



# **Veeva** Network

Veeva Network 21R2.1.1 Release Notes

October 2021



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## About these Release Notes

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These Release Notes describe all features that are included in Veeva Network 21R2.1.

### SUBSCRIBE TO RELEASE NOTIFICATIONS

You can receive email notifications about upcoming software releases and the supporting documentation:

- **Software releases and maintenance** - Go to [trust.veeva.com](https://trust.veeva.com). At the top of the page, click **Subscribe to Veeva Trust Site** and subscribe to the Veeva Network component.
- **Release Notes and Data Governance documents** - PDF files are posted on the [Veeva Support](#) website. To be notified when new documents are published, click the **Follow** button on that page or the [Announcements](#) section in the Network Community.

For more information, see [About Network Releases](#) in the *Veeva Network Online Help*.

## Browser requirements

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These are the minimum browser requirements for Veeva Network:

- Google Chrome™ (most stable version at Network release)
- Safari® 10+
- Microsoft Edge™

Veeva Network is not supported on mobile devices.

## Release Note updates

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Some features have been added and removed since the Early Release Notes document was published.

### Added

- **Network expressions** - A new function can be used to help load dynamic attribute data from Veeva CRM.
- **Geocodes** – Latitude and longitude fields are now available for addresses in all countries.

### Removed

- **Custom keys** - The source subscription wizard is updated to support creating multiple custom keys for each main object defined for a sub-object.

All material in the Release Notes should be reviewed to ensure that updates to existing topics are noted.



## What's new

The following key enhancements comprise the Veeva Network 21R2.1 minor release.

		ST	DS	DM	AD
<b>Network widgets</b>					
Search widget	Search results for HCPs now include the Medical Degree and Specialty fields.	●	●	●	●
<b>Search/Profiles</b>					
Network hashtags	Hashtags now display on record profiles and on search results.	●	●	●	●
<b>Data components</b>					
Network widgets	Data components are now supported on account profiles in the Network widgets.	●	●	●	●
<b>Inbox</b>					
Tasks for large entities	Improvements have been made to the DCR process to support tasks that include a large number of sub-objects or associated tasks.		●	●	●
<b>Reports</b>					
Custom tables	Users can create custom tables for their own use or for shared use in the SQL Query Editor.			●	●
Real time exports	Entity-level updates are now immediately exported to the reporting database.			●	●
<b>Data Model</b>					
New countries supported	Data models have been added for several countries for Latin America.			●	●
New language	Korean (KO) is now supported for data model fields and reference codes.			●	●
Cluster Management	This feature now supports cluster data for Ireland, Netherlands, Russia, and Switzerland.			●	●
Data privacy opt out date	The data_privacy_opt_out_date__c field will become read-only in version 21R3.0.			●	●
Geocodes	Latitude and longitude fields are now available for addresses in all countries.			●	●
<b>Custom objects</b>					
Hard delete custom object records	Custom object records can now be completely removed from your Network instance.			●	●



		ST	DS	DM	AD
<b>Veeva OpenData subscriptions</b>					
Mail only addresses	Mail only addresses can be automatically invalidated when they are downloaded from Veeva OpenData.			●	●
<b>Source subscriptions</b>					
Network expressions	A new function, SETI, can be used to help load dynamic attribute data from Veeva CRM.			●	●
<b>Users</b>					
User status	The user status label has been changed from Disabled to Inactive.				●
<b>Integrations</b>					
Network Bridge warnings	Detailed warnings now display in your Network Bridge configuration if you link to an incorrectly configured target subscription.			●	●
Network Bridge errors	Administrators can now report on record-level errors in Network Bridge jobs.			●	●
<b>Security</b>					
Transport Layer Security	Veeva Network is deprecating support for TLS 1.1.				●

**Note:** The System and Data Admin user has all the capabilities of the System Administrator and Data Steward users. Features and enhancements that apply to those users also apply to the System and Data Admin user.

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





## Network widgets

### SEARCH WIDGET

The search results for HCPs now contain additional data to help you to identify and distinguish the records.

The following fields have been added to the results:

- Medical Degree
- Specialty

The screenshot shows a search widget titled "Search for Health Care Professionals". It includes a "Back to Search" link, a "43870 Search Results for Health Care Professionals" count, and a "+ Create New" button. A filter for "Country: United States" is applied. The results are displayed in a table with columns for Name, First Name, Last Name, ID, and Medical Degree/Specialty. The first result, N Saddawi, is highlighted with a red box around the "Plastic Surgery | Doctor of Medicine" text.

NAME	First Name	Last Name	ID	Medical Degree/Specialty
N Saddawi				Plastic Surgery   Doctor of Medicine
Ann Bennett				Dermatology   Doctor of Medicine
Alai Alvarez				Emergency Medicine   Doctor of Medicine

This enhancement is enabled in your Search widget by default.



## Search and Profiles

### NETWORK HASHTAGS

Hashtags now display on record profiles to summarize important details. Hashtags also display on search results and can be used in search queries to improve search accuracy.

Network provides a set of predefined hashtags and administrators can create hashtags for their specific business purposes.

This feature is enabled by default in your Network instance.

### *Benefits for using hashtags:*

Hashtags help users to search for and to identify relevant records.

Hashtags help you to:

- **Summarize records** - Record profiles contain a lot of data. Users typically spend time on the profile analyzing the data to ensure they have the correct record. Use hashtags to summarize the important details.
- **Search for records** - Many users know to search by name and address in basic search but are unsure of the other fields and reference values that can help to filter the results. Now, they can use hashtags to easily filter records for specific data.

For example, if you search for `UCLA hospital` in the Network search bar, the search results will display all records matching those keywords. This can include hospitals, health systems, clinics, HCPs, and so on. If you use the `#hospital` hashtag in your query, `UCLA #hospital`, the search results is filtered on records that mention UCLA and have the HCO Type field set to "hospital". The other HCO types and HCP records are filtered from the results.

- **Find new targets** - Use hashtags to identify targets for your sales reps. For example, to find nurses that specialize in pediatrics at a specific hospital, you can type the hospital name and use a `#nurse` and `#pediatrics` hashtag.
- **Search for records from specific sources** - Create hashtags for specific custom key sources so users can easily find records for those sources (for example, `#sales`). A predefined custom key for the Veeva CRM source (`#crm`) is provided to identify records in Veeva CRM.

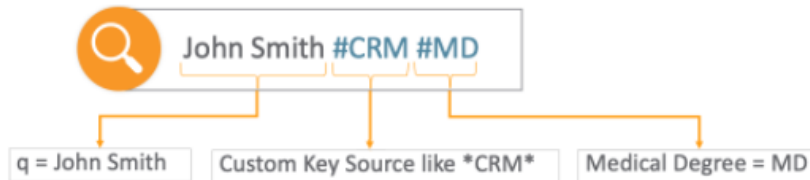


## About hashtags

Review these key details about hashtags:

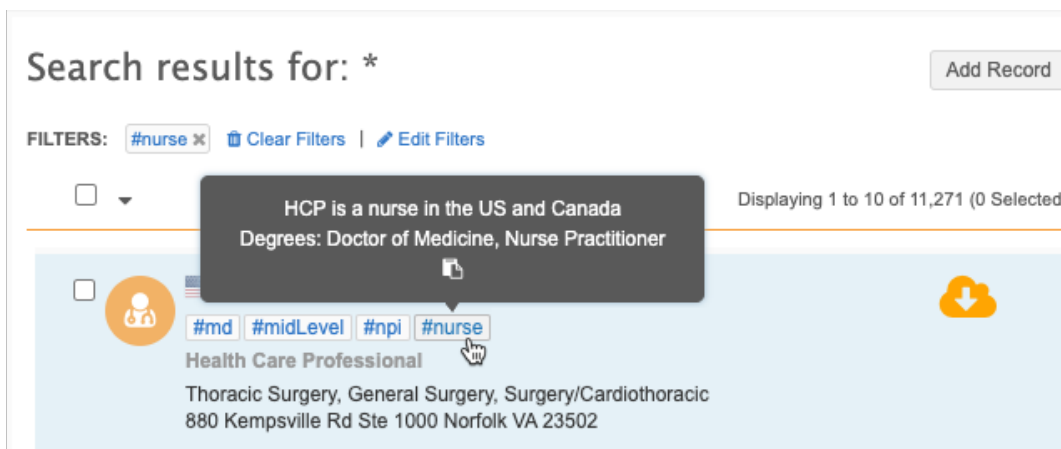
- They are not stored on records, they are dynamically calculated based on the rules in the hashtag configuration. You do not have to update records to add hashtags.

For example, if you use the predefined hashtags called #crm and #md in your search query, the hashtags are automatically applied to HCP records that meet each hashtag rule (the custom key source contains CRM and the HCP `medical__degree` field value is Doctor of Medicine).



- Network provides predefined hashtags that are enabled by default. These hashtags can be edited or disabled.
- Administrators and data managers can create hashtags.
- They are specific to your Network instance; they are managed locally.
- They are supported for HCP, HCO, and custom object records.
- Hashtags display on Veeva OpenData records and local records. You can use hashtags to search for OpenData records that have not been downloaded to your Network instance.

