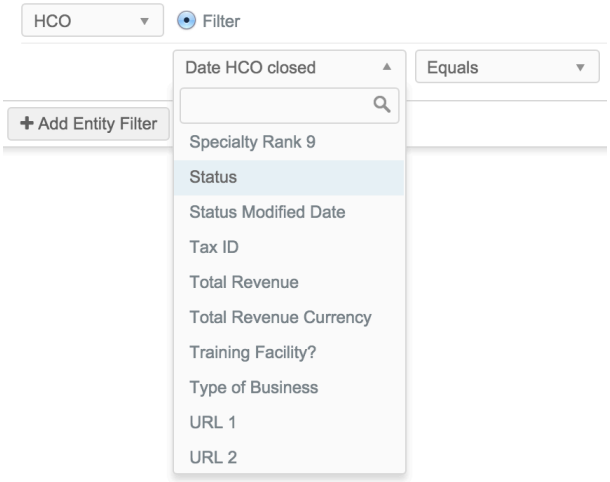
USING FILTERS

You can create and save filters to apply to the Network Explorer view by clicking the middle icon at the top left of the Network Explorer page.



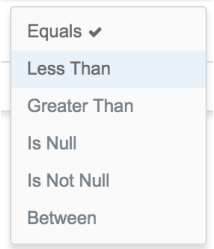
To create a filter:

1. Select an entity (**HCO** or **HCP**) from the drop down list to the left of the Filter pane.



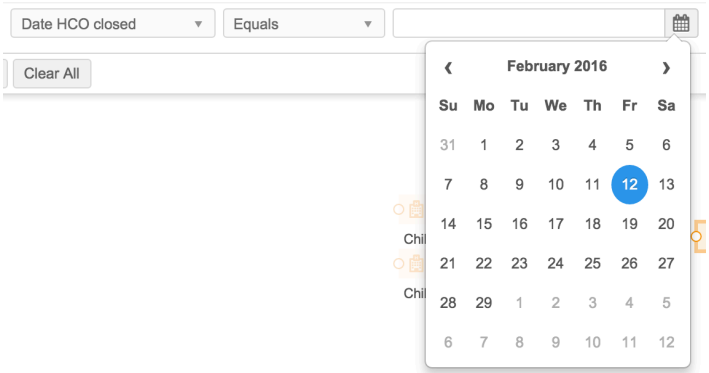
2. You can type at the top of the drop down list to refine the list of available fields.

3. Select a field from the first drop down list in the filter row. All entity and child object fields are available for selection.
4. Select an operator (**Equals**, **Find**, **Greater Than**, **Less Than**, **Between**, **In**, **Is Null**, **Is Not Null**) from the second drop down list.

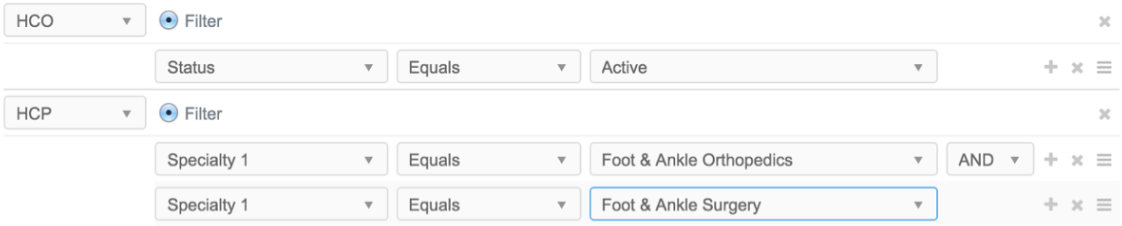


Note that this list changes depending on the field you select.

5. Select a value from the third drop down list. Note that if you selected a date field in the first drop down list, a date picker appears next to the list.



6. To refine the filter further, click the **+** to the right of the filter row to add more filter rows. To remove a filter row, click the **x** to the right of the row you want to remove.
7. Click the **Add Entity Filter** button to add a filter for another entity. You can select whichever entity you did not use for the first filter.
8. Use the **AND** and **OR** operators to include additional conditions on a filter.

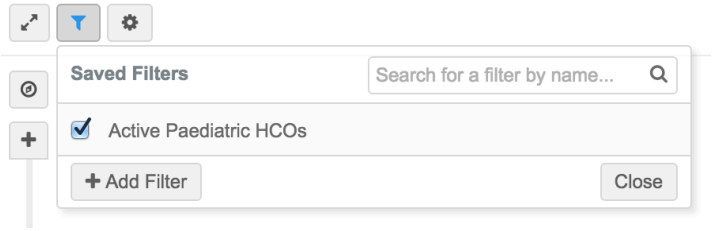


9. Click and drag the handle to the right of a filter row to move it to another position in the list of filters.
10. Click the pencil icon to the right of the filter title to give your filter a name.

11. Click the **Apply** button to view the effects of your filter, the **Save** button to save it, or **Clear All** to remove all filter rows and start over.

Working with saved filters

You can view the list of filters that you saved by clicking the filter icon and then clicking the **Back to list of saved filters** link at the top right of the Filters pane.



You can refine the list of saved filters further by typing text in the search field, or add new filters by clicking the **Add Filter** button. Click the **Close** button to close the list.

For a specific filter, click the filter name or the pencil icon to edit it, or click the **x** to the right of the filter to delete it. You can toggle the effects of the filter in the Network Explorer view by checking or unchecking the checkbox to the left of the filter name.

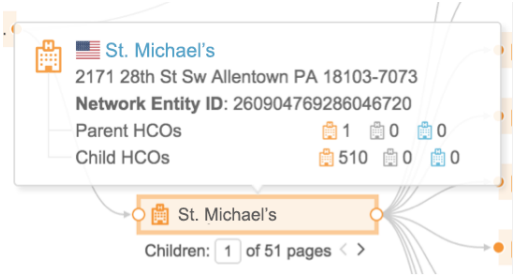
Working with objects in Network Explorer

You can perform the following actions on objects on the Network Explorer canvas:

- Hover over an HCO or HCP to display the business card, and visit the profile from the business card.
- Click a filled node to expand affiliated objects.
- Page through parent or child objects where more than ten exist for a parent HCO.
- Search affiliations for a selected object.
- Change the focus of the tree and highlight an object's parent and child relationships.
- View the relationship types between objects.

View object details

You can view details for an HCO or HCP object by hovering over the object in the tree. The business card appears for the HCO or HCP and includes basic profile details along with a summary of the number of directly linked affiliations by record owner.

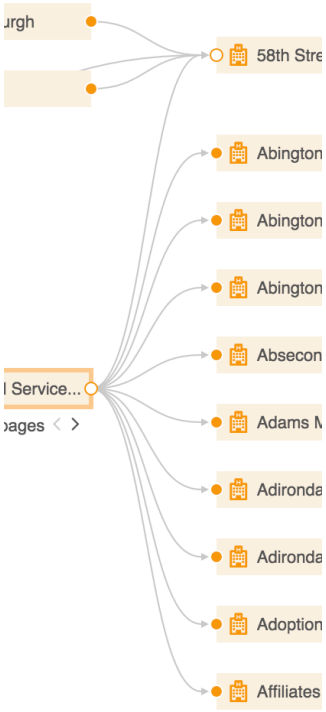


The legend (clickable from the right of the canvas) shows you the meaning for each color and icon.

While the business card is open, you can click the name of the HCO or HCP to open the profile page for that record.

Expanding affiliations

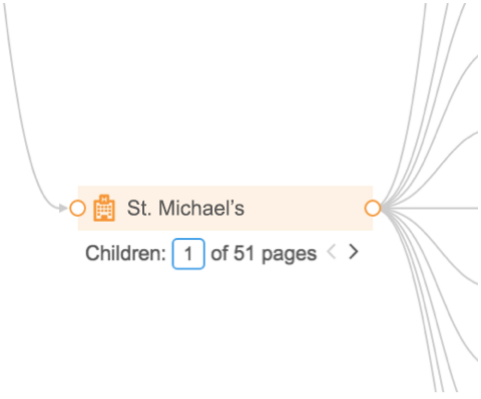
You can view affiliations for an object by clicking a solid node (small circle) to the left or right of the object. A solid (filled) circle indicates that affiliations exist for an object.



Once expanded, the circle becomes hollow. Click the circle again to collapse the object's affiliations.

Paging through child objects

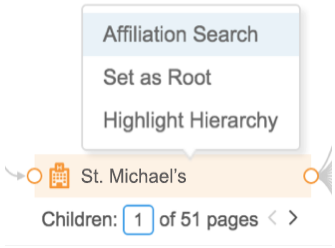
When more than ten child objects exist for an HCO, an indicator appears below the HCO object displaying the number of pages and scroll buttons.



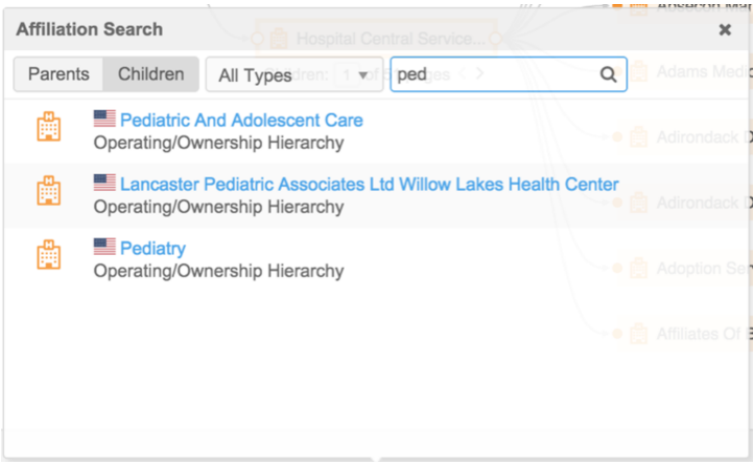
You can click the scroll buttons to display the next or previous ten children, or type a number to display a specific page (of ten objects) in the range.

Search affiliations

You can search through the list of affiliations for an object by right-clicking the object in the tree and selecting **Affiliation Search**.



A pane appears that enables you to type text and to refine the list of affiliations for the object you selected.

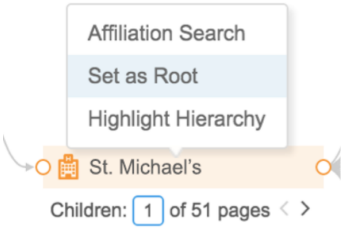


From the Affiliation Search pane, you can also select the following:

- The **Parent** button displays only parent objects.
- The **Child** button displays only child objects.
- The **All Types** drop down list includes options to select only HCO or HCP types for display.

Change the tree focus

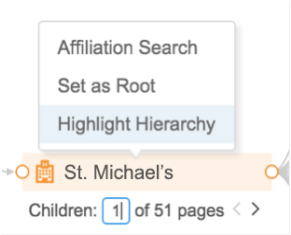
You can change the focus for the tree by right-clicking on an object and selecting **Set as Root**.



This re-centers the view with the object you selected as the root object for associated parent and child relationships.

Highlight an object's hierarchy

You can view the specific parent to child hierarchy for an object in the tree by right-clicking the object and selecting **Highlight Hierarchy**.



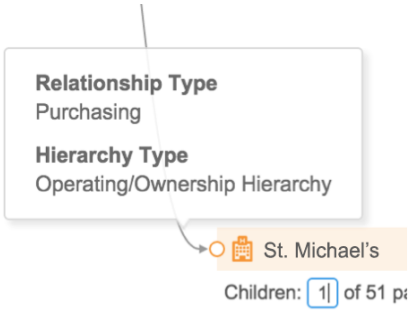
The object and its direct parent and child relationships are highlighted. Right-click the object again and select **Remove Highlight** to remove the highlighting.

View relationships between objects

You can view the specific relationship details between objects by hovering over the connecting line between the objects.

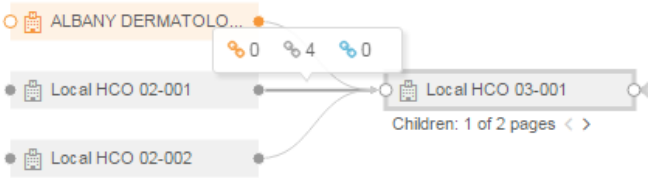
Single relationship

If only one relationship exists, the relationship and hierarchy types appear for that relationship link.



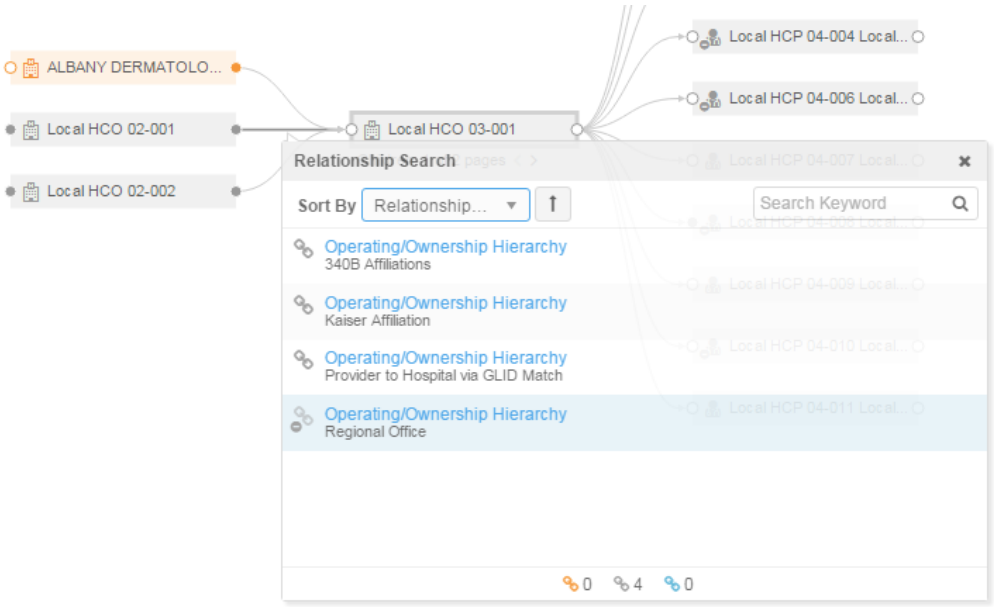
Multiple relationships

If multiple relationships exist, counts appear by relationship owner.



Relationship search

When you right-click on a relationship link the **Relationship Search** dialog enables you to view all of the relationships between two entities. You can sort the list by relationship or hierarchy type in ascending or descending order.



To refine the list, type a keyword in the search field to the right of the dialog. The list updates as you type.

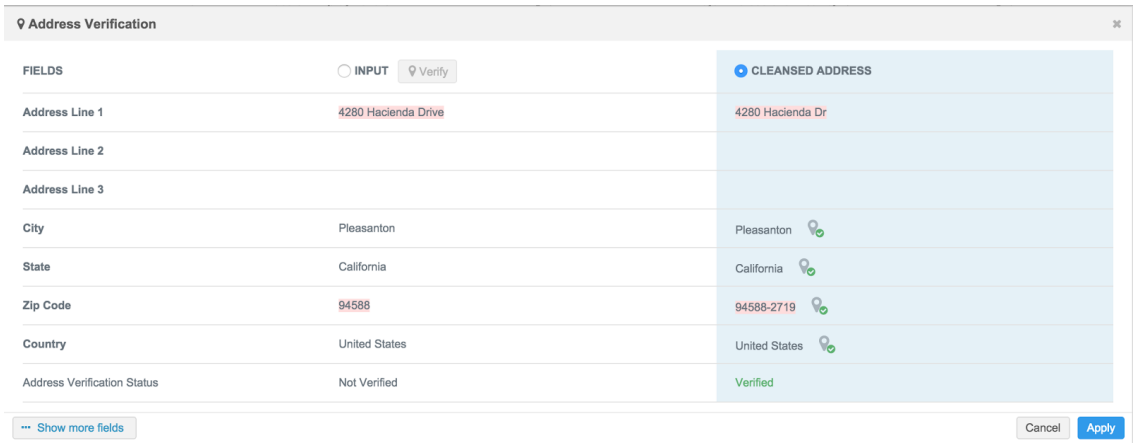
Address cleansing

The address database used by Network has been upgraded to a new version. Addresses reloaded into Network without custom keys may not match addresses validated in the previous version.

Address verification

When you add or update an address on an entity's profile page or in a data change request, a new dialog appears when you click to verify the address.

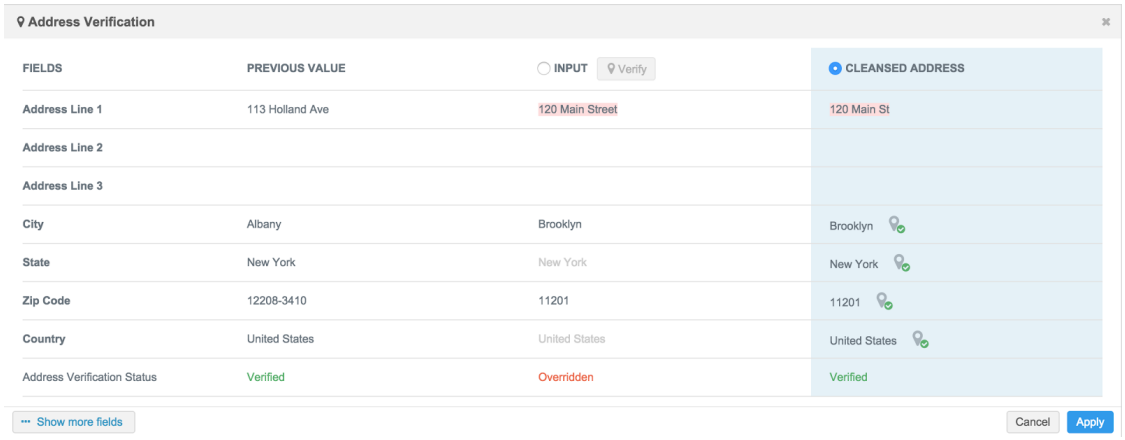
Add a new address on a profile and click the **Verify** button.