For example, if you search using the #nurse hashtag, records in the OpenData database that meet the hashtag rules for #nurse (the HCP has one of the following degrees: Doctor of Medicine or Nurse Practitioner) display and can be downloaded.



- Hashtags that Veeva OpenData uses do not display on records in your Network instance. Hashtags are specific to your Network instance.
- Hashtag rules are based on fields so they are only available for the countries where those fields are available.

For example, the predefined #npi hashtag is available only for the United States.



- They are limited to the countries and entities that you have access to through your data visibility profiles.

For example, if you do not have access to the United States through your data visibility profile, you will not see the predefined #npi hashtag in your Network instance.

- They are available in the Network UI (record profiles and Network Search) and the Network API.
- Searching for hashtags is case-insensitive. There is no difference between #npi and #NPI.

### Hashtags on record profiles

Hashtags are rule-based and are automatically calculated to display on record profiles that meet those rules. For example, the #npi hashtag displays on HCO and HCP records where the NPI field has a value (is not null).

Hashtags display in alphabetical order. They can display in different colors depending on how administrators have configured them.

- Hover over the hashtag to review the tooltip.
- Click the hashtag to start a search for records with that hashtag.

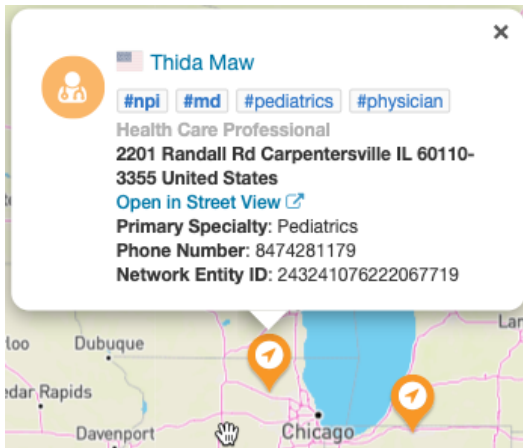
Hashtags display in the following areas for profiles:

- Profile page
- Profile preview in search results

The screenshot shows a search results page for the query #npi #md #highdecile. The search results list two profiles: Erin Hale and Pramod Pinnamaneni. Erin Hale's profile is expanded to show a 'Profile Preview' on the right. The search results include filters for #npi, #md, and #highdecile, and show 'Displaying 1 to 10 of 23 (0 Selected)'. The profile preview for Erin Hale shows her name, location (Omaha, NE), and various hashtags including #highdecile, #md, #npi, #physician, and #sales. The 'Primary Information' section shows her first name as 'Erin' and last name as 'Hale'.

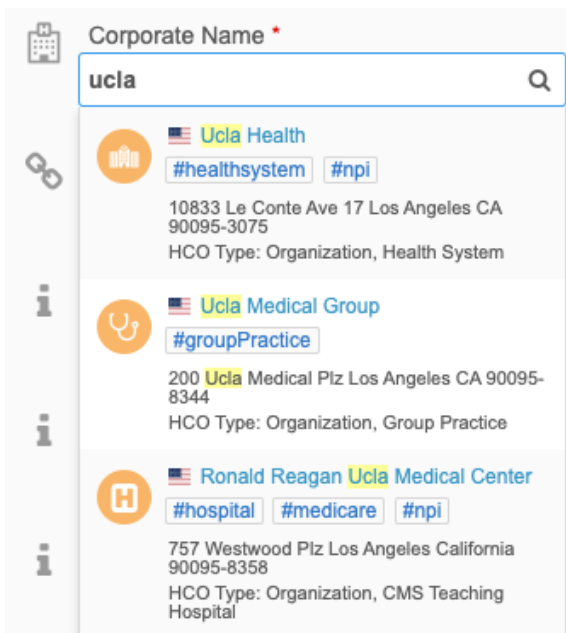


- Business cards on the search map



- New parent affiliation

When you create a parent affiliation on a record profile, hashtags display in the **Corporate Name** field search results so you can easily identify the correct HCO.



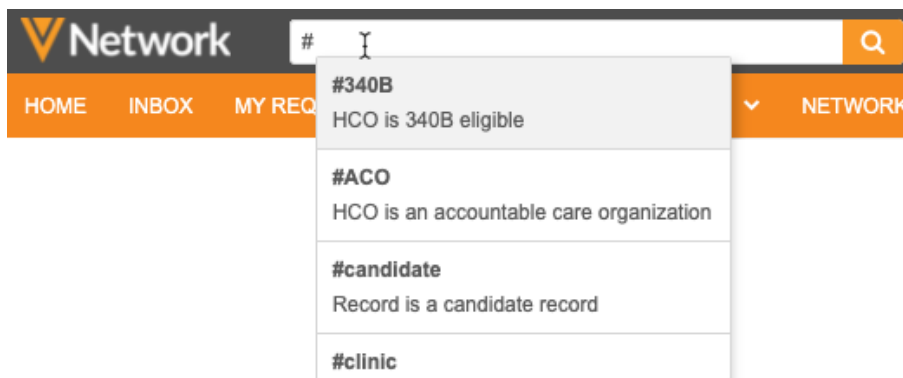


### Search using hashtags

To search using hashtags:

1. On the Network menu bar, type the hash (#) symbol in the search bar.

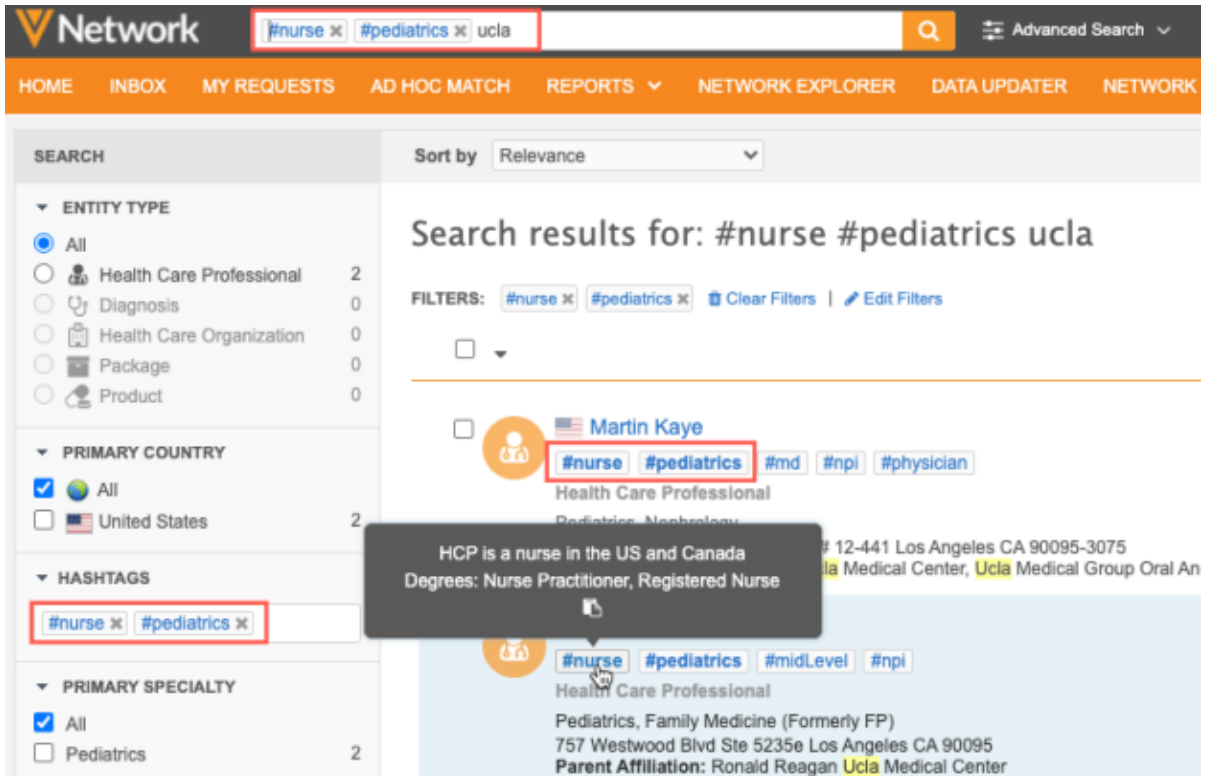
A list displays the hashtags that are available according to the countries and entities that you have access to through your data visibility profile. The available hashtags are listed alphabetically and contain a description.



2. Scroll and select a hashtag or keep typing to find a specific hashtag. Choose one or more hashtags and include any text that you also want to filter on. Click the **Search** button.

The search results display the records that apply to the hashtags and any search terms that you defined.

**Note:** If you use more than one hashtags in your query, they are treated as an AND operator. For example, if your search query includes the **#nurse** and **#pediatrics** hashtags, only the records that meet the conditions of both hashtags will display. If you use hashtags that apply to the same field (for example, the **#nurse** and **#md** hashtags both apply to the Medical Degree field), it is treated as an OR operator; records that have a medical degree that is nursing related or a Doctor of Medicine will display.



Hashtags display on the records and on the search results in alphabetical order. If you search for a hashtag, it displays first on the record results. Hover over a hashtag to view a tooltip. If the tooltip contains extra details; for example, the NPI ID number or degree name, click the **Copy** icon to copy the value to your clipboard.

If you click a hashtag on a record in the search results, it will start a new search for that hashtag.

### Using search filters

Use the **Search** panel to filter your search on **Entity Type** or **Country**. If you select a specific entity type, the available hashtags are filtered for that entity. For example, if you filter the results for the **Package** object, the hashtags that you can use are limited to that object.



**SEARCH**

▼ ENTITY TYPE

- All
- Package 200
- Diagnosis
- Health Care Organization
- Health Care Professional
- Product

▼ PRIMARY COUNTRY

- United States 200

▼ HASHTAGS

**#generic**  
Package is Generic Product.

**#OTC**  
Package is OTC

### Advanced Search

You can also use the Advanced Search form to search using hashtags. Use the **Search by Hashtags** field to enter the hashtags.

**Advanced Search** ⓘ

**Search by Entity Type** **Primary Country**

All Entities Select an option

**Search by Keyword(s)**

Search by name, address, IDs, and more...

**Search by Hashtag(s)**

**#340B**  
HCO is 340B eligible

**#7Decile**  
7 Decile

**#ACO**  
HCO is an accountable care organization

**#candidate**  
Record is a candidate record

**#clinic**





## Available hashtags

Network provides several predefined hashtags that are enabled by default. Administrators can view and edit the configurations of the predefined hashtags.

- In the Admin console, click **Data Model > Network Hashtags**.

On the Network Hashtags page, the hashtags are listed alphabetically by default. Click the **Hashtag**, **Last Modified**, or **Status** column names to sort the list. You can also filter the list by entity type or country.

You can customize these hashtags for your own use.

HASHTAG ▲	DESCRIPTION	LAST MODIFIED	ENTITY TYPE	COUNTRY	STATUS
#340B	The HCO is 340B eligible.	Aug 11, 2021	HCO	United States	ENABLED
#ACO	The HCO is an accountable care organization.	Aug 11, 2021	HCO	United States	ENABLED
#clinic	The HCO is a clinic.	Aug 11, 2021	HCO	All countries	ENABLED
#crm	The record has CRM custom key.	Aug 11, 2021	HCP, HCO	All countries	ENABLED
#dept	The HCO is a department at a hospital.	Aug 11, 2021	HCO	Australia, Canada, New Zealand, United States	ENABLED
#do	The HCP has a Doctor of Osteopathic Medicine.	Aug 11, 2021	HCP	Australia, Canada...	ENABLED
#GPO	The HCO is a group purchasing organization.	Aug 11, 2021	HCO	Canada, United S...	ENABLED

## Predefined hashtags

The following hashtags are available, depending on the countries defined in your Network instance.

Hashtag	Entity	Country	Tooltip
#md	HCP	All countries	HCP has a Doctor of Medicine
#nurse	HCP	United States, Canada	HCP is a nurse in the US and Canada
#npi	HCP, HCO	United States	HCP or HCO has an NPI number
#crm	HCP, HCO	All countries	Account is in CRM
#candidate	HCP, HCO	All countries	Record is a candidate record
#hbp	HCP	All countries	HCP is a business professional



Hashtag	Entity	Country	Tooltip
#marketaccess	HCP, HCO	Andorra, Austria, Belgium, Switzerland, Czech Republic, Germany, Denmark, Spain, Finland, France, Great Britain, Ireland, Iceland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Poland, Portugal, Sweden, Turkey	HCP or HCO assists in bringing a drug to market
#gp	HCP	Andorra, Austria, Bosnia and Herzegovina, Belgium, Bulgaria, Switzerland, Czech Republic, Germany, Denmark, Spain, Finland, France, Great Britain, Croatia, Hungary, Ireland, Iceland, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, New Zealand, Poland, Portugal, Serbia, Sweden, Slovenia, Slovakia, Turkey	HCP is a general practitioner
#specialist	HCP	Andorra, Austria, Bosnia and Herzegovina, Bulgaria, Switzerland, Czech Republic, Germany, Spain, Great Britain, Croatia, Hungary, Ireland, Italy, Liechtenstein, Netherlands, Poland, Portugal, Serbia, Slovenia, Slovakia, Turkey	HCP is a specialist
#midLevel	HCP	United States, Canada	HCP is a mid-level
#infusion	HCO	United States	HCO has the capability to administer infusion drugs
#hospital	HCO	All countries	HCO is a hospital
#groupPractice	HCO	All countries	HCO is a group practice
#dept	HCO	All countries	HCO is a department at the hospital
#340B	HCO	United States	HCO is 340B eligible
#medicare	HCO	United States	HCO accepts Medicare
#ACO	HCO	United States	HCO is an accountable care organization
#physician	HCP	United States, Canada	HCP is a physician
#pediatrics	HCP, HCO	All countries	Record specializes in pediatrics
#do	HCP	United States, Canada, New Zealand, Australia	HCP has a Doctor of Osteopathic Medicine
#clinic	HCO	All countries	HCO is a clinic
#healthsystem	HCO	United States, Canada	HCO is a health system
#kaiser	HCO	United States	Record is associated to Kaiser Permanente



Hashtag	Entity	Country	Tooltip
#GPO	HCO	United States, Canada	HCO is a group purchasing organization
#pharmacy	HCO	All countries	HCO is a pharmacy
#dr	HCP	Mexico, Nicaragua, Colombia, El Salvador, Panama, Dominican Republic, Argentina, Honduras, Guatemala, Costa Rica, Chile, Canada, Monaco, Luxembourg, Liechtenstein, Hungary, Greece, Poland, Bulgaria, Republic of Moldova, Ireland, France, Switzerland, Sweden, Finland, Netherlands, Turkey, Slovakia, Romania, Great Britain, Belgium, Spain, Italy, Portugal, Andorra, Austria, Kazakhstan, Czech Republic, Belarus, Georgia, Serbia, Germany, Norway, Denmark, Russia, Ukraine, China, New Zealand, Australia, Singapore	HCP is a doctor
#jrdr	HCP	Great Britain	HCP is a junior doctor in the UK
#srdr	HCP	Great Britain	HCP is a senior doctor in the UK

Select a hashtag from the list to view or edit the details.



**Example hashtag configuration: #crm**

## #crm

---

**▼ Details**

Name

Description

Code  ⓘ

Color

Entity Type

Country

Status  **ENABLED**

**▼ Rules**

Define rules that control when this tag is displayed.

FIELD	CONDITION	VALUE	
<input type="text" value="Custom Key Source"/> ▼	<input type="text" value="Contains"/> ▼	<input type="text" value="CRM"/>	✕
<a href="#" style="color: #0070c0; text-decoration: none;">+ Add Condition</a>			

---

**▼ Tooltip**

Define an optional tooltip for the search tag. This text will appear when you mouse over the tag and when you search for tags.

Show additional data  Show field value in tooltip

▼

LANGUAGE	TOOLTIP (OPTIONAL)	FIELD VALUE LABEL (OPTIONAL)	
<input type="text" value="English"/> ▼	<input type="text" value="Account is in CRM"/>	<input type="text" value="Account ID:"/>	✕
<a href="#" style="color: #0070c0; text-decoration: none;">+ Add Language</a>			

20



## CRM hashtag

Customers that use a custom key for CRM that does not contain the word **CRM** will need to update the predefined #`crm` hashtag. For example, if your CRM custom key source value is `SF` (`SF:Account:0013s000015ebyWAAQ`), update the hashtag rule so the **Value** field is `SF`.

### *Create a hashtag*

Administrators can create hashtags for their Network instance.

#### **Example**

We have a custom field to record HCP Decile ratings; an indication of whether an HCP is a high or low volume prescriber. We want to create a hashtag to flag a record as **High Decile** so sales reps can easily find these records.

To create a hashtag:

1. On the Network Hashtags page, click **Add Hashtag**.

The New Network Hashtag page displays.

2. In the **Details** section, provide the following information:

- **Name** - Type a name for the hashtag. This is the name that displays in search and on the profile page. Hashtag names are always prefixed with the hash # symbol.  
Names are limited to uppercase and lowercase letters, numbers, underscores (`_`), and hyphens (`-`). Names cannot contain spaces.
- **Description** - Type a meaningful description. This displays for administrators in the Network Hashtag list; it does not display to users.
- **Color** - By default, hashtags have a gray background with blue text. Choose a different background color for hashtags that you want to be highlighted. Six colors are available.
- **Entity Type** - Choose the entity type for the hashtag. The list contains the enabled main objects in your Network instance that you have access to.
- **Country** - Choose the country that the hashtag applies to. The list contains the countries that you have access to through your data visibility profiles. Choose **All Applicable Countries** to apply the hashtag to all countries that you have data for in your Network instance.
- **Status** - The hashtag is enabled by default. Toggle the button to disable it if you don't want it applied to records as soon as you save the configuration.