The **Address Verification** dialog displays the value provided, and the verified address. Differences between the address provided and the verified address are highlighted in the dialog,

and verification statuses are displayed at the bottom of each column. Fields that are sent to the address verification service as input are marked in bold. You can click the **Show more fields** button at the bottom left of the section to display additional fields.

In a profile, for example, change an existing address and click the **Verify** button.



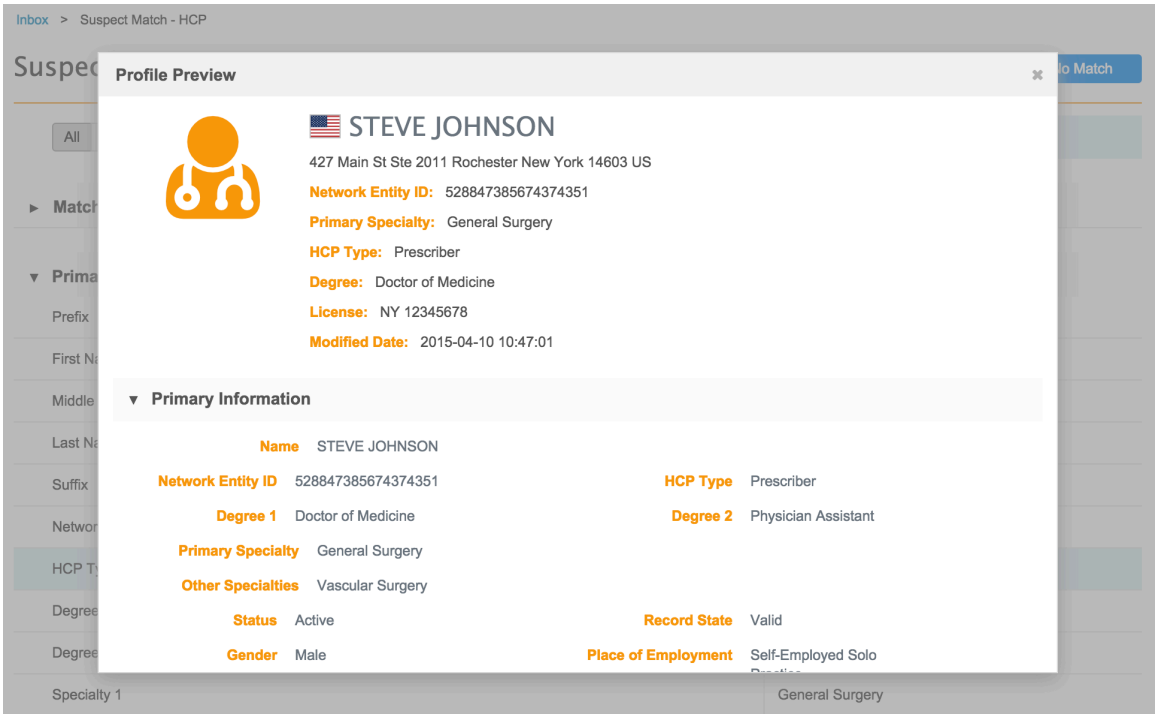
The **Address Verification** dialog appears with the previous value, the value you provided, and the verified address based on your input. Changes from the previous value are highlighted in the dialog.

You can select the address you want to use at the top of each column and click the **Apply** button, or click the **Cancel** button to return to the profile page without applying changes.

Suspect match

From the Suspect Match page, you can click a profile name to view a read-only version of the profile.

1. From the inbox, open a suspect match task.
2. On the Suspect Match page, click a profile name.
   The Profile Preview displays. You can scroll within this window to view the entire profile.

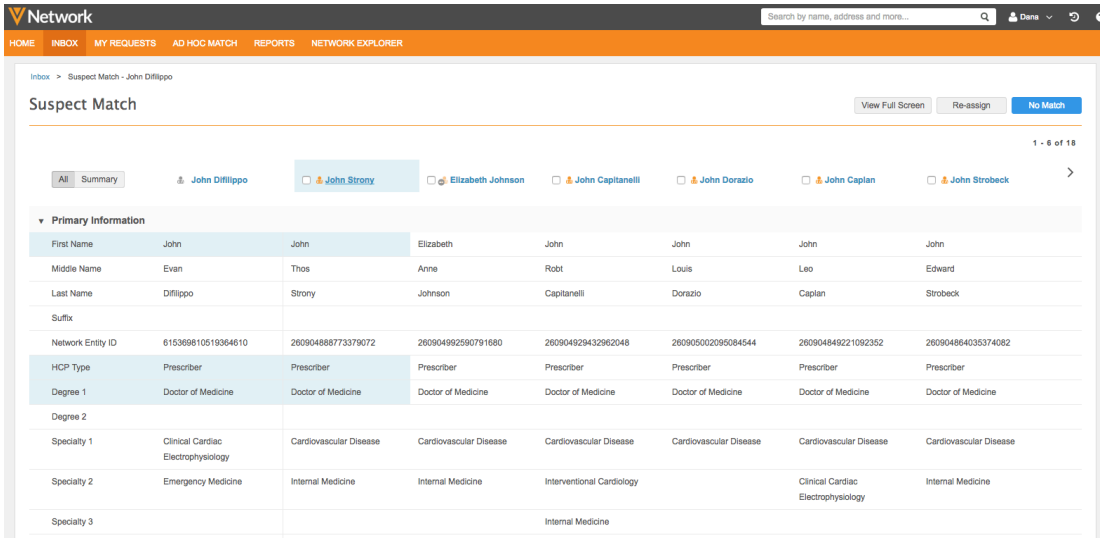


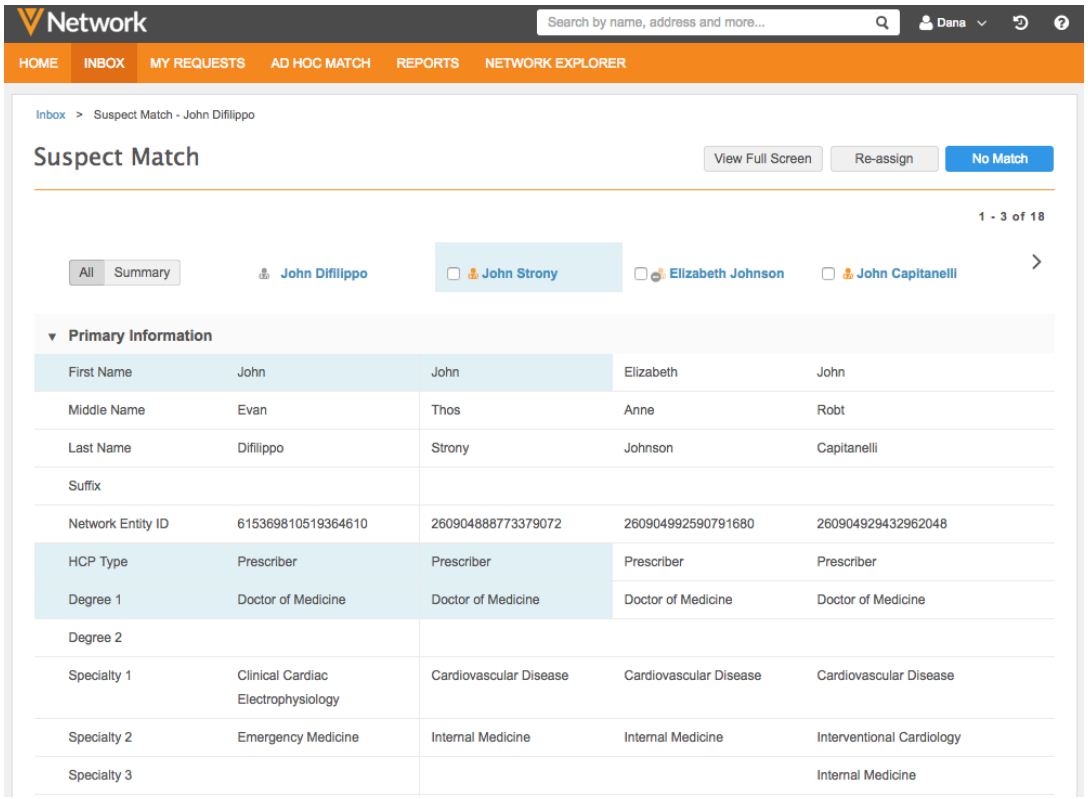
3. Click the **X** at the top right of the Profile Preview to close the window and return to the Suspect Match page.

Adaptive UI

The Suspect Match page now adjusts for changes in screen size. Adaptive UI ensures that information on this page is not truncated; a navigation arrow enables you to see additional columns.

The number of possible matches displayed depends on your screen size. Larger monitors will display 6+ possible matches at a time, while smaller monitors may display as few as 3 at a time.



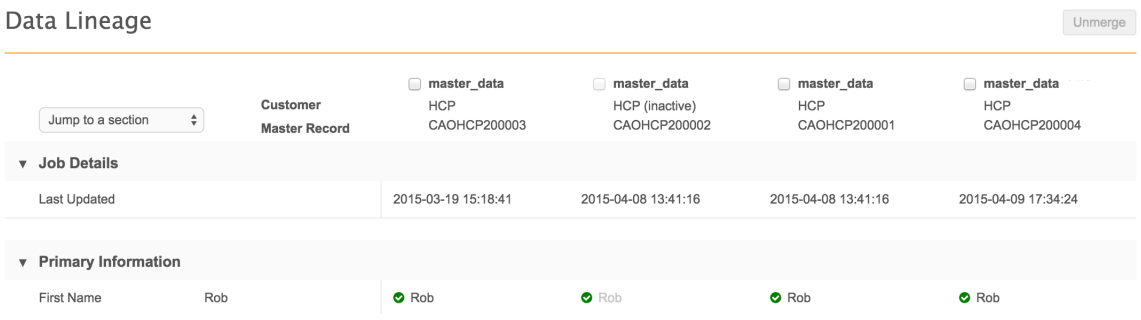


Data lineage

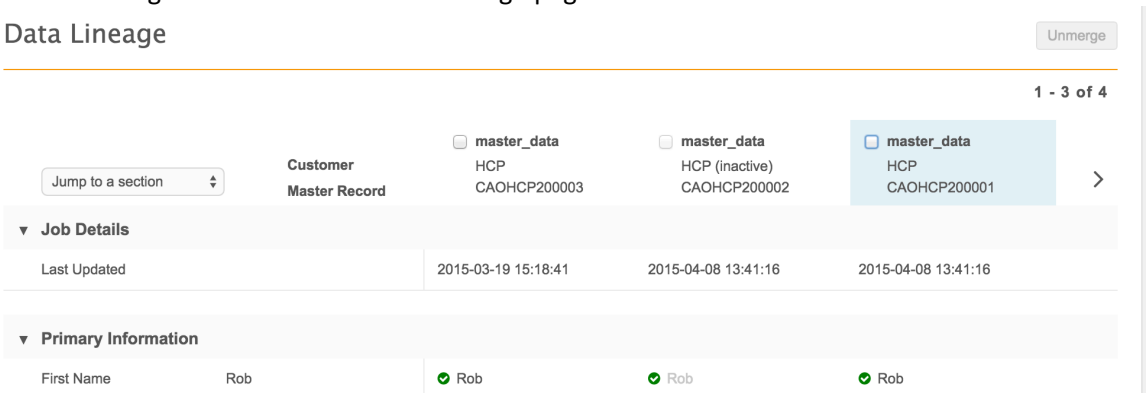
The Data Lineage page now adjusts for changes in screen size. Adaptive UI ensures that information on this page is not truncated; a navigation arrow enables you to see additional columns.

The number of source records displayed depends on your screen size. Larger monitors will display 6+ possible records at a time, while smaller monitors may display as few as 3 at a time.

The following screens illustrate its use on the Data Lineage page.



The following screen shows the data lineage page after it has been scaled down:

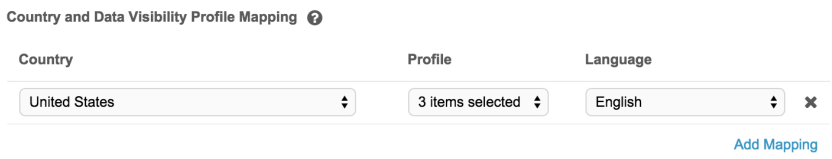


Single sign-on

Mapping a Language to a Country Code

In the single sign-on settings, in addition to mapping a country code in the incoming SAML to data visibility profiles, you can now map a language as well.

1. From the Admin console, in the top navigation, select **SETTINGS**.
2. In the left navigation, select **SSO Settings**.
3. In the lower right corner of the Single Sign-On Settings page, click the **Edit** button.
4. In the **Auto-Creation of User Accounts** section, you can select the language to map a country code to.

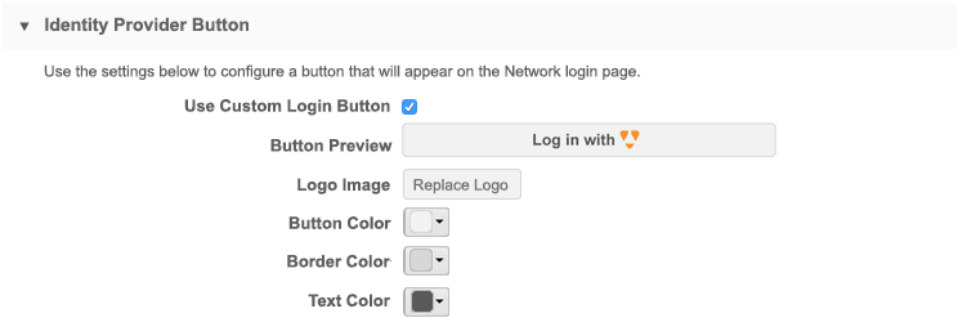


Identity Provider Button

You can also define and enable a login button for the specified identity provider. This feature is only available on production instances, and not on sandbox instances if at least one user in the instance is using a SAML security policy.

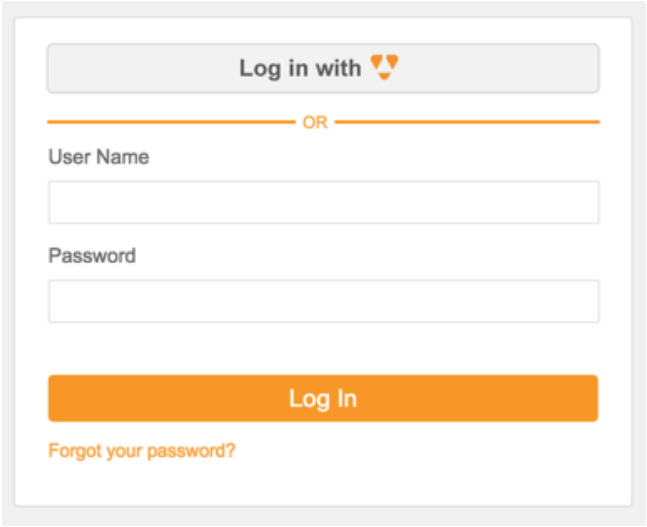
1. From the Admin console, in the top navigation, select SETTINGS.
2. In the left navigation, select **SSO Settings**.
3. In the lower right corner of the Single Sign-On Settings page, click the **Edit** button.