## New Network Hashtag

Cancel
Save

▼ **Details**

**Name**

**Description**

**Color** #

**Entity Type**

**Country**

**Status**  **ENABLED**

3. Use the **Rules** section to control where the hashtag displays.

For this example, we'll create a rule based on our Decile custom field. The #highdecile hashtag will display on HCP records only where the value of the Decile field is greater than six.

▼ **Rules**

Define rules that control when this tag is displayed.

FIELD	CONDITION	VALUE	
HCP Decile ▼	Greater Than ▼	<input style="width: 80px;" type="text" value="6"/>	✕

[+ Add Condition](#)

- **Field** - Choose the field. The list contains the fields that apply to the main objects you defined for the **Entity Type**.

Rules can be created for custom key fields (source only). They cannot be created for sub-object fields.
- **Condition** - Choose the condition to use. The available conditions depend on the selected field type. For example, text fields support the **Equals**, **Contains**, and **Is Not Null** conditions; integer number fields support the **Greater Than**, **Less Than**, **Between**, and **Equals** conditions.
- **Value** - Define the field value.



Click **Add Condition** to create another condition. Multiple conditions are treated as AND operators.

For example, if you want sales reps to easily find new targets for doctors that specialize in neurology, you can add multiple conditions to the rule; only HCP records that have the HCP type Doctor AND that have specific values in the Specialty 1 field will have the hashtag applied.

FIELD	CONDITION	VALUE		
HCP HCP Type	In	Doctor	AND	✕
HCP Specialty 1	In	Critical Care Neurosurgery Neurological Surgery Internal Medicine_Neurology Neurology		✕
<a href="#">+ Add Condition</a>				

If the hashtag applies to multiple entity types, the condition for each entity type is treated individually.

FIELD	CONDITION	VALUE		
HCP Market Access?	In	Yes/True	AND	✕
HCO Market Access?	In	Yes/True		✕
<a href="#">+ Add Condition</a>				

- 4. (Optional) In the **Tooltip** section, you can define a description for the hashtag. You can also include additional data to display when users hover over the hashtag.

**▼ Tooltip**

Define an optional tooltip for the search tag. This text will appear when you mouse over the tag and when you search for tags.

Show additional data  Show field value in tooltip

Decile

LANGUAGE	TOOLTIP (OPTIONAL)	FIELD VALUE LABEL (OPTIONAL)	
English	This is a high decile HCP.	Decile:	✕
<a href="#">+ Add Language</a>			

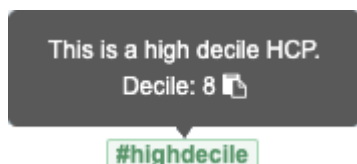


- **Show additional data** - Select this option if you want to display a field value in the tooltip. Expand the list to choose the field to display the value. Fields for the objects you have defined for the **Entity Type** display.

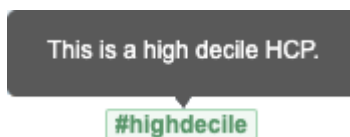
For example, you can choose the `Decile` field to add the HCP's decile rating on the tooltip.

**Examples**

**Tooltip with additional data**



**Tooltip with no additional data**



- **Language** - Select the language for the tooltip.
- **Tooltip** - Type a description of the hashtag to display to users when they hover over the tooltip.
- **Field Value Label** - If you chose **Show additional data**, type a label to describe the field value that will display. For example, type `Decile:`. The field value will be added after the label in the tooltip.

5. **Save** your changes.

If the hashtag is enabled it will be immediately applied to records that meet the rules. Users can now search for the hashtag and see it on record profiles.

*Disabling hashtags*

Predefined hashtags are enabled by default. Predefined and custom hashtags can be disabled from the Network Hashtags page. In the hashtag row, toggle the icon in the **Status** column or click the hashtag to open the configuration page to disable it.

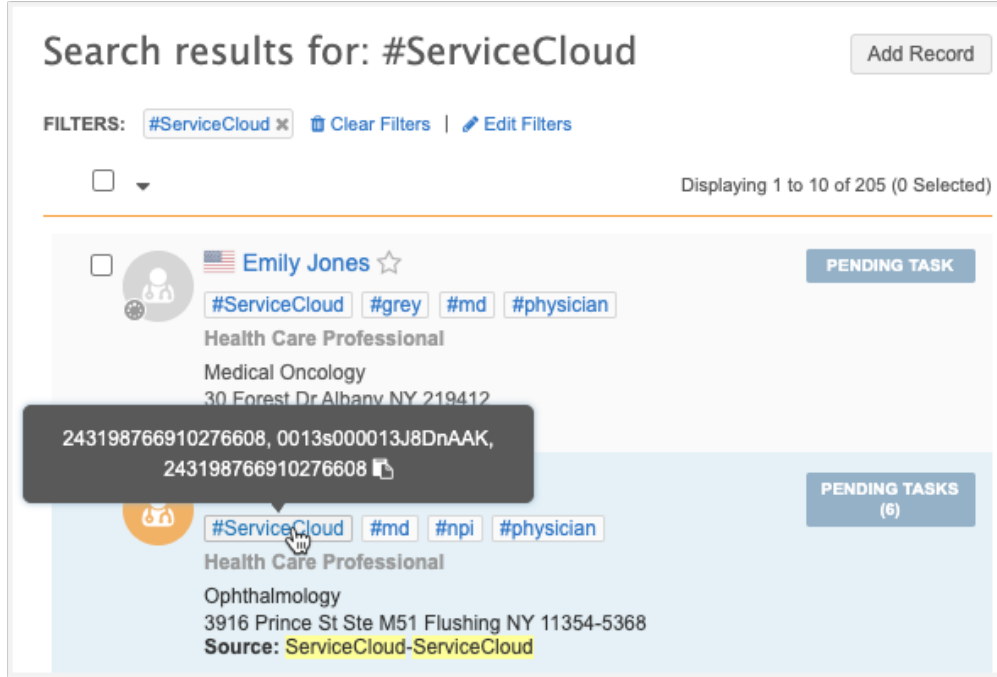
HASHTAG	DESCRIPTION	LAST MODIFIED	ENTITY TYPE	COUNTRY	STATUS
#340B	The HCO is 340B eligible.	Aug 11, 2021	HCO	United States	⊗ DISABLED
#ACO	The HCO is an accountable care organization.	Aug 11, 2021	HCO	United States	✔ ENABLED
#candidate	The record is a candidate record.	Aug 11, 2021	HCP, HCO	All countries	✔ ENABLED





### Hashtags for custom keys

Hashtags can be used to easily find records from a specific source. Previously, users had to search for custom keys. Now you can create a hashtag for a specific source so users can filter their search on that source.



### Custom key hashtag rules

Hashtags rules can be created only for the Source field for custom keys. Only custom keys that are active are considered for searching and displaying hashtags.

When the rule condition is **Equals**, the rule is applied to custom key sources that contain separators (for example, a hyphen (-)). For example, searching for the #ServiceCloud hashtag will find the ServiceCloud-ServiceCloud sources.

FIELD	CONDITION	VALUE	
Custom Key Source	Equals	ServiceCloud	x
<a href="#">+ Add Condition</a>			



### Multiple custom key values

If a record contains multiple custom keys for that source, up to three values will display on the tooltip. If there are more than three values, + **Others** displays after the third value. Open the record to review all of the custom keys.



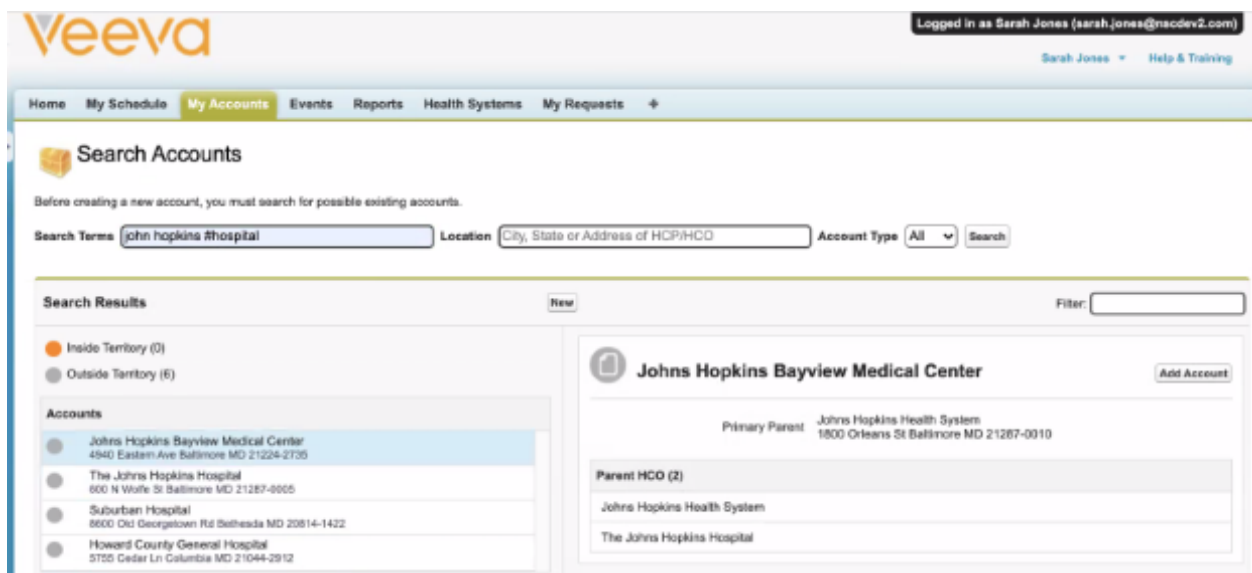
### Find Suspect Match

When Data Stewards use the **Find Suspect Match** feature on the Profile page, hashtags display in the search results to help identify a relevant match. Hashtags do not display on the suspect match page.

### Veeva CRM

Veeva CRM users can use hashtags to search in Network Account Search. For example, if you search for John Hopkins, the search results will contain HCPs and HCO departments making it difficult to find the relevant record. Now, you can search using the #hospital hashtag so you can filter on the relevant records.

**Note:** Hashtags can be used but they do not display in the search results or on the account.



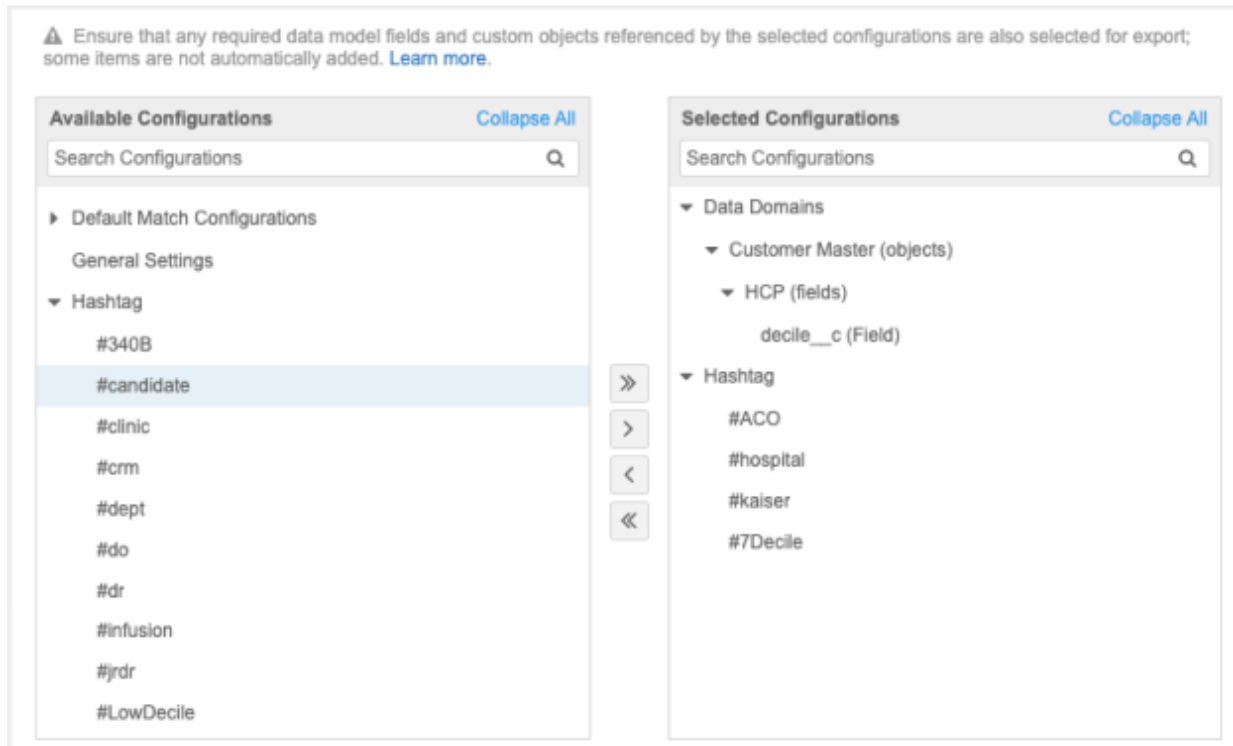
Using hashtags for Network Account Search is available for CRM on Online, iPad, and Windows.

**Tip:** Veeva CRM administrators can update the description on the Search Accounts page to suggest searching for specific hashtags. The description can be changed by updating the BEFORE\_CREATE Veeva message. For more details, see [Veeva Messages](#) in the *Veeva CRM Online Help*.



### Exporting configurations

Hashtags can be exported to a target environment. In the export package (**Settings > Configuration Export**), move the **Hashtags** section or individual hashtags into the **Selected Configurations** panel. If the hashtag contains dependencies; for example, the rule uses a custom field, the dependencies will be added to the panel also.



### Auditing

Updates to hashtags are logged in the **System Audit History (Logs)**.

### Using hashtags in the Network API

Integration users can search for records using hashtags from the Search API. Use hashtags in the **q** parameter.

#### Example request

```
GET
https://my.veevanetwork.com/api/v21.0/search?supplemental=NONE&limit=10&q=#npi&#nurse&ucla
```

Depending on which REST client you use, you might have to URL encode the hash (#) symbol as %23.



## Example

```
GET
https://my.veevanetwork.com/api/v21.0/search?supplemental=NONE&limit=10&q=%
23npi&%23nurse&ucla
```

**Note:** Candidate records are excluded from the Search API, so the #candidate hashtag does not work.

## Data components

---

### NETWORK WIDGETS

Data components are now supported on account profiles in Network widgets.

Data components were introduced in version 21R1.1 so users could view external data related to main entities (HCPs, HCOs, and custom objects) in Network without logging into another system. Previously, data components were limited to the Network UI. Now, you can view external data for HCPs and HCOs in the Network widgets. Administrators can apply the same data component to the Network UI and the Network widgets.

This feature is enabled by default in your Network instance.

### *Supported Network widgets*

Administrators can add existing or new data components to the following Network widgets:

- Affiliation widget
- Profile widget
- Search widget

Data components cannot be applied to the My Request widget.

### Network Portal

If you are using Network widgets in the Network Portal, the portal must be enabled to see the data components in the widgets. Data components do not display when the Network Portal is in preview mode.



### Adding data components to widgets

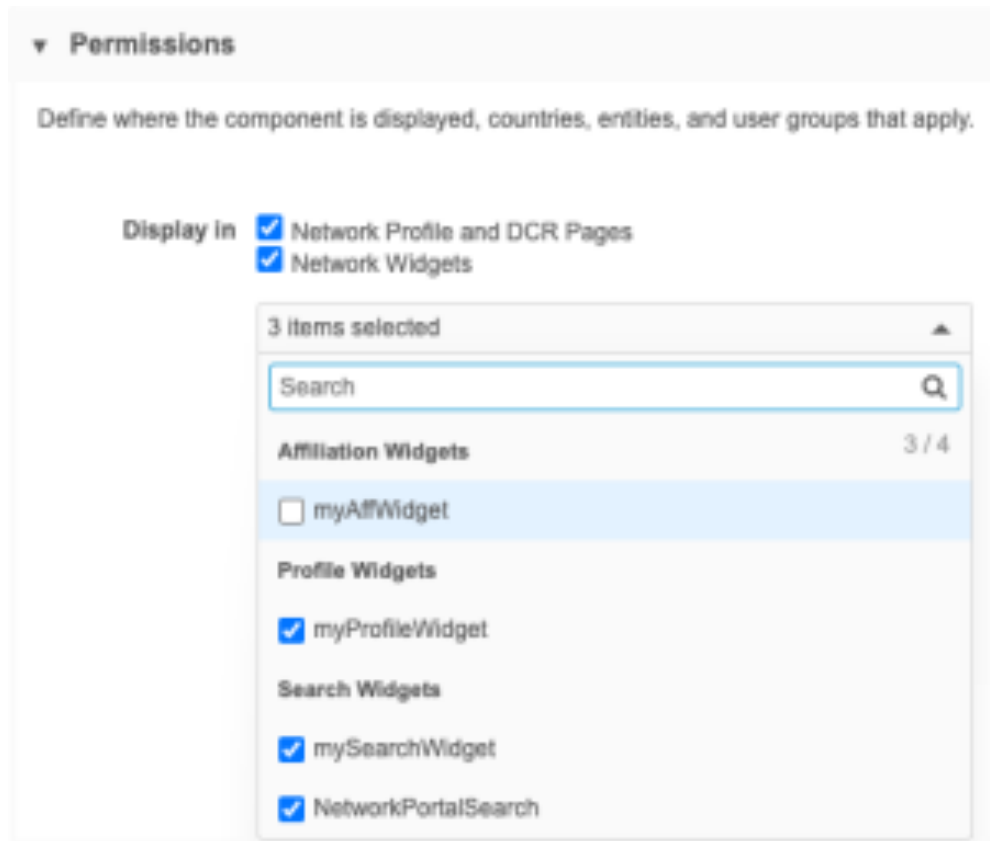
To apply an existing data component to a widget:

1. In the Admin console, click **Widgets & Portal > Data Components**.
2. Select a data component from the list.
3. In the **Permissions** section, next to the **Display in** setting, choose **Network Widgets**.