4. In the **Identity Provider Button** section, select the **Use Custom Login Button** check box.



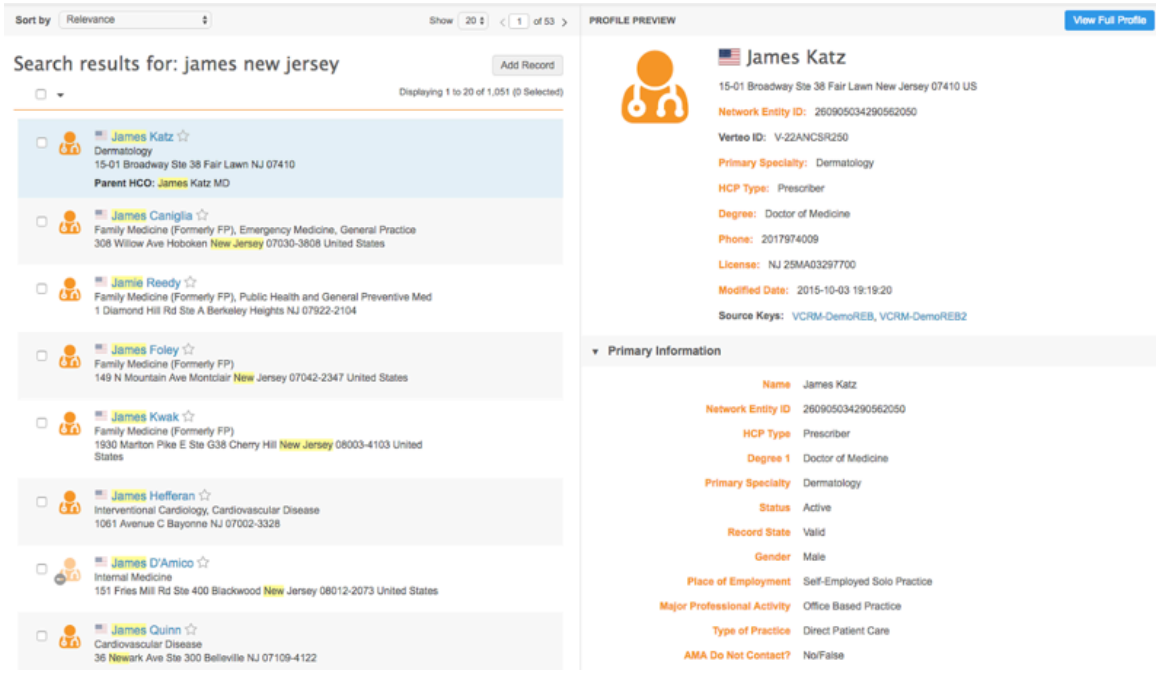
5. Select a logo image to appear to the right of the button text.
6. Select the fill color of the button, the border color, and text color.
7. In the lower right corner of the page, click the **Save** button.

The Network login page will display an additional button to log into the identity provider.



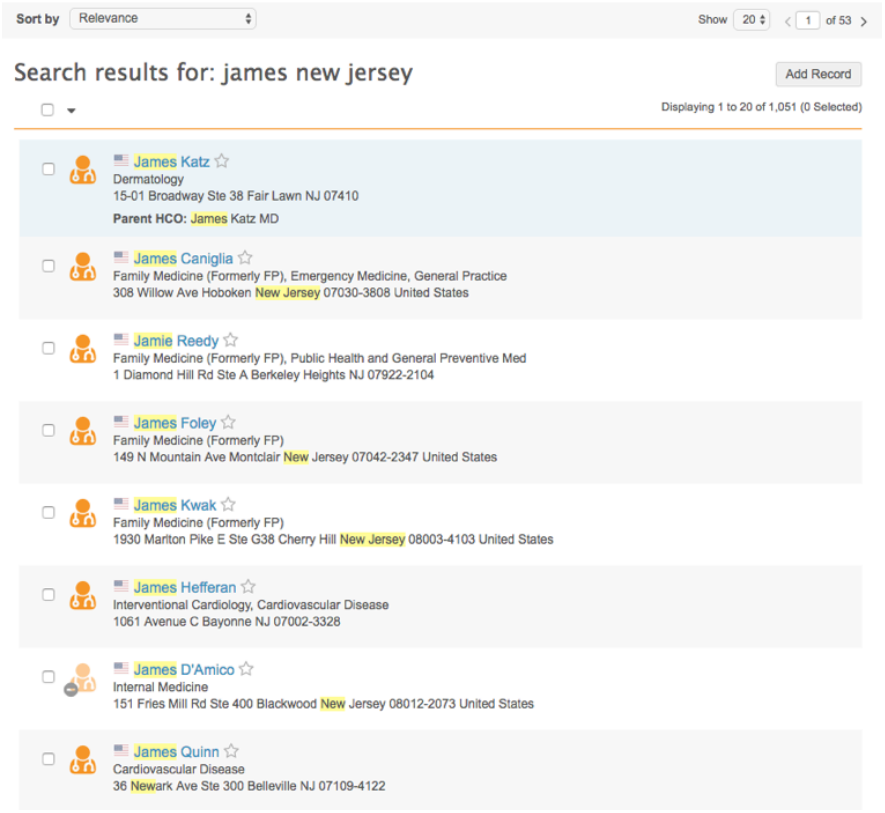
Search

When you click row in the search results, a profile preview for that record appears to the right of the search results list, if your screen size is 1440px or wider.



Click the **View Full Profile** button to open the record in the Profile page.

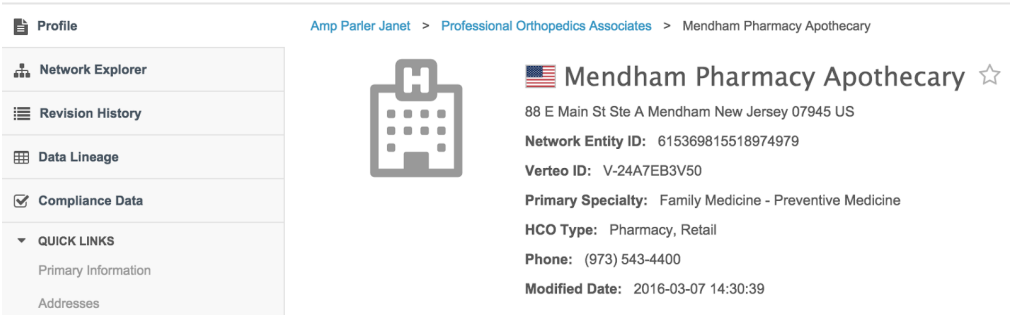
If your screen size is not wide enough, you will see the following for this example:



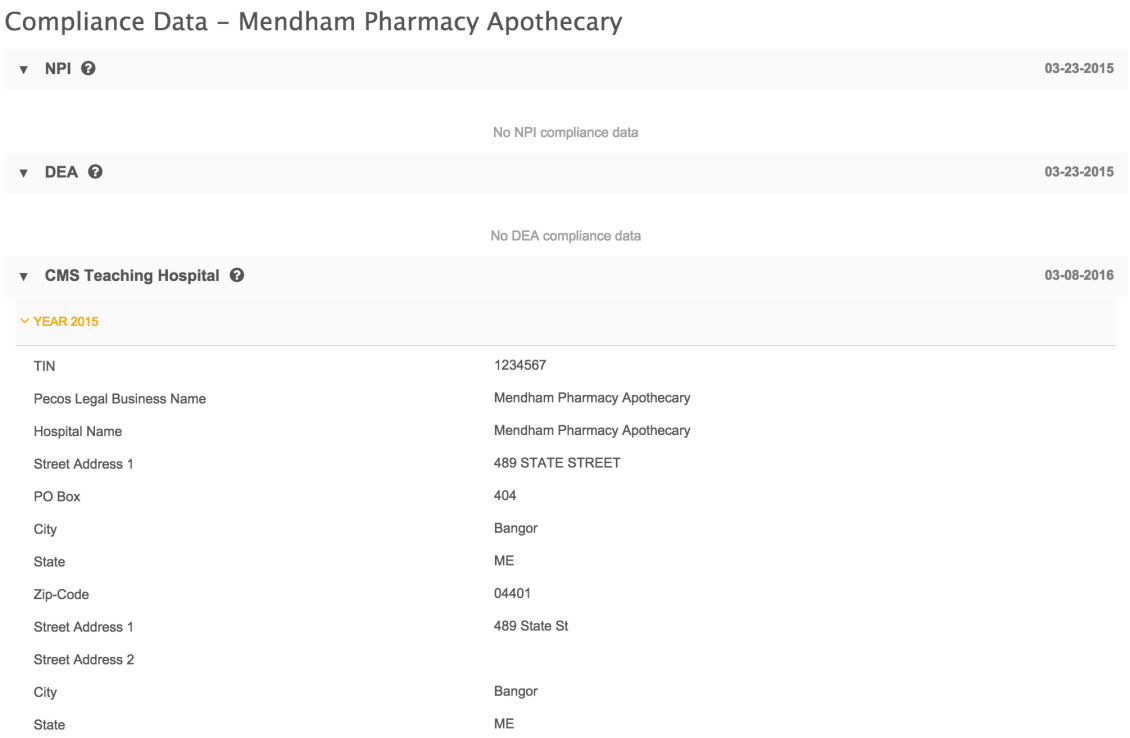
Profile enhancements

Compliance data

For United States data, select **Compliance Data** in the left navigation to display US compliance information.



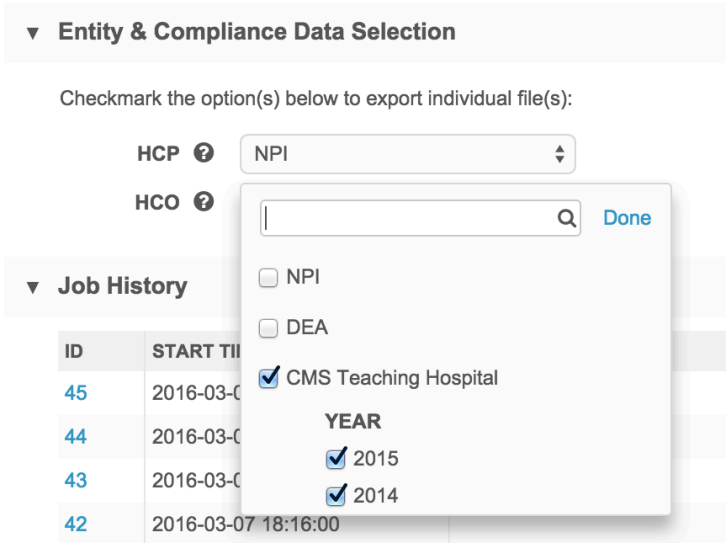
All available compliance information is displayed for the record. The CMS Teaching Hospital data is now available by year on the Compliance page.



US Compliance target subscription

The CMS Teaching Hospital data available through the US Compliance Target subscription can also be filtered by year.

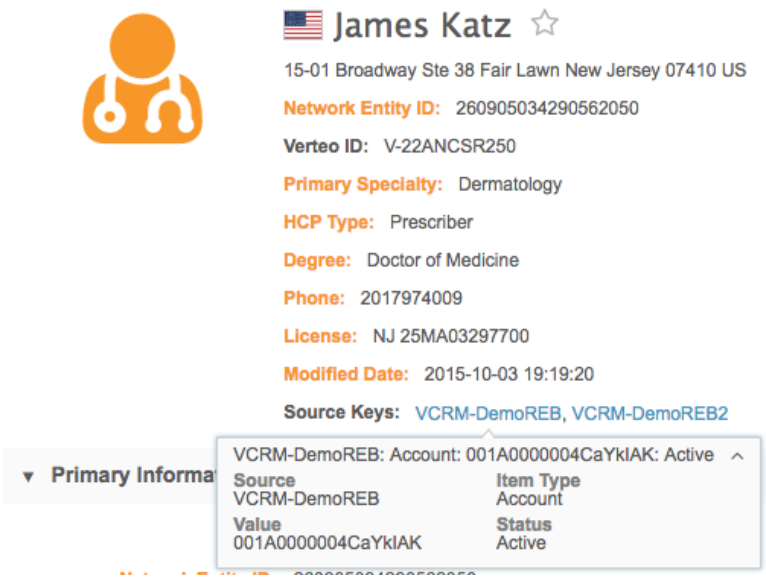
In the **Entity & Compliance Data Selection** section of the US Compliance Target subscription, click the **HCO** drop down and select the years to export under **CMS Teaching Hospital**.



Note: This functionality will be available in the Network 8.0.0.1 production release. The US Compliance Target Subscription page will not be available for the Network 8.0 sandbox release.

SOURCE KEYS

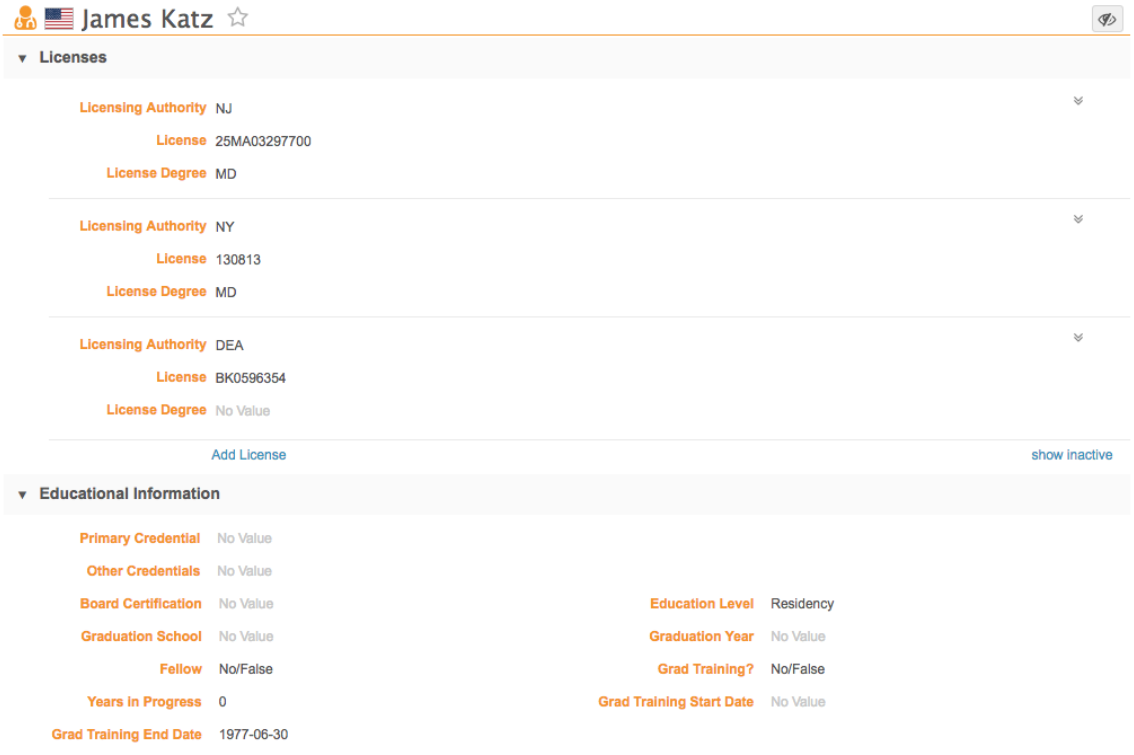
The Profile page now includes a drop down list under the profile summary that displays information on source keys contributing to the profile.



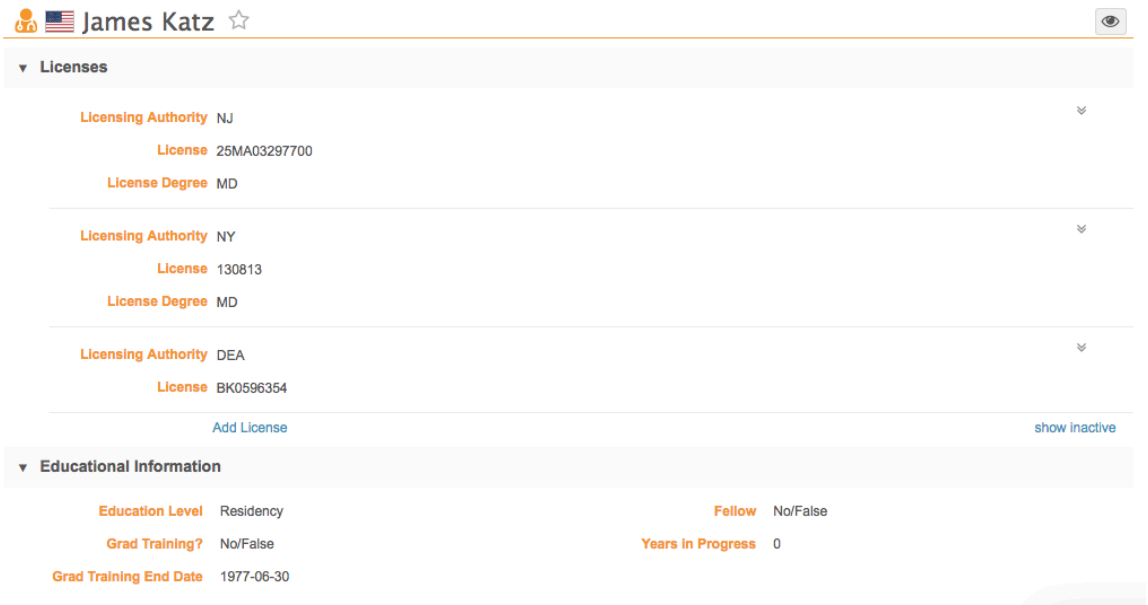
TOGGLE EMPTY FIELDS

You can show or hide empty fields on the Profile page by clicking the eye icon at the top right of the profile.

Empty fields visible:



Empty fields hidden:



TEXT FORMATTING

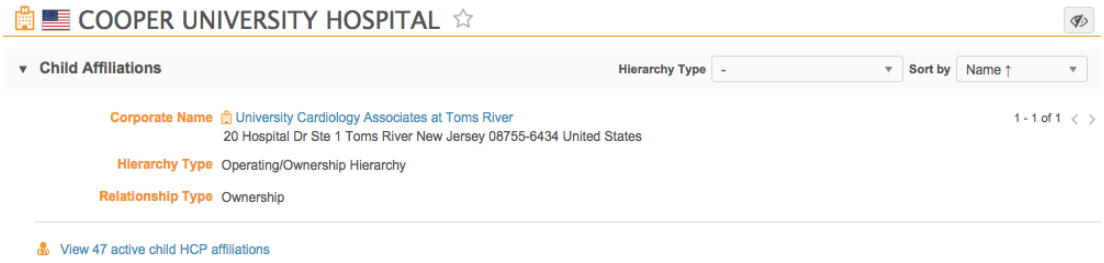
On the profile page, drop down lists now wrap text to display full descriptions for each value; previously, longer values were truncated to the width of the drop down list.

Profile Summary

The profile summary section now displays the full name and hover text for the HCO or HCP, regardless of length.

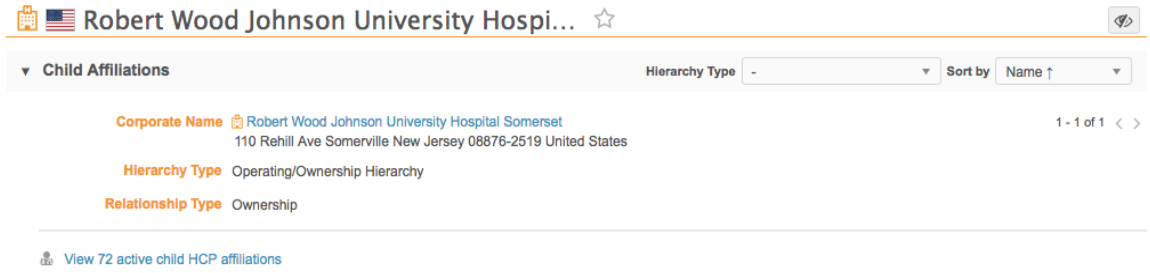
Affiliations

Child and parent affiliations within a profile are now sorted alphabetically within their respective sections.

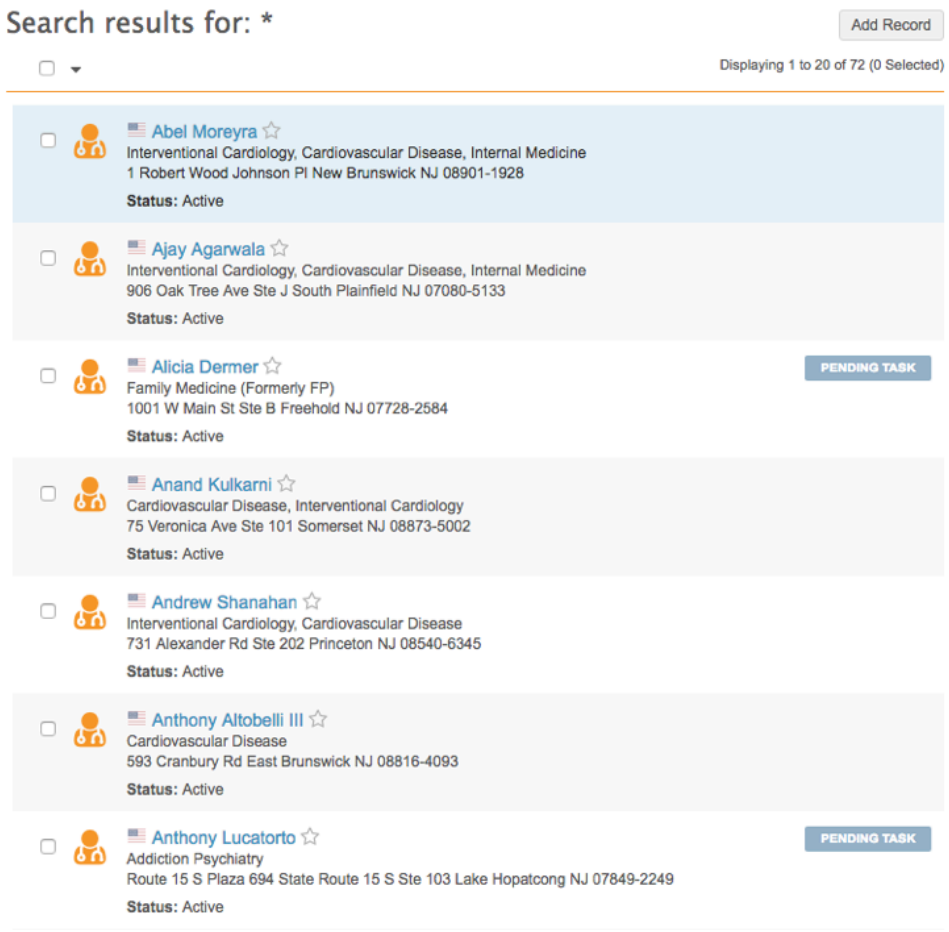


Link to Child Affiliations from an HCO Profile

The **Child Affiliations** section of an HCO profile includes a link that opens a search page containing all child HCP affiliations.

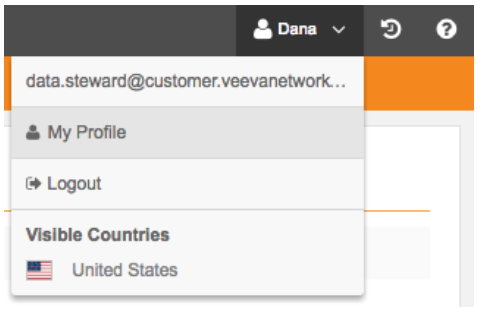


Click the link to view child affiliations on the search page.

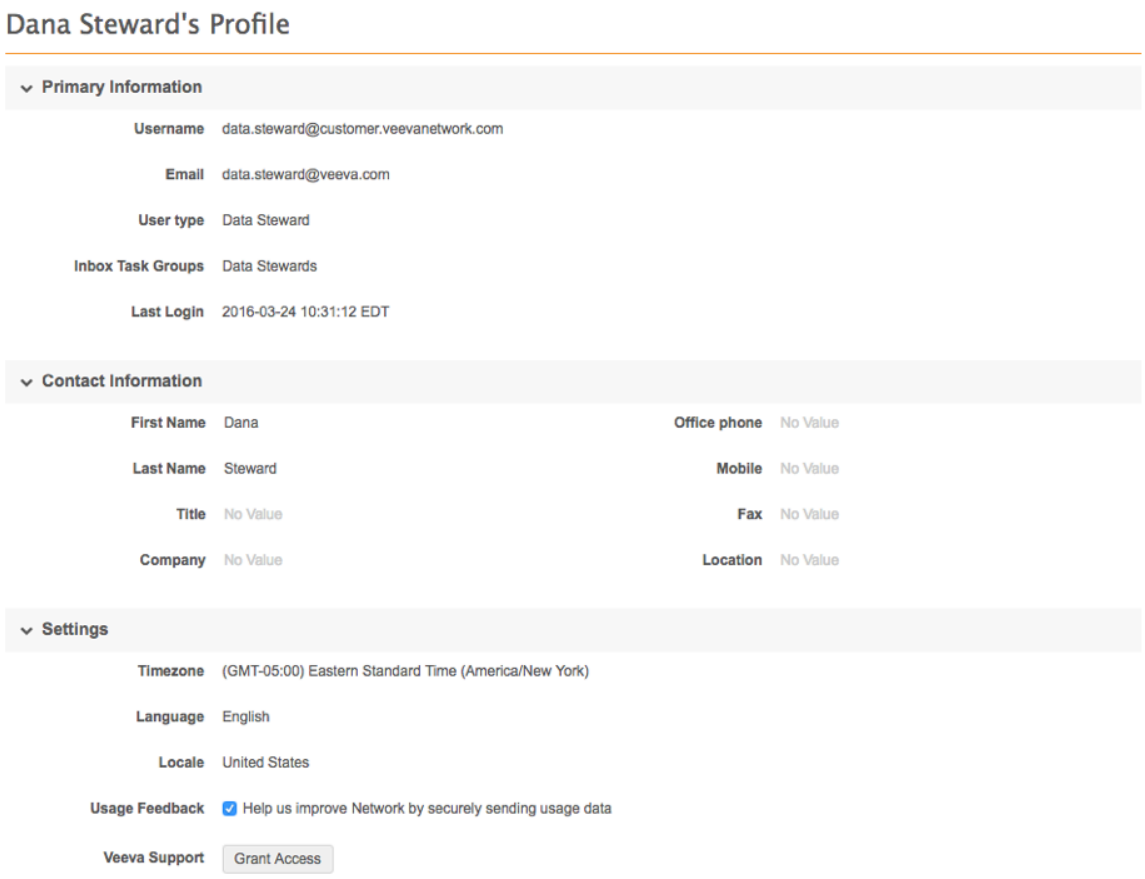


User profile

You can view and update your own user profile from the drop down list at the top right of the Network UI. Click the drop down list and select **My Profile**.

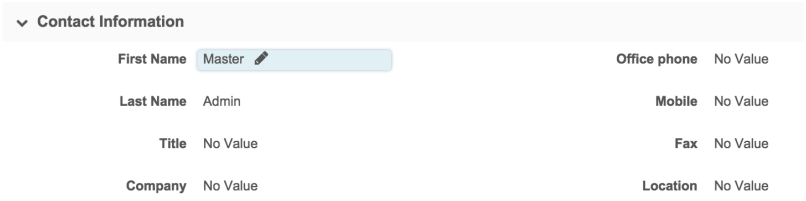


Your user profile page appears.



EDIT YOUR USER PROFILE

From your user profile, you can hover and click a field to update its value.



UPDATE YOUR USAGE FEEDBACK PREFERENCE

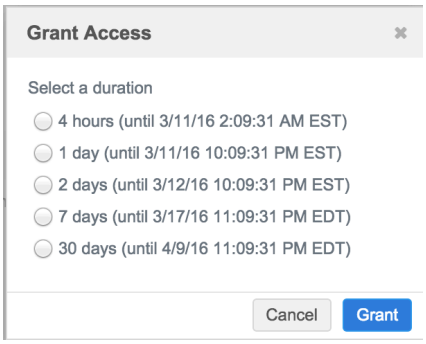
Veeva Network now uses Google Analytics to help improve your Network experience. By default, usage feedback is enabled for your user profile. If you want to turn it off, clear the check next to **Usage Feedback**.

Note that your feedback preference does not take effect until the next time you sign into Network.

GRANT SUPPORT ACCESS

You can grant Network Support access to your user profile by clicking the **Grant Access** button on your user profile page.

The **Grant Access** dialog appears with options for the duration of time you want to grant access.

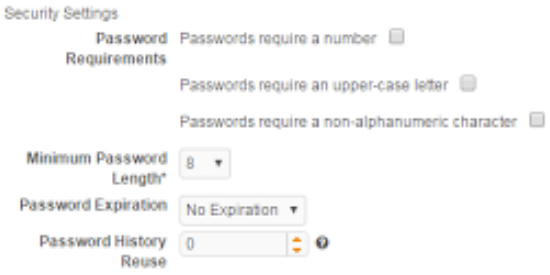


Select a duration and click the **Grant** button to grant access to Network Support for that duration.

If you want to revoke access before the duration has ended, click the **Change Access** button in your user profile and then click the **Revoke Access** button in the dialog.

Password history

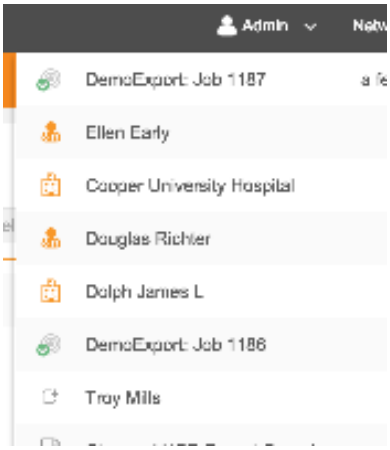
Administrators can now configure history reuse limits. In the administration console under **Security Settings**, select the **Password History Reuse** drop down list to specify reuse limitations.



The reuse value specifies the number of different passwords a user can have before they can reuse a past password. This value can be 0 (no history) to 100 passwords before reuse. For example, a value of 3 indicates that the user must use three different passwords before reverting to a previously used password. A value of 0 indicates that a password can be reused again immediately after it has expired.

Recent items

The recent items list now includes recently run jobs.



Browser support

As of January 12, 2016 Microsoft only supports the most current version of Internet Explorer (11+). Consequently, Network will no longer actively support earlier versions of Internet Explorer as of this release.

The following are the updated minimum browser requirements:

- Internet Explorer 11+
- Google Chrome (most recent stable version at Network release)
- Safari 6+

Note that Network is not optimized for tablets, phones, and other touch devices.

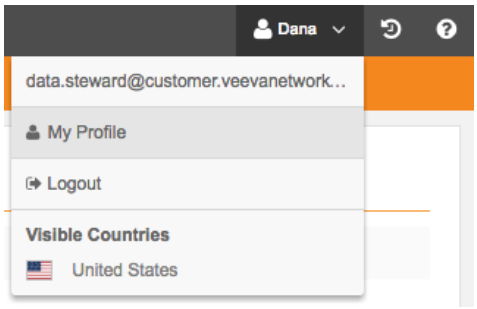
UI enhancements

The top right menu in Network has been updated. The following items appear directly on the navigation bar:

- Customer drop down menu
- Network/Admin console link
- Recent items drop down menu
- Help link

The following items appear within the Customer drop down menu:

- Link to user and data profiles
- Logout option
- Visible countries list



Network Data Quality Reports

Network Data Quality Reports builds on Network Reporting to simplify the process of generating, presenting, and consuming reports specifically designed to highlight issues with data quality.

Network Data Quality Reporting provides the following benefits:

- makes it easy to find and quantify data issues
- includes standard quality checks out of the box
- generates email notifications when issues are identified
- extend quality reports with test cases that are specific to your custom fields and data

Key concepts

Network Data Quality Reporting employs the following key concepts:

Data Quality Report – a suite of tests that quantify and summarize potential issues in customer master data

Test case – a quality report that identifies a single problem or symptom of poor data quality; for example, a list of active HCPs without active addresses

Entity group – a way to group results (similar to HCPs or HCOs) for data quality analysis; for example, hospitals in France, Nurses in Germany, or MDs in the EU.

Data visibility and security

Network Data Quality Reports are restricted by data visibility profiles. You can view any entity group allowed by your data visibility profile country and settings. By extension, you can view test cases relevant to entity groups allowed by your data visibility profile.

Specific results for a test case will only show records that you can access, according to your data visibility profile.

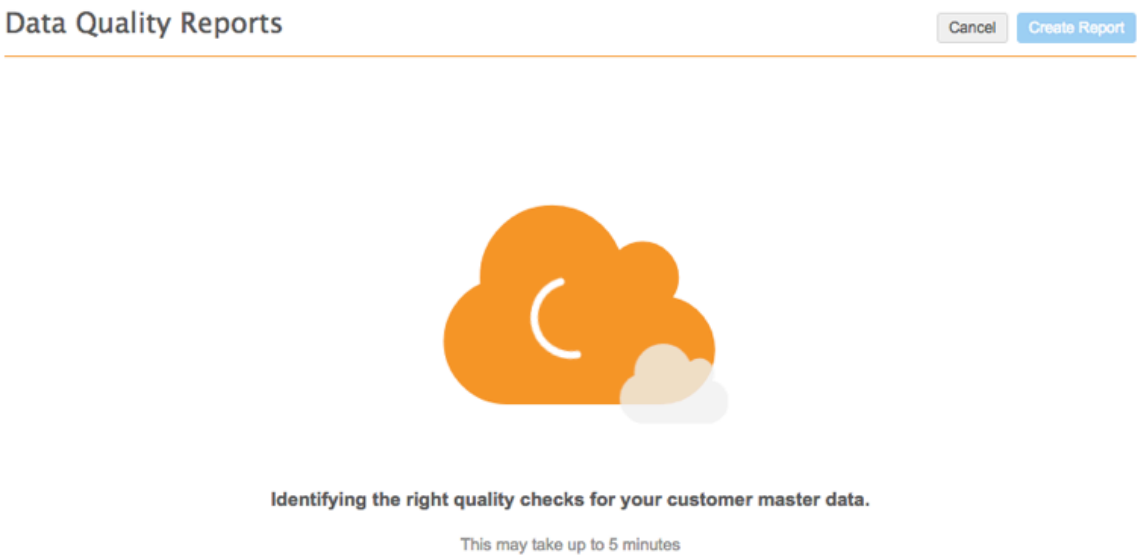
Network Data Quality Reports are available to each user role as follows:

- **Standard users –** Can view results but cannot add watchers or update entity group or test case queries.
- **Data stewards –** Can view all results, apply filters, and subscribe to emails, but cannot add or update entity group or test case queries.