This is a new setting to support data components in widgets. On new and existing data components, the **Network Profile and DCR Pages** option is selected by default.

4. Expand the list and select the widgets that the data component should be applied to. The widgets are grouped by widget type. The list is enabled only when **Network Widgets** is selected in the **Display in** setting.

Network widgets are dimmed if they are not enabled in your Network instance.



5. **Save** your changes.

The data component is now available in the widgets that you selected.

For detailed instruction about creating data components, see the [Creating data components](#) topic in the *Veeva Network Online Help*.



### Viewing data components in the widgets

The countries, entities, and permissions (user groups) defined in the data component configuration determine what components display for you in the widgets.

### Profile and Search widgets

Data components display in tabs at the top of record profiles. They are listed alphabetically after the Profile Information tab. The order cannot be changed. The tabs do not display if data components have not been applied to this widget or do not apply to the profile. For example, if a data component applies to HCPs only, it does not display on HCO accounts.

In the Search widget, data components display when users view a record profile from the search results.

Search Accounts

[← Back to Search Results](#)

**Thida Maw**

Prescriber, Pediatrics  
2201 Randall Rd Carpentersville IL 60110-3355

No value  
8474281179

Profile Information
CRM Activity Data
CRM Call Data
Engage Meeting Invites
Opened Approved Emails
Service Cloud

Calls

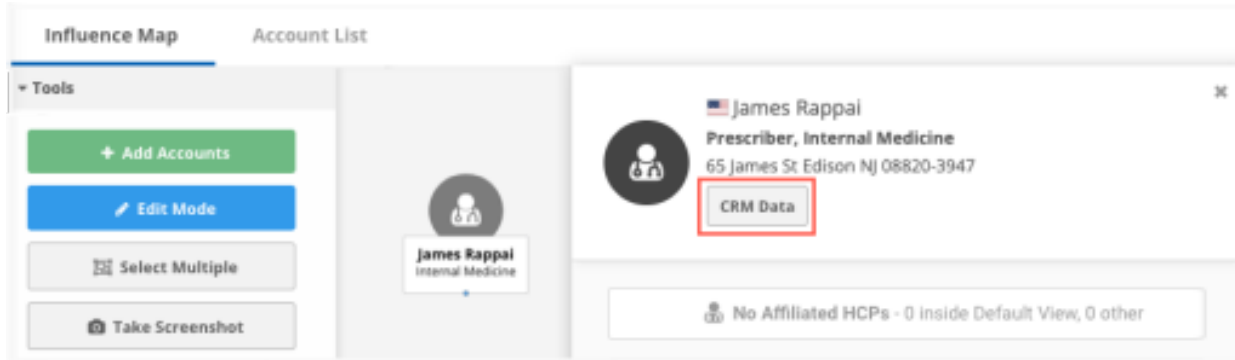
ID	Call Date	Address	Call Type	CRM User
243193017685509126	2021-06-09	65 James St, Edison, NJ 08820-3947	Detail Only	Andy Jones
243193017685509126	2021-05-18	65 James St, Edison, NJ 08820-3947	Detail with Sample	Sarah Jones
243193017685509126	2021-04-28	65 James St, Edison, NJ 08820-3947	Detail with Sample	Sarah Jones
243193017685509126	2021-03-25	32 Douma Dr, Newton, NJ 07860	Detail Only	Sarah Jones

### Edit profiles

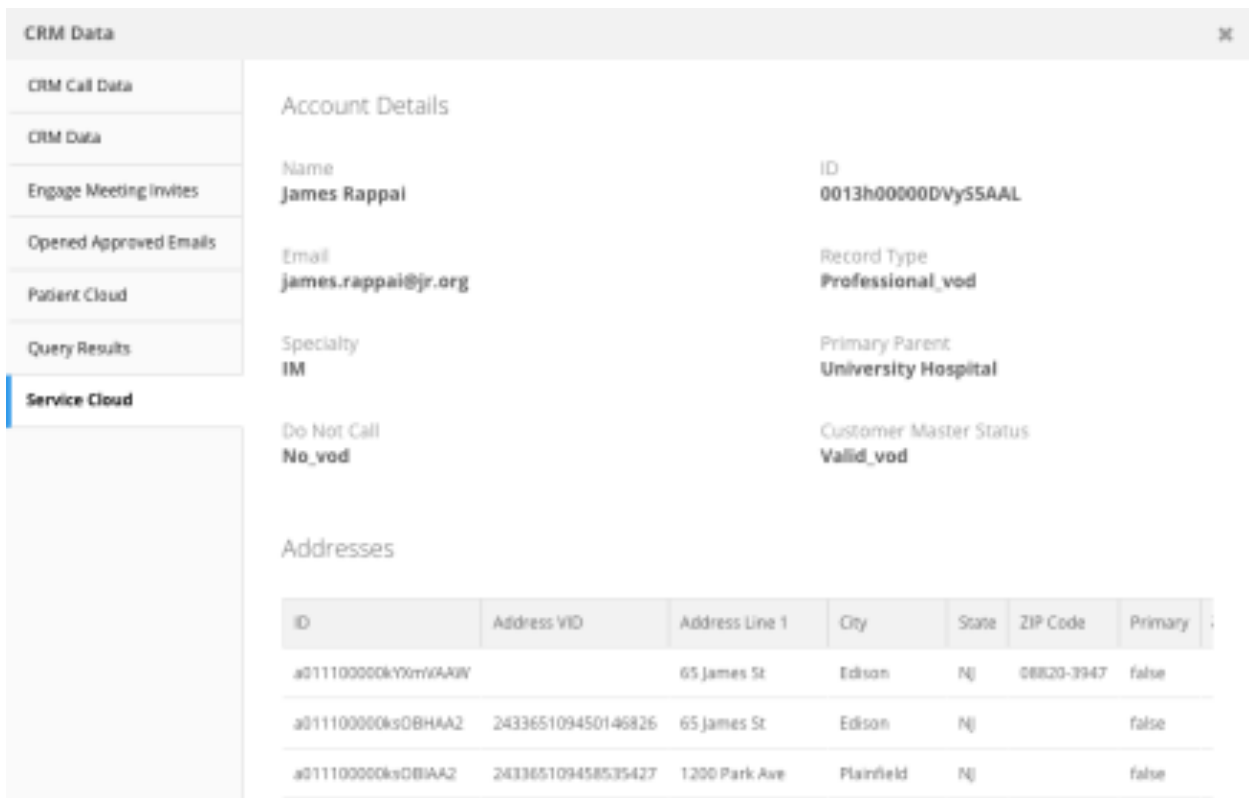
The external data on the data component tabs is read-only. Profiles can be edited only on the **Profile Information** tab if editing is enabled in the widget.

### Affiliation widget

The **Data Components** button displays on the profile when you view an account. Administrators can customize the button name on the Data Component Settings page; for example, it might be called **CRM Data**. The button does not display if data components are not defined for the widget or do not apply to the profile



Click the button to display the dialog.



The first available data component displays. Additional data components are listed alphabetically in the left pane. By default, 25 results are shown in the data component table view. Use the **Show** list to customize the number of results that display for each table.

### Logs

The **System Audit Log** tracks changes to where data components are displayed.



## Inbox

---

### TASKS WITH MANY OBJECTS

Improvements have been made to the DCR process to support tasks for entities that have a large number of sub-objects (more than 100 sub-objects for each sub-object type) or that have a large number of pending associated tasks (more than 100 tasks).

This enhancement is enabled in your Network instance by default.

#### *Sub-objects*

When data change requests are submitted, Network reindexes the DCR task and the entity. Indexing DCRs for records that contain many sub-objects (for example, 300 sub-objects or relationship objects) may cause issues in your Network instance. To better handle these tasks, Network will not index the sub-object or relationship object records if there are more than 100 records for each object type.

#### **Example**

A DCR is submitted to update the name for an HCO. The existing HCO record has 101 addresses, 5 ParentHCOs, and 3 Licenses. Network will only index the ParentHCO and License objects for that task; the address object will not be indexed because there are more than 100 addresses on the record.

Impact:

- **Inbox** - Addresses will not display for that record on the Inbox page.

No Impact:

- **Search** - You can search against the addresses for that HCO.
- **Profile** - All 101 addresses display on the record profile.
- **DCRs** - The DCR displays all addresses.
- **Reports** - All 101 addresses are available in reporting.

#### *Associated tasks*

After an update to a record, Network indexes the entity for each associated pending task. Network will not reindex the entity if there are more than 100 associated tasks for the record.

#### **Example**

An HCP record has 101 pending associated tasks. An update is made to the HCP's Medical Degree through a source subscription. Network will not reindex the 101 associated tasks to apply the update to HCP's Medical Degree.