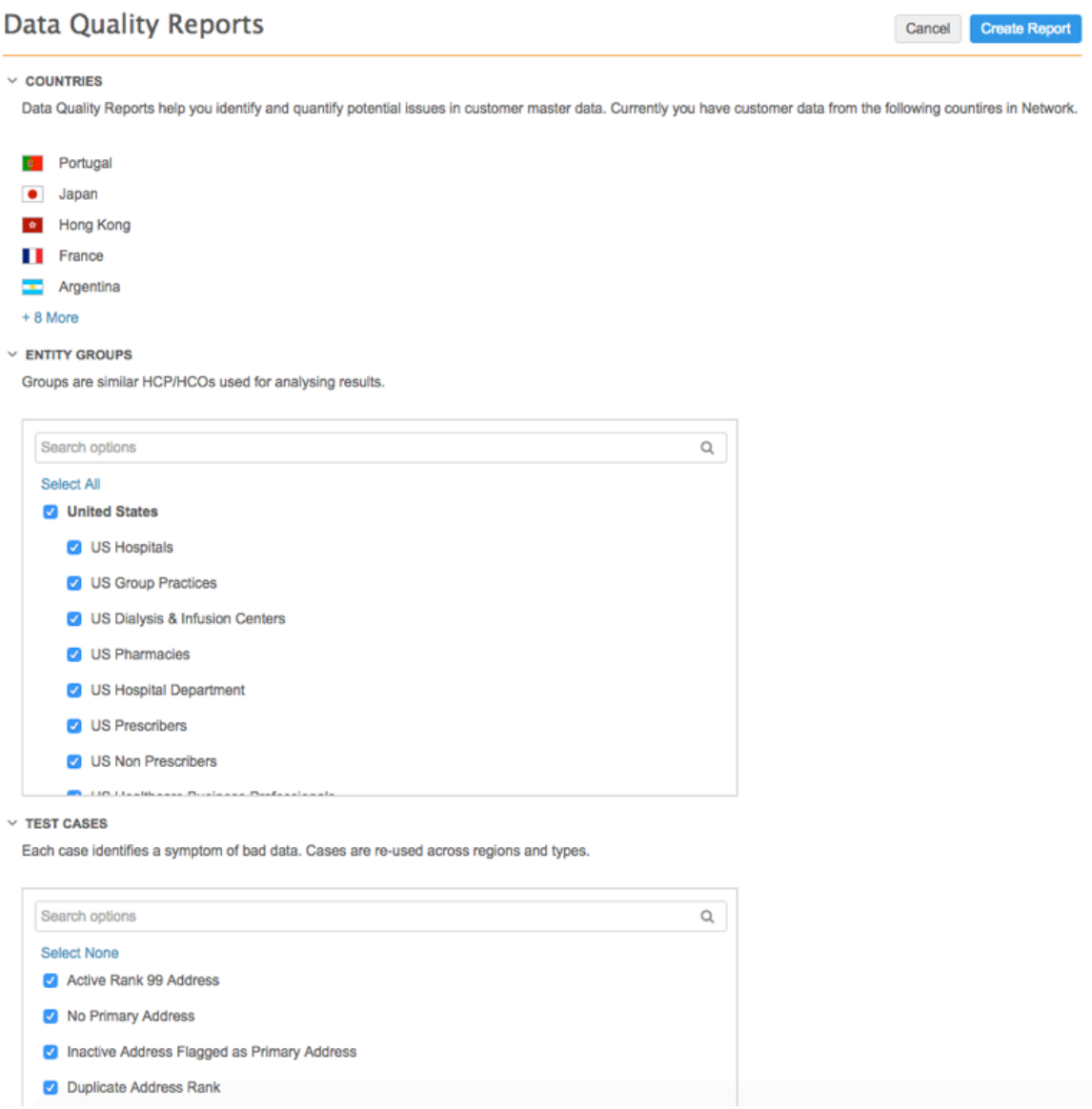
- **Data managers and administrators –** Can access all of the functionality described in this document.

GETTING STARTED

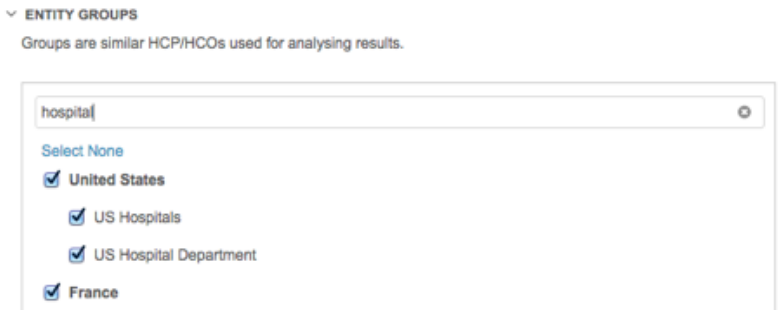
When you start Network Data Quality Reports for the first time, a wizard runs to determine the most appropriate checks for your data.



After the check runs, a page appears indicating which countries you have data for and which entity groups, test cases are available (and selected). You can specify email addresses for notifications on this page as well.

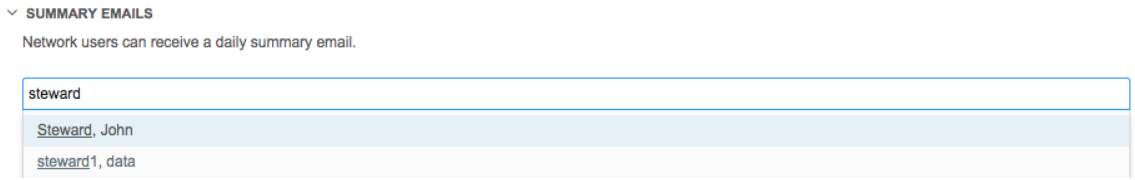


Select the entity groups and test cases to display in the Data Quality Reports dashboard. You can type in the search field for each to refine the list of entity groups or test cases.



To subscribe specific users to a daily summary email for the criteria you selected, type the user names in the **SUMMARY EMAILS** section. The current user is added to the summary emails list

by default. A drop down list refines the results as you type. Select a user and type more names as required.



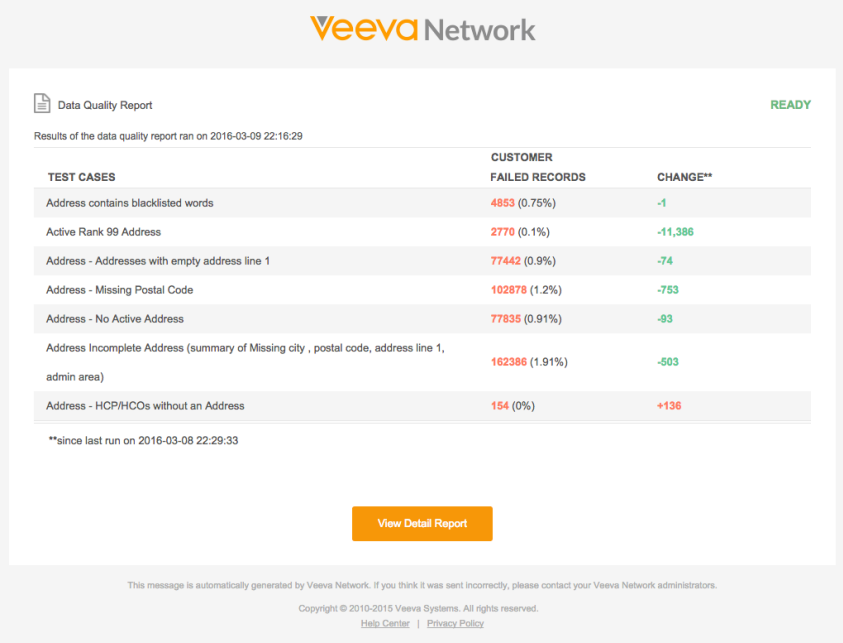
When you have finished selecting entity groups and test cases, and specified users for summary emails, click the **Create Report** button to run the initial report and display the dashboard. Note that the results will appear on the dashboard within 24 hours. You can perform all other tasks on the dashboard in the mean time.

Using Network Data Quality Reports

The following illustrates typical Network Data Quality Reports usage on a daily basis:

Email notifications

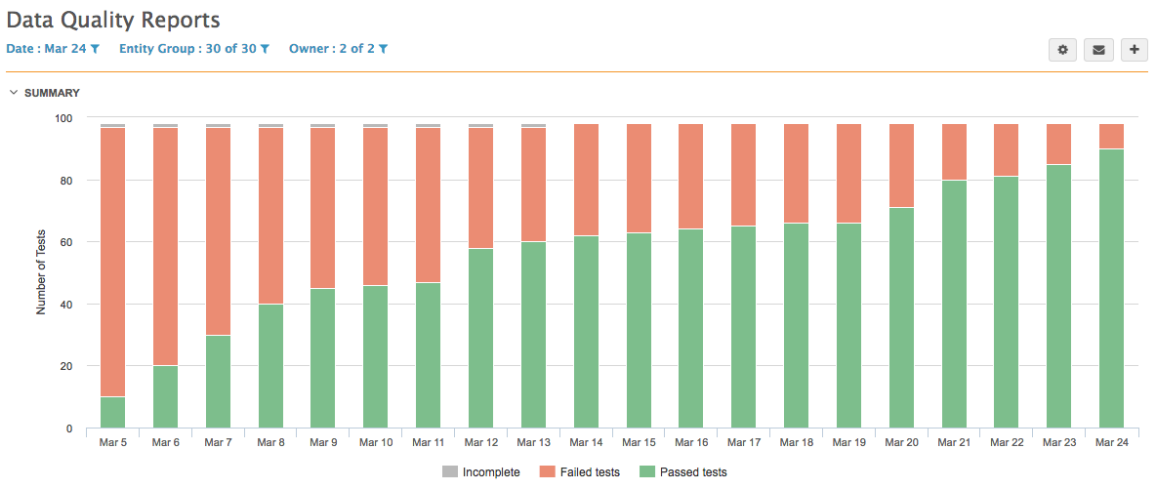
Email notifications are sent to users that are either watching or that subscribed to a test case or cases. They enable you to see a snapshot of daily activity and link directly to a detailed report. Email summary notifications can also be sent that contain all failing test cases. Administrators can choose which users receive this email by clicking the **Edit** button from the dashboard screen.



For more information on email notifications, see the “Email notifications” section.

Data Quality Reports dashboard

The Data Quality Reports dashboard enables you to see a summary of tests from the past day, along with a breakdown of test results by test case and entity group.



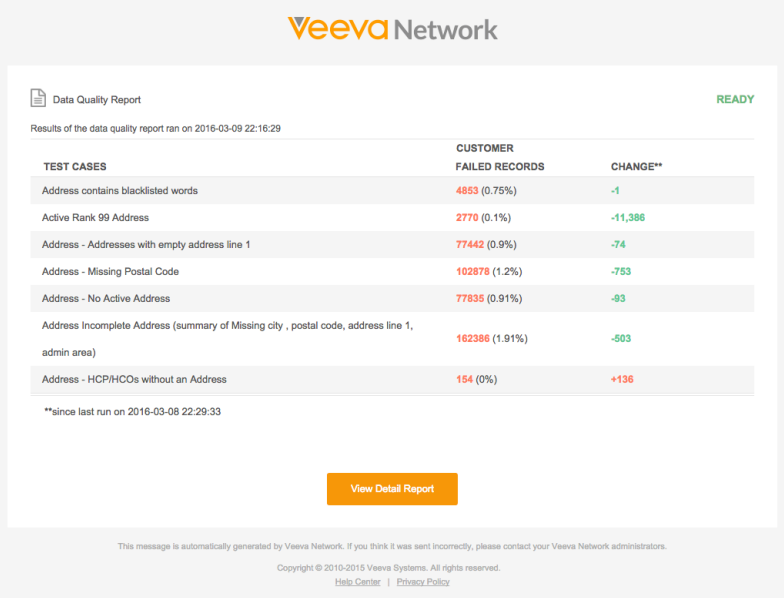
For more information, see the "Working with the Data Quality Reports dashboard" section.

Test case drill-through

From the Data Quality Reports dashboard, you can drill down through test cases to review and download the full results for the test case, including a detailed list of failed records.

EMAIL NOTIFICATIONS

You receive email notifications when you choose to watch a test case (from the Test Case Details page), when you have been added to the email notifications list for a test case or entity group, or by clicking the email icon on the dashboard.



Veeva Network

Data Quality Report READY

Results of the data quality report ran on 2016-03-09 22:16:29

TEST CASES	CUSTOMER FAILED RECORDS	CHANGE**
Address contains blacklisted words	4853 (0.75%)	-1
Active Rank 99 Address	2770 (0.1%)	-11,386
Address - Addresses with empty address line 1	77442 (0.9%)	-74
Address - Missing Postal Code	102878 (1.2%)	-753
Address - No Active Address	77835 (0.91%)	-93
Address Incomplete Address (summary of Missing city , postal code, address line 1, admin area)	162386 (1.91%)	-503
Address - HCP/HCOs without an Address	154 (0%)	+136

**since last run on 2016-03-08 22:29:33

View Detail Report

This message is automatically generated by Veeva Network. If you think it was sent incorrectly, please contact your Veeva Network administrators.

Copyright © 2010-2015 Veeva Systems. All rights reserved.

Help Center | Privacy Policy

Email notifications provide you with daily data quality report emails that include key statistics over the past day, including:

Time stamps – date and time of the current report, as well as of the previously run report

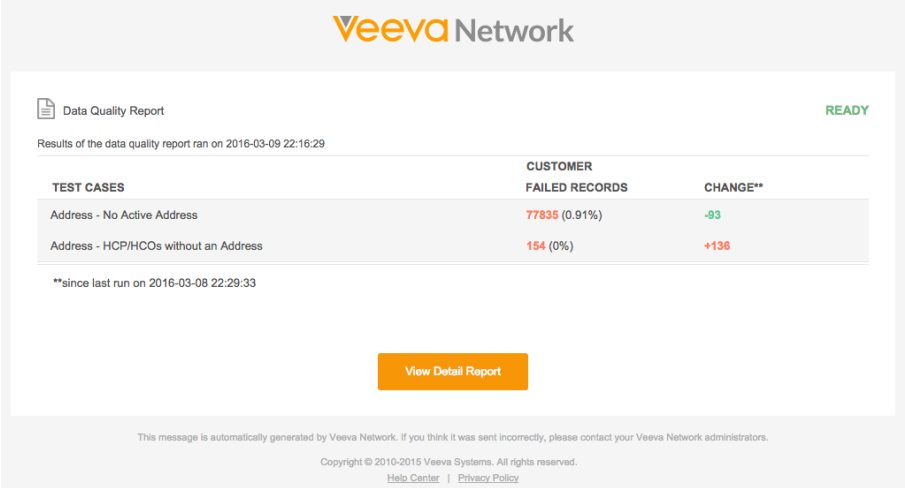
Test cases – name of each test case

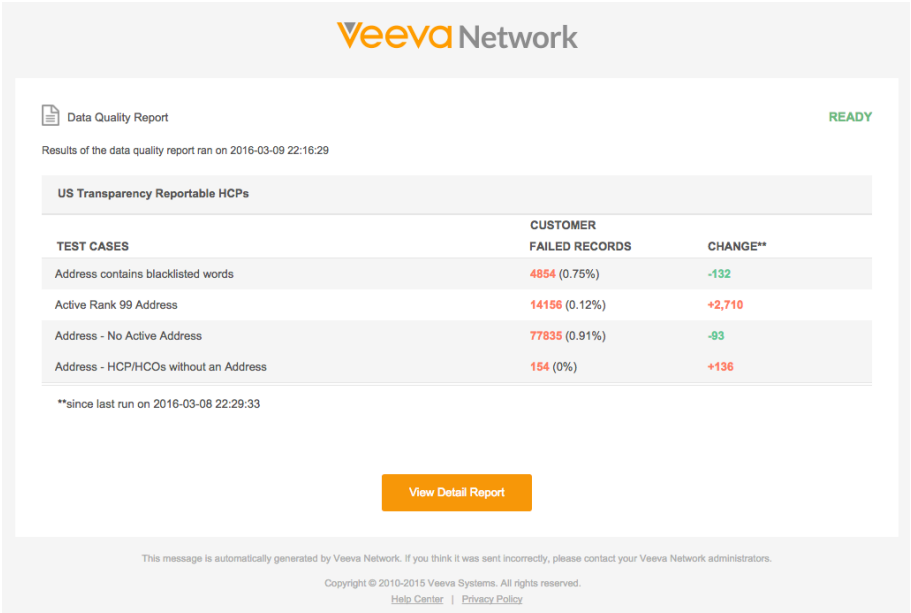
Failed records – number and percentage of failed records for both Veeva OpenData and customer records

Change – the pass rate change, in number of records, since the previously run report

From the Data Quality Report email, you can click the **View Detail Report** button to open the Data Quality Reports dashboard, which contains results for all tests cases across the specified groups. Note that the results displayed are for a specific run date specified in the email, not necessarily the most recent results.

Depending on notification, you might have specific test cases or entity groups only in the email.



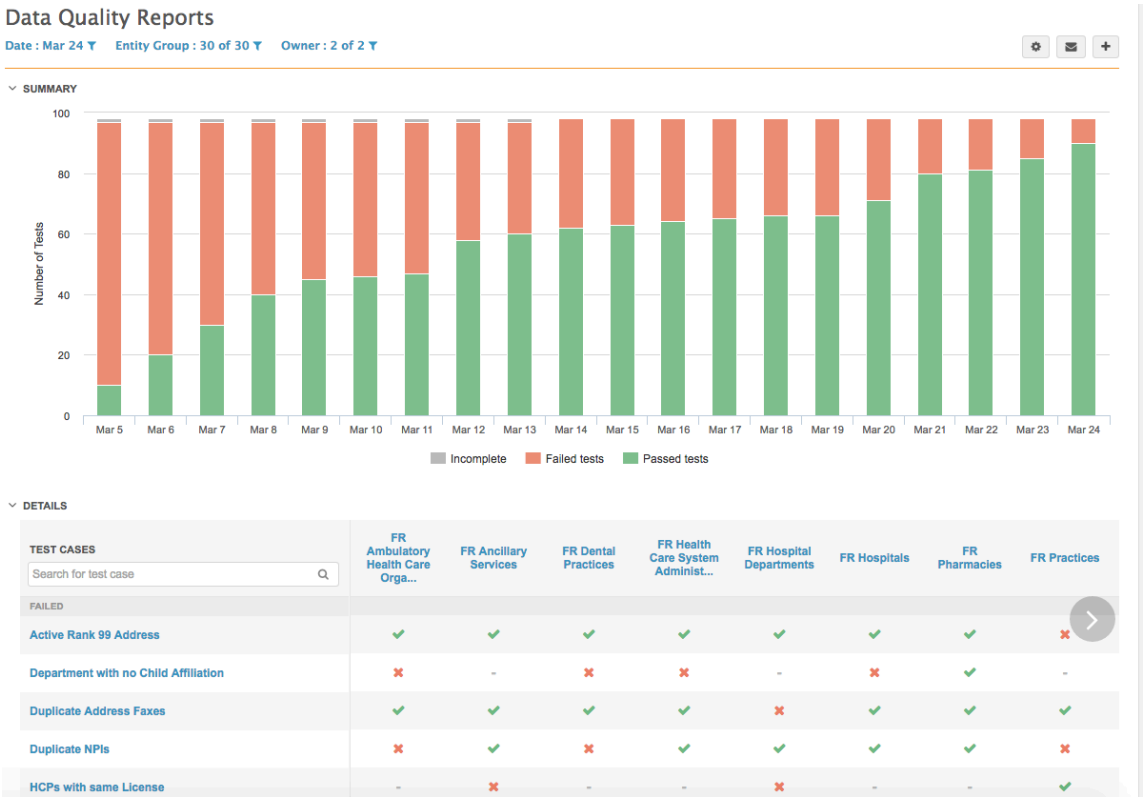


See “Working with the Data Quality Reports dashboard” for information on navigating the various components of the dashboard.

Working with the Data Quality Reports dashboard

You can access Network Data Quality Reports from within the Reports section of Network.

In the left navigation, click **Quality Reports**. The Quality Reports page shows a summary of the test case pass rate by day in chart form, along with details by test case and group, including specific tests passed, failed, or incomplete.



If you have recently created test cases and they have yet to run, they appear at the top of the test case scorecard.

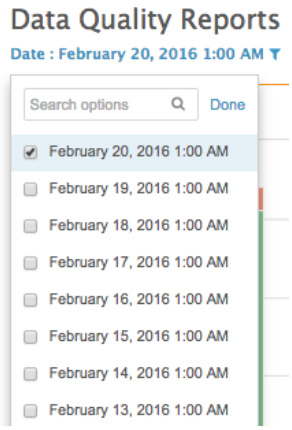
From the Quality Reports page, you can perform the following actions:

- Click the email icon to set up email notifications.
- Admins can click the gear icon to add users to summary emails.
- Click the download icon to print or export the chart as an image file.

- Click the **+** (Add) button to create a new test case or entity group using advanced queries.
- Hover over bars in the summary chart for specific numbers on the test case pass rates.
- Filter the graph and test cases by date, group, and owner.
- Search for and drill down through specific test cases.

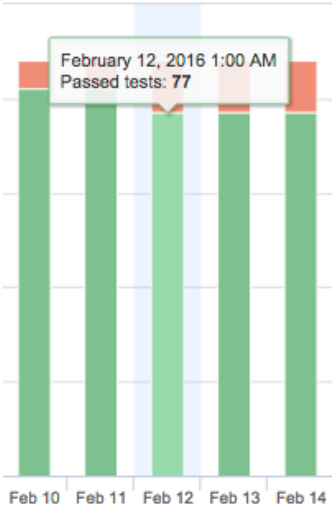
Viewing past report summaries

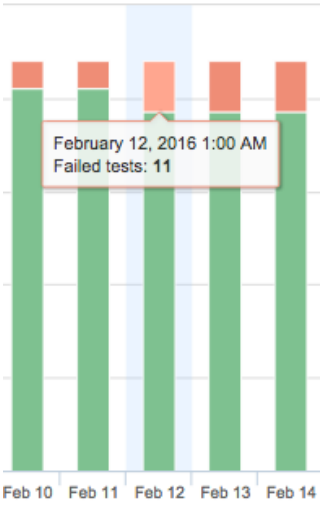
You can view quality reports for previous dates by selecting a date from the drop down list at the top of the Quality Reports page.



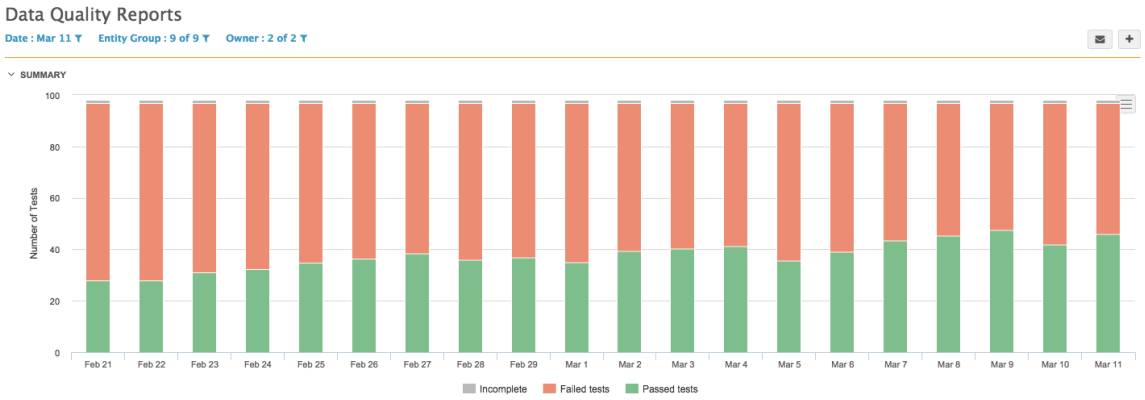
Within the drop down, you can begin typing to further refine the list of dates.

From within each report summary, you can hover over a bar in the chart to display specific numbers for each date and color.





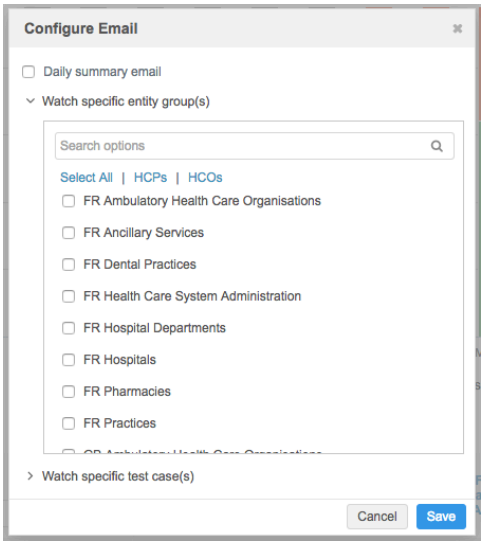
You can also filter the chart to display any combination of results by clicking **Incomplete**, **Failed tests**, and **Passed tests** at the bottom of the chart.



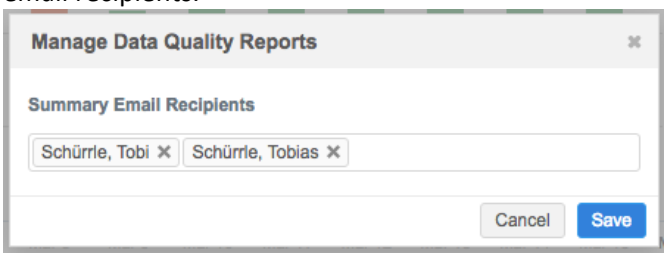
Configuring email notifications

You can define a list of users that will receive email notifications for the current report at the top right of the Quality Reports page.

1. Click the email icon.
2. In the **Configure Email** dialog box, select one or more report types to send and click the **Save** button.



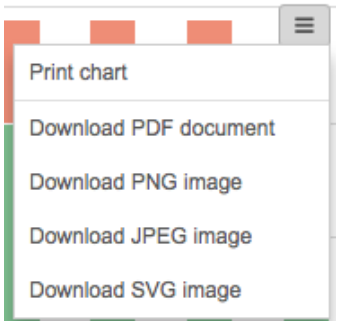
3. Administrators can click the gear icon at the top right of the page and specify summary email recipients.



4. To remove a name from the list, click the **x** beside the name. When you're done, click the **Ok** button.

Export or print report chart

You can print or export the report chart by clicking the download icon at the top right of the chart.



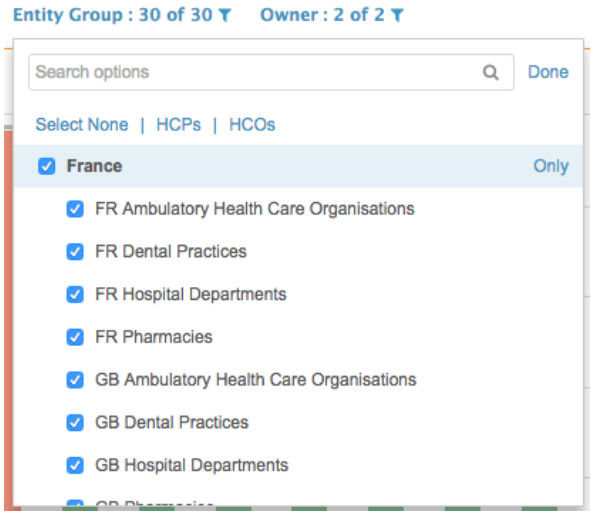
If you choose to print the chart, your system print dialog appears. If you choose to download the chart as an image or PDF file, it downloads to your local file system.

DRILLING DOWN THROUGH TEST CASES

The test cases section of the Data Quality Reports dashboard enables you to click through results to provide even more detailed results for test cases and entity groups. You can also refine this section further by including or excluding test cases and entity groups.

Refining results by entity group

You can refine the entity groups that appear for each test case by clicking the drop down list at the top of the page. Entity groups are grouped by country.

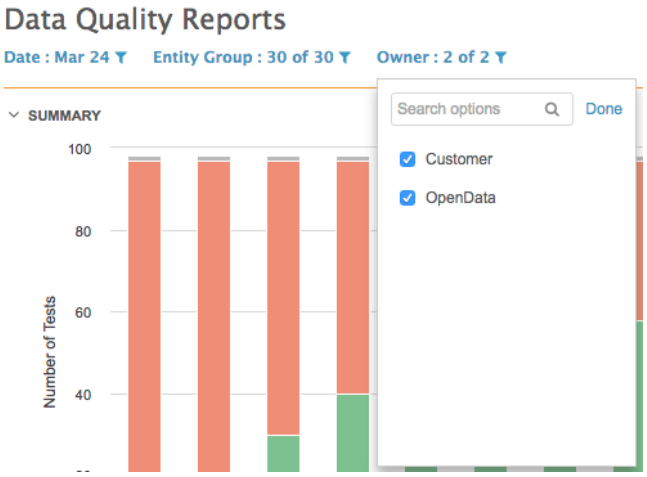


From the drop down list, select the entity groups to appear in the results. You can select them individually by clicking the check box next to each group, or click the corresponding links at the top of the list to select HCPs only, HCOs only, or all entity groups. Click the **Only** link next to an entity to clear all selections except that entity. (This link appears when you hover over an entity.)

You can also type text in the search box to refine the list and more easily select entity groups. Click the **Done** link to update the test case results.

Refining results by owner

You can refine the results by whether they are customer-owned or owned by Veeva OpenData.

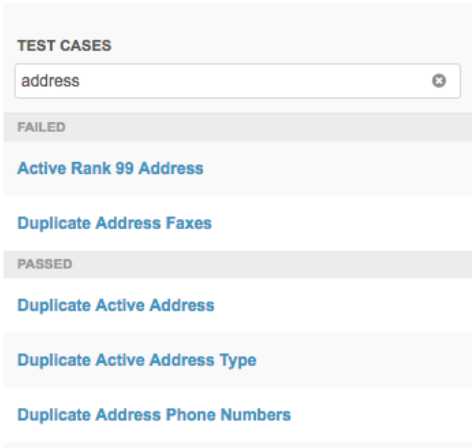


From the drop down list, select the check box next to one or more owners. Click the **Only** link next to an entity to clear all selections except that entity. (This link appears when you hover over an entity.)

You can also type text in the search box to refine the list and more easily select owners. Click the **Done** link to update the results.

Refining results by test case

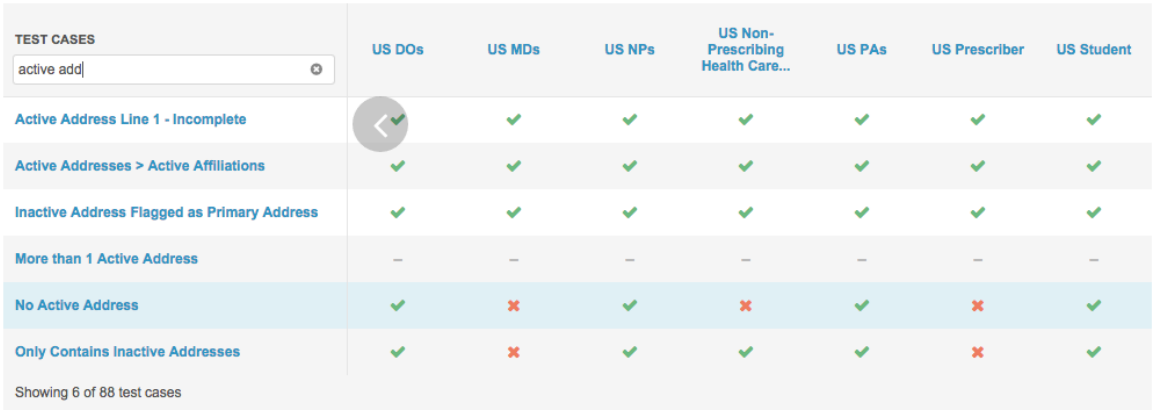
You can refine the test cases that appear by typing in the search field at the top of the list.



From the list, select a test case to display or press Return to view all test cases that appear in the refined list. Click the **x** to the right of the search field to clear your text and display all test cases.

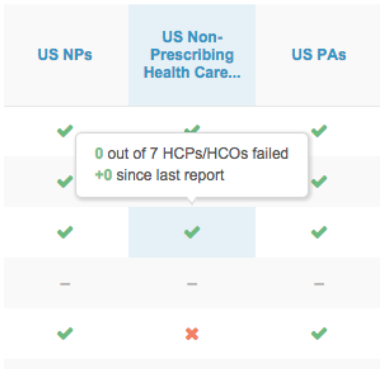
Drill down by test case

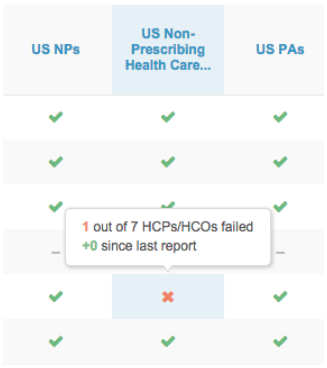
When you drill down by test case, you can get detailed results for all entity groups in a test case or a selected entity group. To view detailed results for all entity groups within a test case, click the title of the test case to the left of the results list.



To view details for a single entity group, hover over the test case result; summary information appears for that test case and entity group.

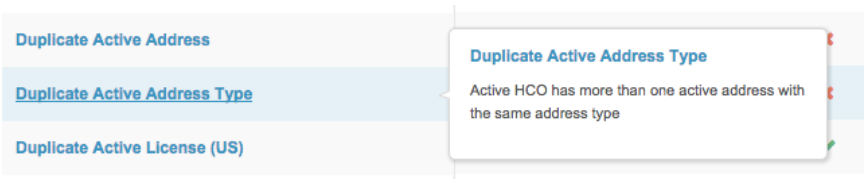
Hover over a specific result (check mark, **x**, or -) to view details for that entity group and test case.