Impact:

- **Inbox** - The degree of the HCP will not be updated on each pending task in the Inbox

No Impact:

- **Search** - You can search for the degree of the HCP using Network search.
- **Profile** - The updated degree of the HCP is displayed in the profile
- **DCRs** - The DCR will show the data submitted in the request.
- **Reports** - Reporting will display the HCP's degree





## Reports

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### CUSTOM TABLES

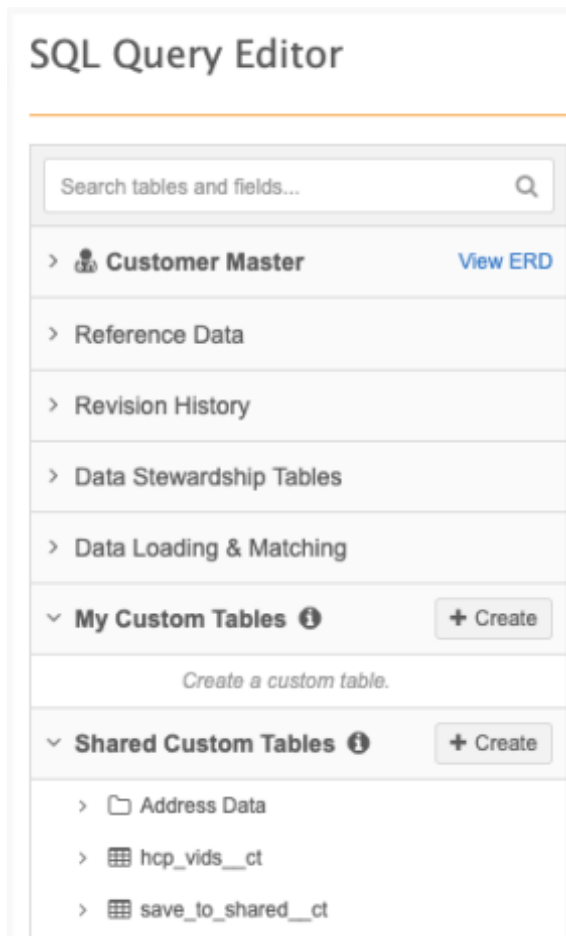
Advanced reporting users can now create their own data tables in the SQL Query Editor. You can create a table by uploading a file or through your report results.

Use custom tables to:

- Compare existing data in your Network instance to a source file before an initial data load.
- Upload a file instead of using the Lookup Tables feature. There is no file size limit for creating a custom table; lookup tables are limited to 1GB or 5 million rows.

Also, not all reporting users have access to the Admin console and the Lookup Tables feature.

- Create a table based on your report results so you can create complex queries that don't time out.



This feature is enabled by default in your Network instance.



### *About custom tables*

- Tables can be created for your own use or to share with other users.
- The tables are available to immediately query after they are created.
- Table names must be unique in your Network instance. For example, two users cannot have the same table name in their **My Custom Table** sections.
- All users with advanced reporting permissions can access the tables in the **Shared Tables** section.
- You can create a hierarchy of folders in the custom table sections and move the tables in and out of folders.
- Queries can be run against the tables in the following Network features:
  - SQL Query Editor
  - Saved Reports
  - Data Quality Reports
  - Data Maintenance subscriptions (Advanced).

Custom tables cannot be used in the Basic Report Builder or the Aggregate Report Builder features.

### *Supported files for custom tables*

Create a custom table using your report results or a source file.

Source file requirements:

- File format - Must be .csv.
- File size - Unlimited.
- Column headers - Can contain lowercase letters, numbers, or underscores (\_).

Duplicate column names, blank column names, spaces, and symbols (other than underscores) are not supported.

To help column headers pass validation, Network converts uppercase letters to lowercase and trims spaces before and after the name.

**Important:** Avoid using Network field names as column headers.

### *Creating a table through a source file*

The **My Custom Tables** and **Shared Custom** tables categories display in the SQL Query Editor; they are empty by default.

- **My Custom Tables** - Data tables that you create for your private use. No other users can access the tables in this category.
- **Shared Custom Tables** - Data tables created by you and other users in your Network instance. These tables are available to everyone in your Network instance that has access to SQL Query Editor.



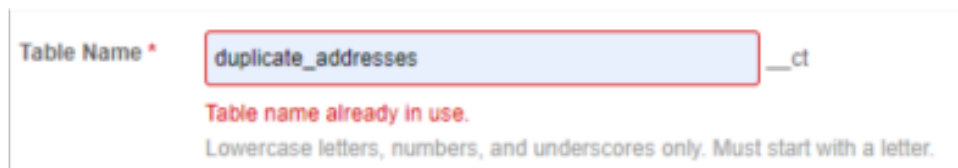
To create a private or shared custom table:

1. On the Network menu bar, click **Reports > SQL Query Editor**.
2. In the tree view, on the **My Custom Tables** or **Shared Custom Table** heading, click **Create > Custom Table**.

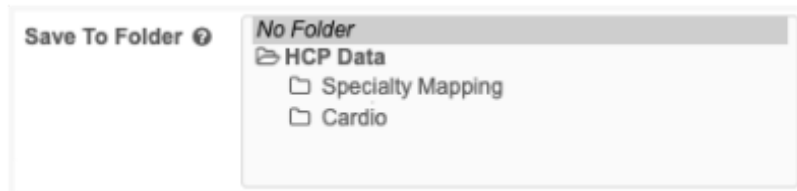
The Create Custom Table wizard opens.

3. On Step 1, **Table Details**, provide the following information:
  - **Table Name** - Type a meaningful name for this table. The name is automatically appended with the `__ct` suffix.

Table names must be unique for all custom tables in the Network instance. If the `Table name already in use` message displays, another user has used the name for their custom table. A table name can be used again if the custom table has been deleted.



- **Description** - Type a meaningful description. The description displays in the table metadata in the tree view.
- **Table Type** - The custom table category that you chose is automatically selected and cannot be changed.
- **Save to Folder** - If folders have been created in the custom table section, you can select where the table should be saved. Otherwise, the table will be created in the top level of the section.



- **Third Party Data** - Indicate if the file that you are uploading contains third party data. If you choose **Yes**, confirm that you have a TPA in place so Veeva can receive the data.
- **Upload File** - Drag your .csv file to the box or click **Upload File** to choose it from your local computer.

The file is scanned and validated when it is being uploaded. If any issues are found, warnings or a failed message displays.

The upload will fail if any of the following issues are found:

- **Malformed Line Found** - The file contains a malformed line.
- **Invalid file format** - Files must be in .csv format.
- **Invalid header format** - Spaces, special characters, or duplicate column names were found.
- **Something went wrong** - An unknown issue occurred.



### Create Custom Table

Import a file that you can use as a reporting table to run reports.

**1 Upload File** **2 File Preview**

**Table Name \***  \_\_ct  
Lowercase letters, numbers, and underscores only. Must start with a letter.


**Description**

**Table Type \***  My Custom Table  Shared Custom Table

**Save To Folder**

**Third Party Data \*** Does your file contain third party data? (Example: data licensed from IMS/IQVIA)  
 No  Yes

**File Upload**

  
Drag file here (.csv)  
or

- When the file is uploaded, Step 2 of the wizard automatically opens. The **File Preview** displays a count of the records. This is the total number of rows that will be created in the custom table, not including the column header. The first four rows of the file display so you can preview the data before you create the table.



SQL Query Editor > Create Custom Table > Table Preview

### New Custom Table – specialty\_group\_list\_ct

Preview the column names and values before saving the table.

1 Upload File    2 File Preview    3 Create Table

**2016** RECORDS REAL

COLUMN NAME	ROW 1 VALUE	ROW 2 VALUE	ROW 3 VALUE	ROW 4 VALUE
spec_group_code	G-CD	G-CD	G-CD	G-CD
spec_group_label	Cardiology	Cardiology	Cardiology	Cardiology
reference_type	HCPFocusArea	HCPFocusArea	HCPFocusArea	HCPFocusArea
network_code	CARDIOSURG	CARMETA	CARMYO	CHF
network_label	Cardiovascular Surgery	Cardio_Metabolic Diseases	Cardiomyopathy / Heart Muscle Disease	Congestive Heart Failure
primary_spec_group				
group_rank	2	2	2	2

If you click **Table Details** to return to the first step, the **Third Party Data** setting will be reset and you must re-upload the file. If you click **Cancel**, the table will not be created.

5. Click **Create Table** to generate the custom table.

When the update is complete, the SQL Query Editor opens with the custom table section opened to the new table. Expand the table to review the metadata and the columns that were created.