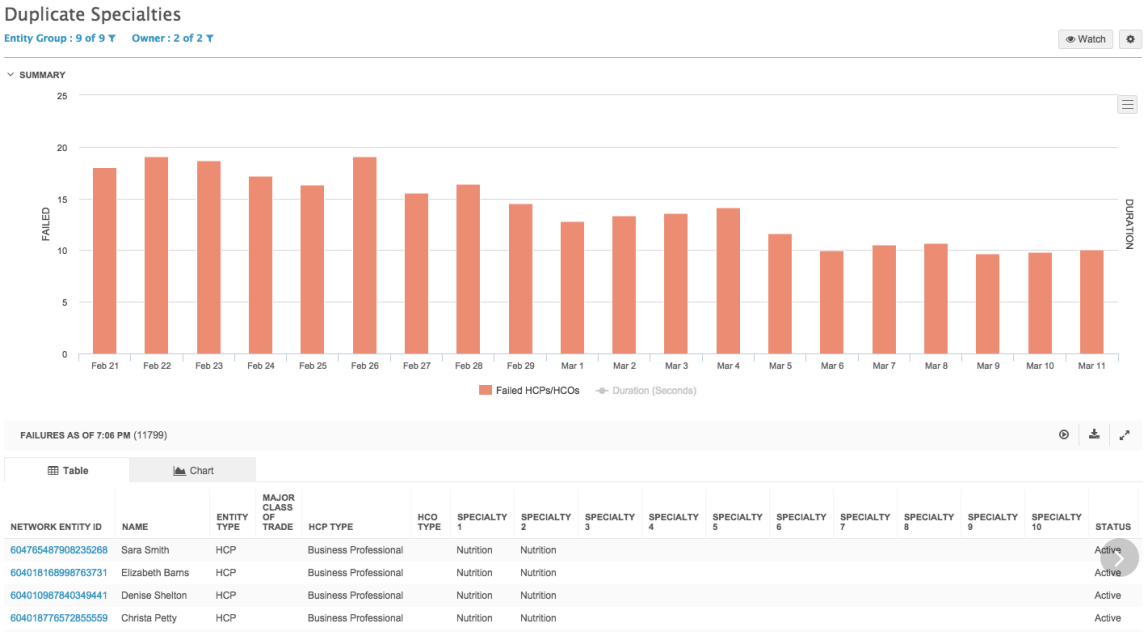
You can hover over the column heading to view the number of entities in that entity group.

Hover over a test case heading to view more information about that test case.



Test case details page

When you drill down to the test case page, a page similar to the Data Quality Reports dashboard appears. A summary section provides a chart with information on failures and durations for that test case, and a detailed section below provides a list of the failed records.

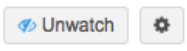


From the test case details page, you can perform the following actions:

- Click the **Watch** button to receive email updates for the test case.
- Click the gear icon to edit or delete the test case.
- Hover over bars in the summary chart for specific numbers on the test case pass rates.
- Toggle test case failures and durations in the summary chart.
- Filter the results by group and owner.
- Open profiles directly from the list of failed records.
- Re-run or download the report.
- Open the report in full screen mode.
- View the report results as a chart.

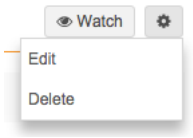
Watch a test case

You can receive email updates for a particular test case by clicking the **Watch** button at the top right of the test case details page. The button toggles to **Unwatch**.



Edit or delete a test case

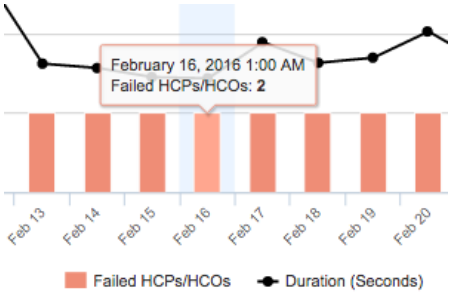
You can edit or delete a particular test case by clicking the gear icon at the top right of the test case details page. If you select **Delete**, a confirmation dialog appears before deleting the test case.



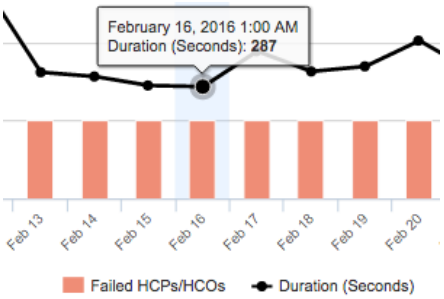
If you select **Edit**, the test case page appears with the advanced query editor and a list of applicable entity groups. For more information on editing a test case, see the "Adding or updating test cases" section.

View summary information

You can filter the summary chart to toggle display of **Failed HCPs/HCOs** and **Duration (Seconds)** at the bottom of the chart. You can then hover over the bars to view the timestamp for the test along with the total number of failed HCPs and HCOs.

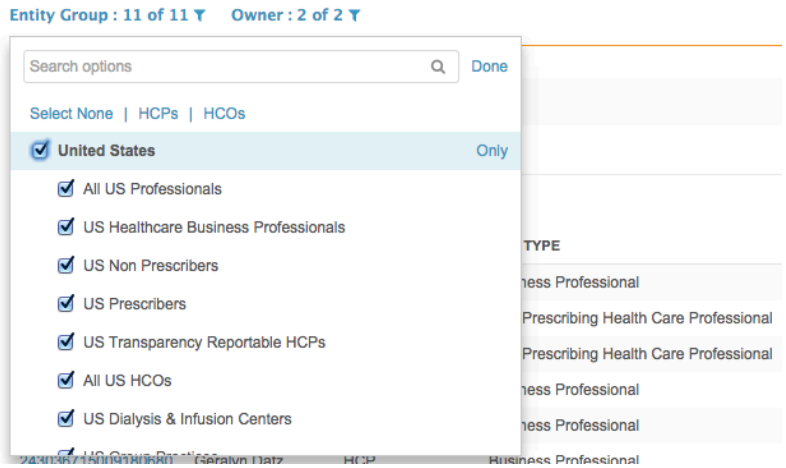


Hover over the duration line to view the timestamp and duration of the test case in seconds.



Refine results by entity group

You can refine the entity groups that are included in the graph by clicking the drop down list at the top of the page.

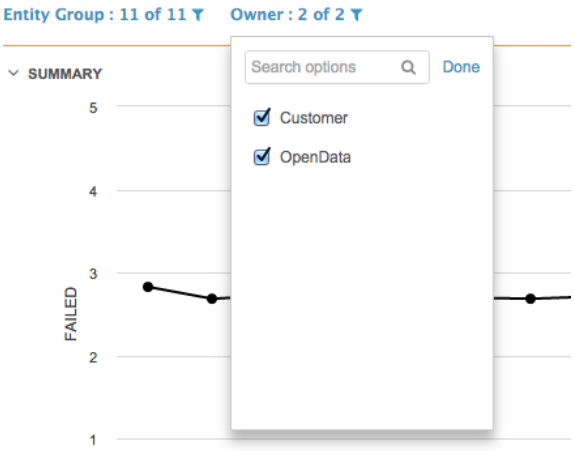


From the drop down list, select the entity groups to appear in the results. You can select them individually by clicking the check box next to each group, or click the corresponding links at the top of the list to select HCPs only, HCOs only, or all entity groups. Click the **Only** link next to an entity to clear all selections except that entity. (This link appears when you hover over an entity.)

You can also type text in the search box to refine the list and more easily select entity groups. Click the **Done** link to update the test case results.

Refining results by owner

You can refine the results by whether they are customer-owned or owned by Veeva OpenData.

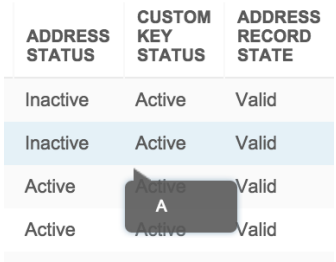


From the drop down list, select the check box next to one or more owners. Click the **Only** link next to an entity to clear all selections except that entity. (This link appears when you hover over an entity.)

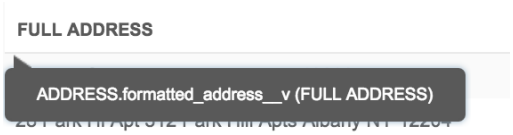
You can also type text in the search box to refine the list and more easily select owners. Click the **Done** link to update the results.

Examine test case results

From within the list of failed records, you can click a profile link to open it in a new browser tab, and hover over various column values to view additional information, including codes for record states and statuses.

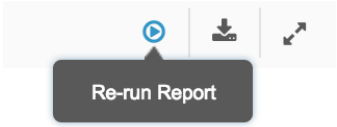


You can also hover over column headings to view detailed field names.



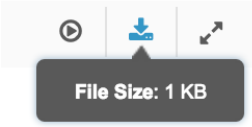
Re-run a test case

You can re-run the test case to update the results by clicking the **Re-run Report** icon at the top right of the results. The report re-generates and displays the updated results.



Download report results

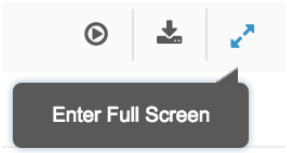
You can download the test case results by clicking the **Download** icon at the top right of the results. When you hover over the icon, the file size appears under it.



The report downloads within a ZIP file, with its file name date and time stamped according to the user's locale settings. The report in the CSV appears as in the same format and order as in the preview, in tabular format.

View the report full screen

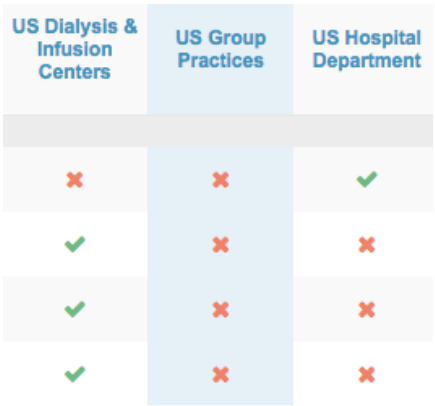
To view the resulting report in full screen mode, click the **Enter Full Screen** icon to the top right of the results. Press the Esc button on your keyboard to exit full screen mode.



DRILL DOWN BY ENTITY GROUP

When you drill down by entity group, you can edit the entity group query and see detailed results for all test cases for the selected entity group.

From the Data Quality Reports dashboard, click an entity group heading in the results.



The entity group page displays the query editor containing the query that defines the entity group, as well as a list of the test cases and their corresponding results.

From the entity group page, you can perform the following actions:

- Define the name, description, entity type, and query for the entity group.
- Add users to receive email notifications for the entity group.
- Drill through to test cases.
- Enable test cases to run for the entity group.
- Add test cases to run for the entity group.

CREATE OR UPDATE THE ENTITY GROUP QUERY

Entity groups enable you to group report results (for example, by country and entity) so that test cases can be used globally, without additional modification.

The query editor used for editing entity groups includes the same functionality as the advanced query editor for Network Reporting. The query editor offers tools for auto completion, as well as easy access to quick lists of available keywords, tables, fields, and operators. As you construct your query, the editor automatically validates it.

Rules for defining entity groups

When you add or update an entity group, the following rules apply:

- SELECT statements must include vid__v and is_veeva_master__v
- The DISTINCT clause is required

- UNIONS are only allowed in sub-queries
- No semicolon at end of the query

For example:

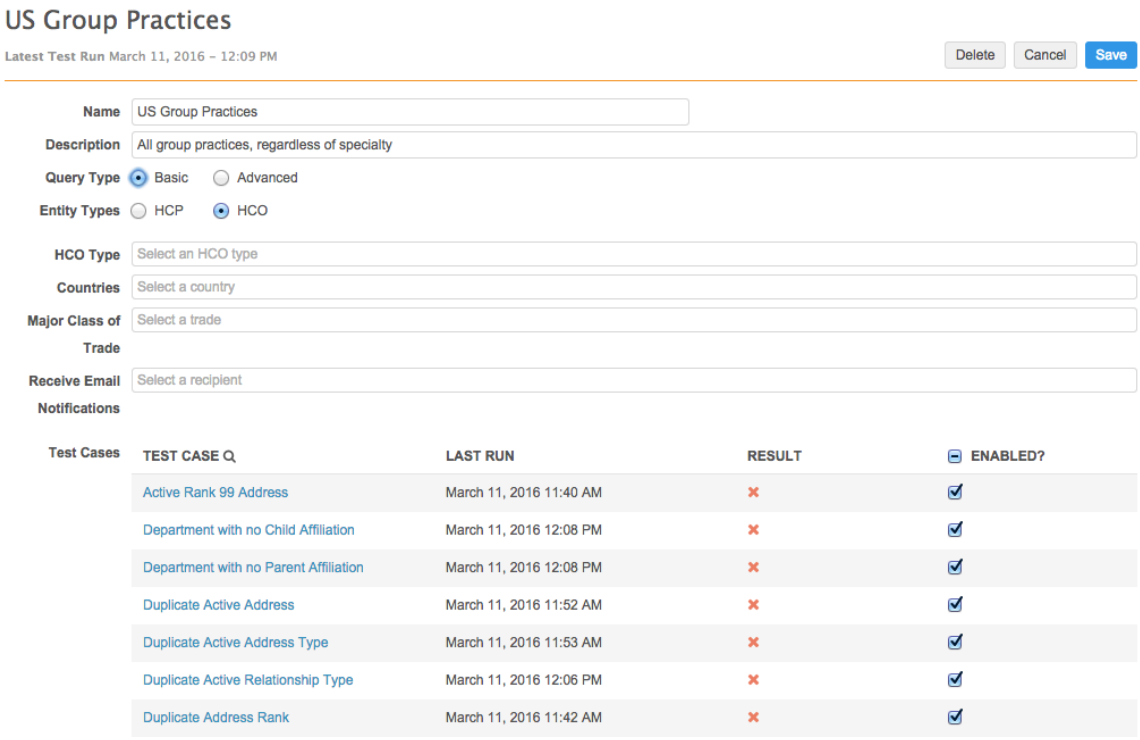
```
SELECT DISTINCT vid__v
FROM hcp
WHERE hcp_type__v = 'O'
```

Add or update a query

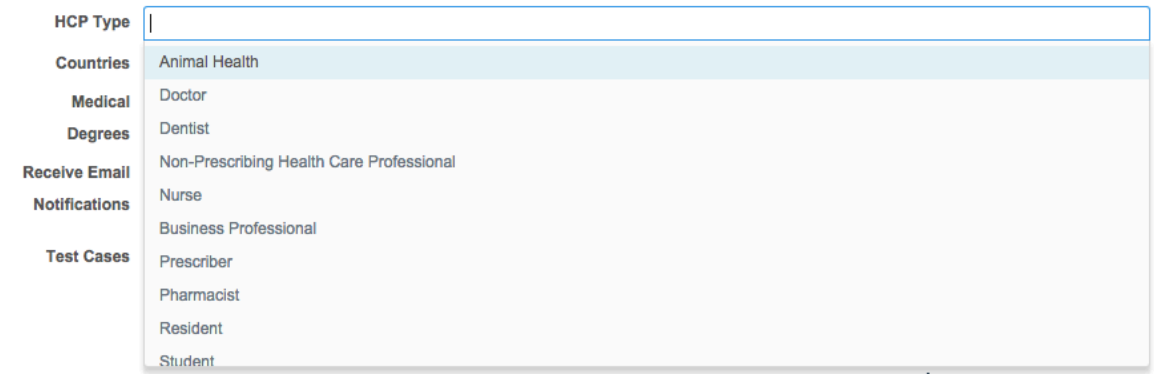
If you are updating an existing entity group, from the Data Quality Report dashboard, select an entity group from one of the columns in the test case results table. The entity group page appears with the defined query and list of test cases.

If you are creating a new entity group, from the Data Quality Report dashboard, click the **+** (add) button at the top right of the page and select **Entity Group**.

The entity group page appears with the list of test cases and results. By default, all test cases are enabled for the new entity group and the query mode is set to basic.



1. Type or edit the name and description for the entity group.
2. Select **HCO** or **HCP** from the **Entity Types** radio buttons.
3. The **Query Type** should be **Basic** by default. If it is not, select the **Basic** radio button.
4. Click each of the HCP Type, Countries, and Medical Degrees (or Major Class of Trade for HCOs) fields to refine the entity group.



You can begin typing to refine the values in the drop down list. Select a value to add it to the field and click the field to open the drop down list and add more values. You can remove a value by clicking the **x** to the right of the value.

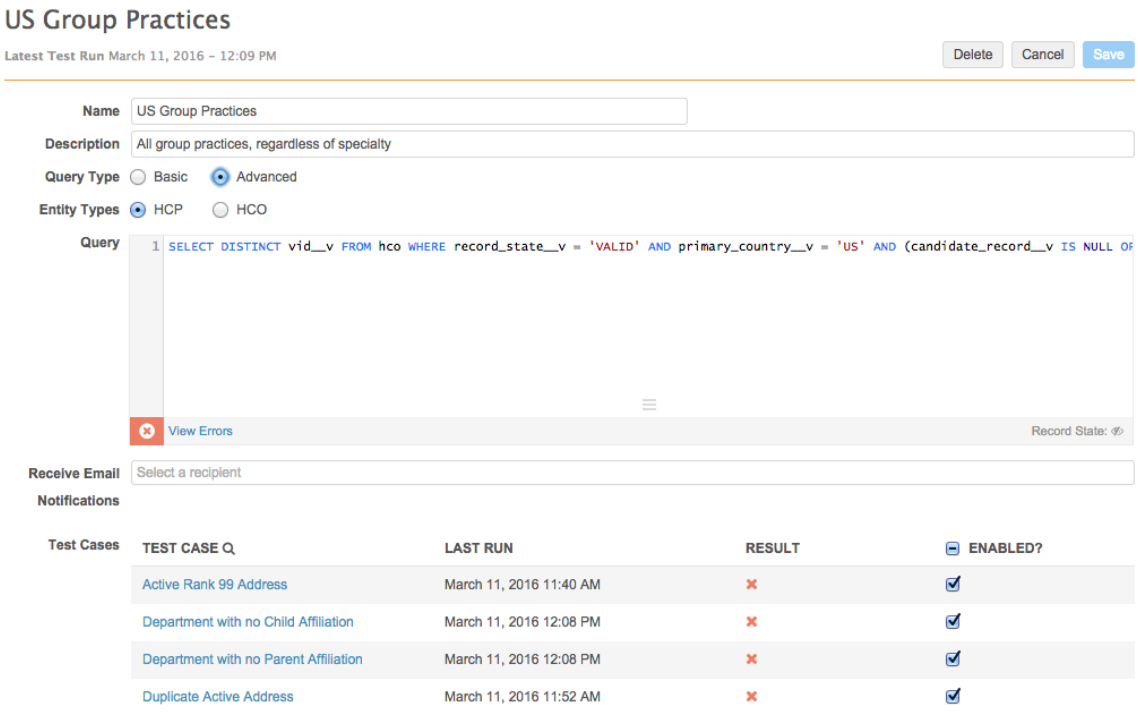
5. Skip to the "**Error! Reference source not found.**" and "Manage test cases" sections to add email notifications and enable or disable test cases.

Note that you can click the **Delete** button at the top right of the page to delete the test case. A confirmation dialog appears before the test case is deleted.

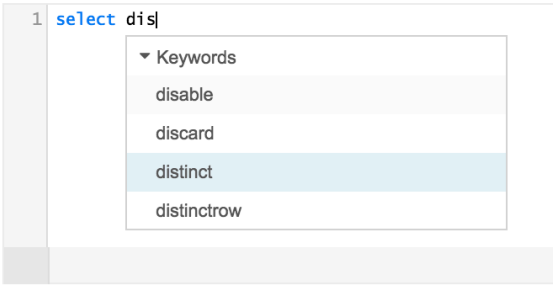
Create an entity group in advanced mode

To add or update the entity group query in advanced mode:

1. Type or edit the name and description for the entity group.
2. Select the **Advanced** radio button. The query editor appears on the page.

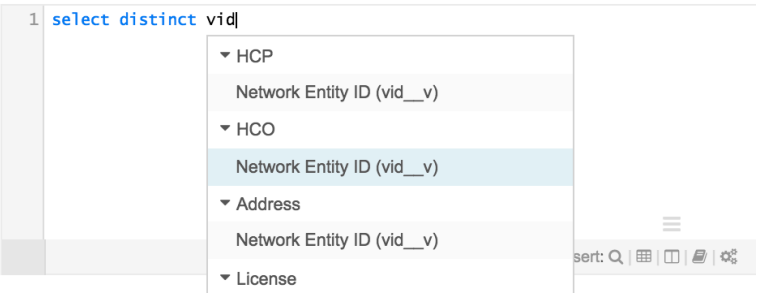


3. Select **HCO** or **HCP** from the **Entity Types** radio buttons.
4. Begin typing your SQL code in the text area. While you type, you can press Control-Space to display auto complete options for keywords, tables, fields, and operators. Double-click a selection in the drop down list to use it in your code.



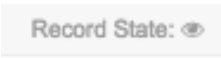
Note that as you type, an icon appears to the lower left indicating whether your code is valid. See the *Validate the query* section for information on automatic query validation.

5. Click the corresponding links at the bottom of the text area to view valid keywords, tables, fields, reference data, or operators.



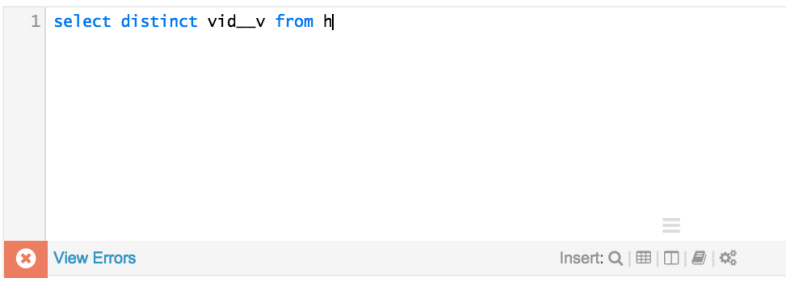
View or hide invalid records

The **Record State** icon at the bottom right of the editor, by default, is set to hide any records with a state of INVALID, DELETED, or MERGED_INTO from the results. You can choose to display these records in your results by clicking the icon. When these record states are unhidden, the eye icon appears open. You can click the icon again to hide these record states.



Validate the query

As you type your query, an icon appears to the lower left indicating whether or not your code is valid. Note that until you finish complete sections of code, the icon will appear as an **x**.



Once you have completed a successful section of code, it should appear as a check mark, indicating that the code is valid.

If your code is not validating successfully, you can click the **View Errors** link next to the **x** icon to see the errors in your code.

Note that if you leave this option enabled, the error messages will resolve as you fix the code, and re-appear as you type additional code, until the code is complete and valid. You can click the **Hide Errors** link next to the **x** icon to hide these messages. Note that some validations only occur after you've saved the code.

Once you have completed your code and it validates successfully, the green check mark icon will re-appear in the lower left corner.

Manage Test Cases

In the **Test Cases** section of the Entity Groups page, you can click through to individual test cases, see when tests were last run and which ones passed or failed, and you can enable or disable test cases.

To view an individual test case's results, click the test case link in the list. The test case page opens with detailed information.

Drilling down through test cases

To enable or disable individual test cases for the current entity group, click the corresponding check box in the **ENABLED?** column of the table.

You can select or clear all check boxes by clicking the check box next to the column heading.

Test Cases

TEST CASE	LAST RUN	RESULT	ENABLED?
Missing AMS ID	January 27, 2016 1:03 AM	✖	☑
Missing Active AMS ID in Custom Key Table	January 27, 2016 1:03 AM	✖	☑
Missing Phone Number	January 27, 2016 1:01 AM	✖	☑
More than 1 Active Address	January 27, 2016 1:00 AM	✖	☑
Active Address Line 1 - Incomplete	January 27, 2016 1:00 AM	✔	☑
Active Addresses > Active Affiliations	Never	--	☐

Ensure that you click the **Save** button at the top of the page to save your changes.

To create and add a test case, at the bottom of the test case list, click the **+Add Test Case** link. For more information on creating test cases, see the "Adding or updating test cases" section.

ADDING OR UPDATING TEST CASES

The test case page displays the query editor containing the query that defines the test case conditions, as well as a list of the entity groups and their corresponding results for the test case. Best practice is to have fewer than 250 test cases, to minimize run and preview times.

From the test case page, you can perform the following actions:

- Define the name, description and query for the test case.
- Add users to receive email notifications for the test case.
- Define the failure condition and threshold.
- Drill through to entity groups.
- Enable entity groups to run for the test case.
- Add entity groups to the test case.

Note: Common test case names should follow a convention; for example, all address checks should include *address* in the name. This will make it easier to filter results in the dashboard.

Create or update the test case query

The query editor used for editing test cases includes the same functionality as the advanced query editor for Network Reporting. The query editor offers tools for auto completion, as well as easy access to quick lists of available keywords, tables, fields, and operators. As you construct your query, the editor automatically validates it.

Rules for defining test cases

When you add or update a test case, the following rules apply:

- SELECT statements must include vid__v and is_veeva_master__v
- Address, License, and ParentHCO queries must include entity_vid__v
- UNIONS are only allowed in sub-queries
- No semicolon at end of the query

For example:

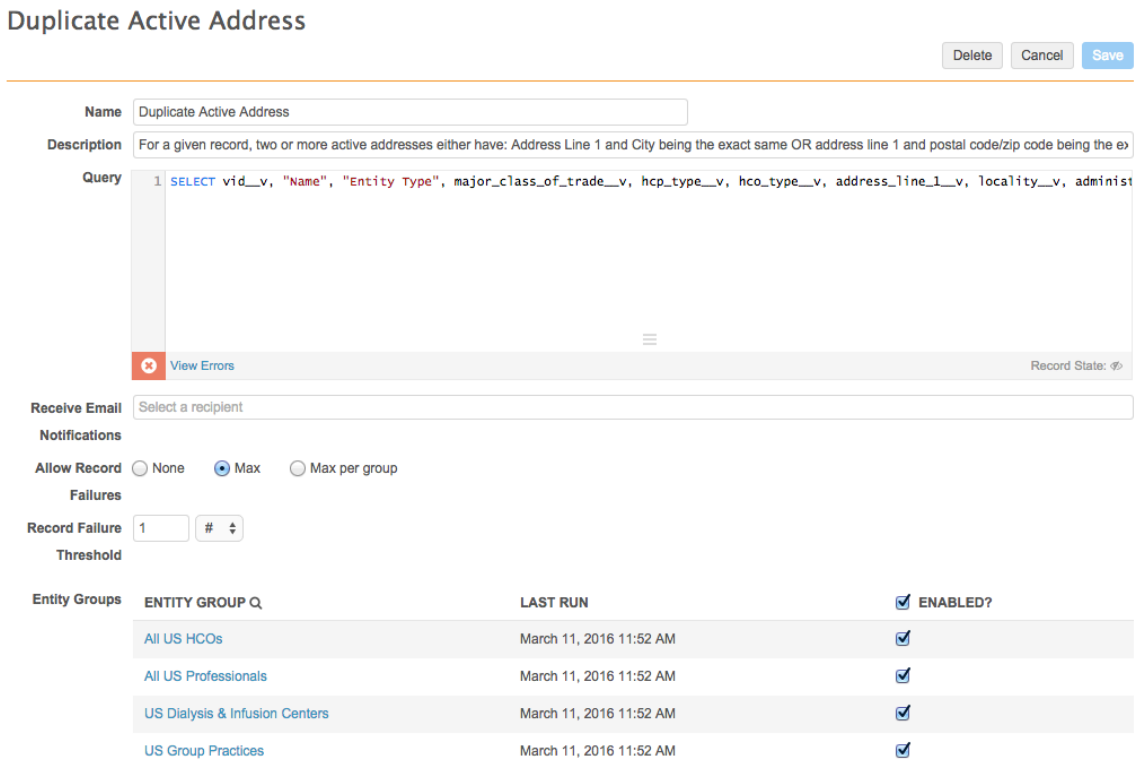
```
SELECT entity_vid__v,
       vid__v,
       formatted_address__v,
       address_status__v,
       record_state__v,
       address_type__v,
       created_date__v,
       modified_date__v,
       is_veeva_master__v

FROM ADDRESS

WHERE coalesce(address_type__v, '') = ''
```

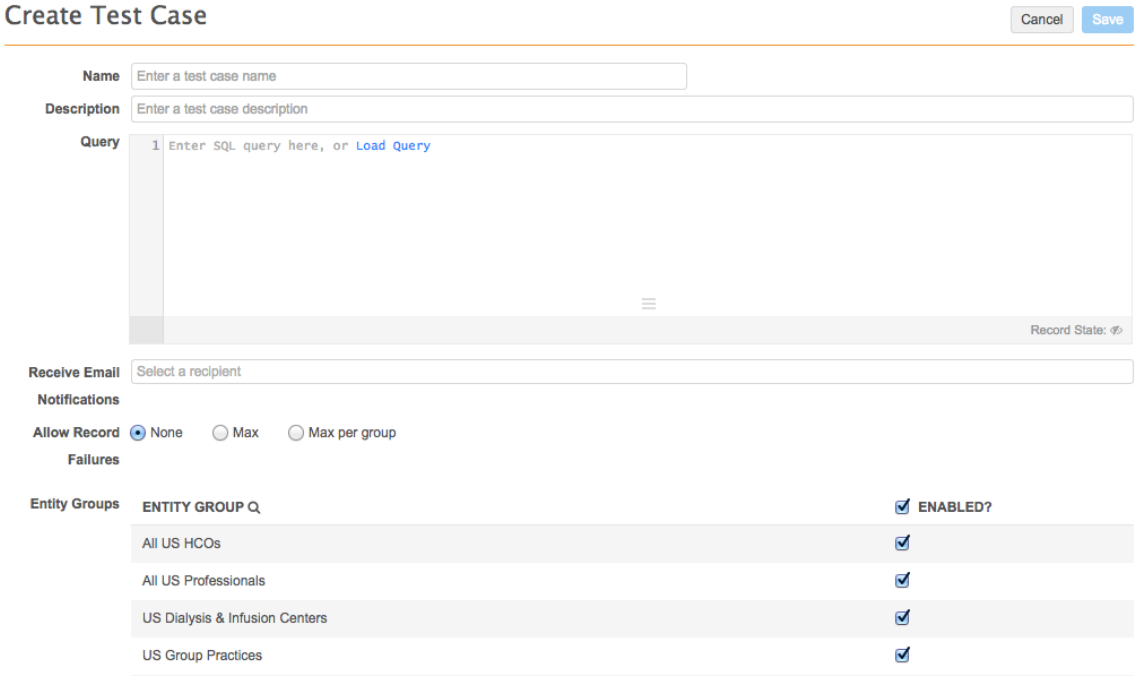
Add or update a test case query

If you are updating an existing test case, from the Data Quality Report dashboard, select a test case from one of the rows in the test case results table. At the top right of the Test Case Details page, click the gear icon and select **Edit**.



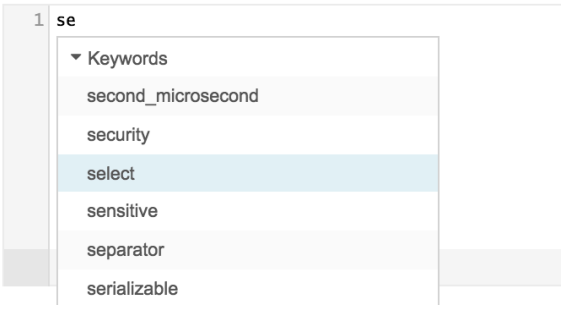
If you are creating a new test case, from the Data Quality Report dashboard, click the **+** (add) button and select **Test Case**.

The Test Case page appears with an empty query editor. By default, all entity groups are enabled for the new test case.



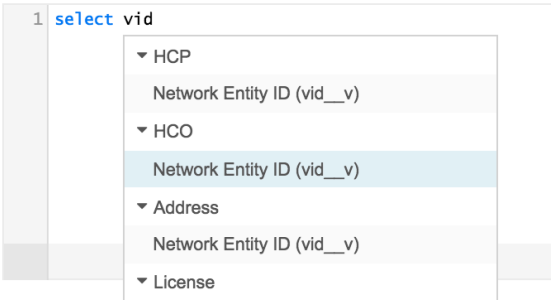
To add or update the test case query:

1. Type a name and description for the test case.
2. Begin typing your SQL code in the text area. While you type, you can press Control-Space to display auto complete options for keywords, tables, fields, and operators. Double-click a selection in the drop down list to use it in your code.



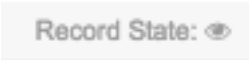
Note that as you type, an icon appears to the lower left indicating whether your code is valid. See the *Validate the query* section for information on automatic query validation.

3. Click the corresponding links at the bottom of the text area to view valid keywords, tables, fields, reference data, or operators.



View or hide invalid records

The **Record State** icon at the bottom right of the editor, by default, is set to hide any records with a state of INVALID, DELETED, or MERGED_INTO from the results. You can choose to display these records in your results by clicking the icon. When these record states are unhidden, the eye icon appears open. You can click the icon again to hide these record states.



Validate the query

As you type your query, an icon appears to the lower left indicating whether or not your code is valid. Note that until you finish complete sections of code, the icon will appear as an **x**.

Once you have completed a successful section of code, it should appear as a check mark, indicating that the code is valid.

If your code is not validating successfully, you can click the **View Errors** link next to the **x** icon to see the errors in your code.

Note that if you leave this option enabled, the error messages will resolve as you fix the code, and re-appear as you type additional code, until the code is complete and valid. You can click the **Hide Errors** link next to the **x** icon to hide these messages.

Once you have completed your code and it validates successfully, the green check mark icon will re-appear in the lower left corner.

Configure the failure threshold

Select an option next to **Allow Record Failures** to define acceptable limits for the test case:

None – This test case will fail if one or more records fails.

Max – The test case will fail if the maximum number of failed records you specify is exceeded. This setting is used when there are a known (fixed) number of exceptions.

Max per group – The test case will fail based on the maximum number of failed records specified for each individual entity group.

Manage entity groups

In the **Entity Groups** section of the Test Case page, you can select entity groups for the test case.

To enable or disable entity groups for the current test case, click the corresponding check box in the **ENABLED?** column of the table. You can select or clear all check boxes by clicking the check box next to the column heading. You can also filter the list by entity group name.

Ensure that you click the **Save** button at the top of the page to save your changes.

To create and add an entity group, at the bottom of the test case list, click the **+Add Entity Group** link. For more information on creating entity groups, see the "Create or update the entity group query" section.

API

Change request API

The Change Request Retrieve and Change Request Batch Retrieve APIs now include a parameter to enable return of related entities in the response.

You can include the following optional parameter for each API to enable this functionality:

- **includeEntity –** If set to True, Network returns all entities related to the change request (or change requests for the batch API). The entity for a change request is determined by the entity identifier (vid__v) of that change request.

The response will include the following:

- **entities –** An array of entities associated with the change request (or change requests for the batch API).

Search API

For the Search API, the corporate name of any parent HCOs is now included in search results without the need to request supplemental parent HCOs in the response.

The Retrieve Fields Metadata API now includes support for the following headers:

- Last-Modified – Indicates the date the list of fields was last changed.
- If-Modified-Since – Indicates whether the list of fields was modified since the specified date. The response contains the 304 Not Modified status code if the content is unchanged.