**Note:** All fields under custom tables are `text` data type fields.

My Custom Tables ⓘ + Create

specialty\_group\_list\_ct

- Created Date: August 26, 2021
- Created From: File
- Description: Details for the specialty groups.
- network\_code
- network\_label
- reference\_type
- spec\_group\_code
- spec\_group\_label

Shared Custom Tables ⓘ + Create

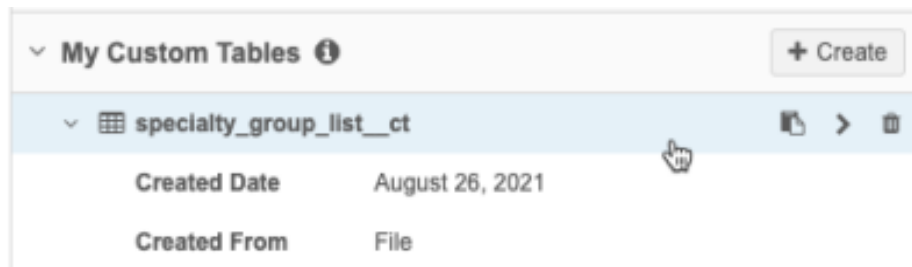
You can now use the table and fields in a report query.



### Table actions

Highlight a table to use the action buttons, **Copy to Clipboard**, **Add to Query**, and **Delete**.

**Note:** Table names must be unique. If you delete a custom table, the name can be re-used.

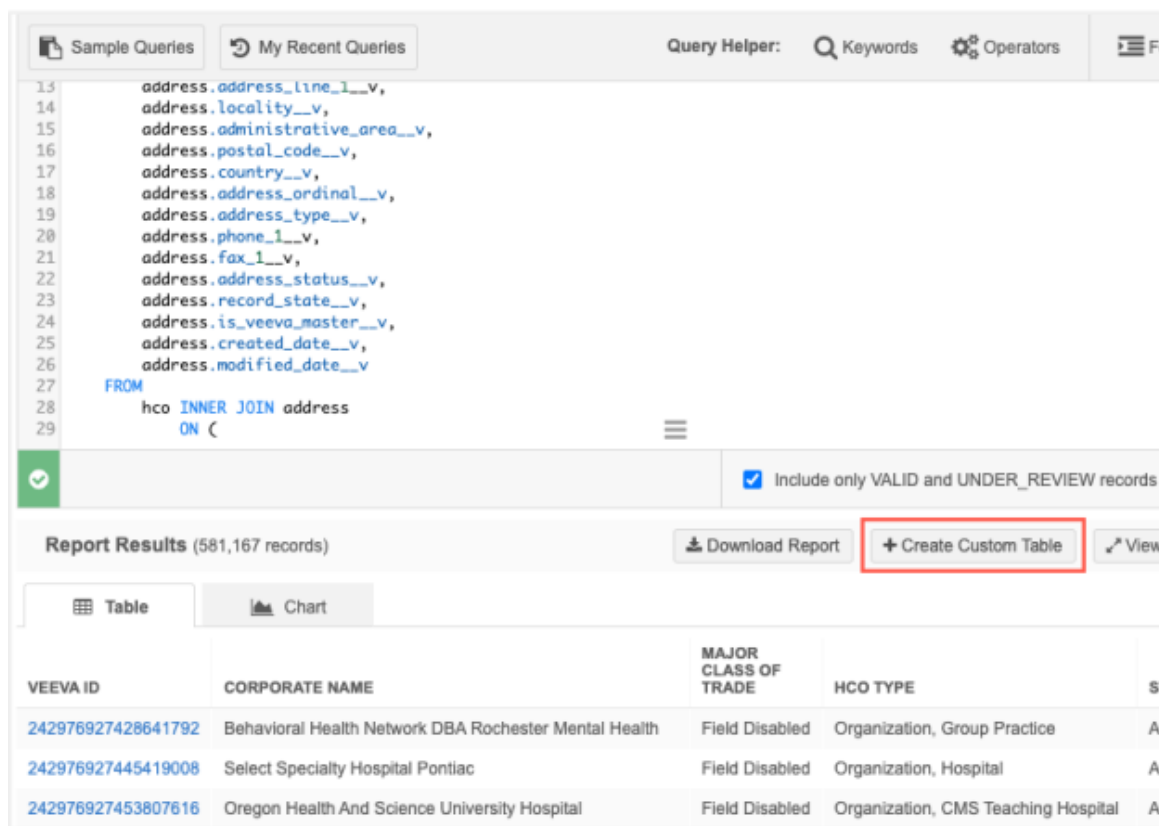


### Creating a table from your report results

Using report results to create a custom table enables you to create complex queries that will not timeout.

To create a table using results:

1. In the SQL Query Editor, write a valid query in the query box.
2. Click **Run Query**.
3. In the **Report Results** section, click **Create Custom Table**.





The Create Custom Table wizard opens.

4. On Step 1, **Table Details**, define the settings for the custom table.

Define the following information:

- **Table Name** - Type a meaningful name for this table. The name is automatically appended with the `__ct` suffix.

Table names must be unique for all custom tables in the Network instance. If the `Table name already in use` message displays, another user has used the name for their custom table. A table name can be used again if the custom table has been deleted.

- **Description** - Type a meaningful description. This displays in the table metadata in the tree view.
- **Table Type** - Choose the type of custom table to create: **My Custom Table** or **Shared Custom Table**.
- **Save to Folder** - If folders have been created in the custom table section, you can select where the table should be saved. Otherwise, the table will be created in the top level of the section.
- **Export Dropdown List (Reference Value) Fields As** - Specify whether reference codes appear in the results, or their corresponding localized labels. Labels will display in the language you select from the drop-down list.

The screenshot shows the 'Create Custom Table' wizard interface. At the top, there are 'Cancel' and 'Next' buttons. Below the title, a progress bar indicates three steps: '1 Table Details' (active), '2 Table Preview', and '3 Create Table'. The form contains the following fields and options:

- Table Name \***: A text input field containing 'custom\_table1' followed by a suffix '\_\_ct'. A note below reads: 'Lowercase letters, numbers, and underscores only. Must start with a letter.'
- Description**: A text area containing 'Custom table created from report results'.
- Table Type \***: Two radio button options: 'My Custom Table' (selected) and 'Shared Custom Table'.
- Save To Folder**: A dropdown menu showing 'No Folder'.
- Export Dropdown List (Reference Value) Fields As \***: Two radio button options: 'Labels' (selected) and 'Codes'.
- Language \***: A dropdown menu showing 'English'.

5. Click **Next**.



- On Step 2, **Table Preview**, a count of the records displays. This is the total number of rows that will be created in the custom table, not including the column header. The first four rows of the file display so you can preview the data before you create the table.

**Column header validation**

Network validates the column headers so the custom table is created without issues. If the column header names have issues, the table cannot be created; the **Create Table** button is dimmed.

Column name requirements:

- Must start with a lowercase letter.  
Network trims spaces before and after the column header name and automatically converts uppercase letters to lowercase.
- Can contain only lowercase letters, numbers, and underscores (\_).
- Can be SQL reserved words.

Errors will display for any of the following issues:

- Duplicate or blank column names
- Spaces within the column names
- Special characters are used. Only underscores are supported.

SQL Query Editor > Create Custom Table > Table Preview

New Custom Table – custom\_table1\_ct Cancel Create Table

Preview the column names and values before saving the table.

✓ Table Details
2 Table Preview
3 Create Table

**581167** RECORDS READ

*Invalid column name. Column names can only contain lowercase letters, numbers or underscores and they can only start with a letter. No duplicate column names allowed.*

COLUMN NAME	ROW 1 VALUE	ROW 2 VALUE	ROW 3 VALUE	ROW 4 VALUE
vid__v	242976927428641792	242976927445419008	242976927453807616	242976927462196225
hco_type__v	Organization, Group Practice	Organization, Hospital	Organization, CMS Teaching Hospital	Organization, CMS Teaching Hospital
hco_status__v	Active	Active	Active	Active
created_date__v	2018-04-24T03:05:03+00:00	2018-04-24T04:58:35+00:00	2018-04-24T04:34:15+00:00	2018-04-24T09:01:35+00:00
modified_date__v	2018-09-14T01:30:51+00:00	2018-09-13T18:41:38+00:00	2018-09-13T19:18:01+00:00	2018-09-14T01:28:42+00:00
primary_country__v	United States	United States	United States	United States





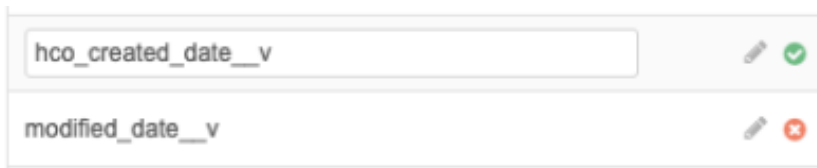
### Validation issue example

The column names that display are the data model field names from the report query, not the field label.

In the report query, the `created_date__v` field is used for both the HCO and Address object, so the field name becomes a duplicate column name.

```
hco.hco_status__v,  
hco.created_date__v,  
hco.modified_date__v,  
hco.primary_country__v,  
hco.is_veeva_master__v,  
address.entity_type__v,  
address.formatted_address__v,  
address.address_line_1__v,  
address.locality__v,  
address.administrative_area__v,  
address.address_status__v,  
address.record_state__v,  
address.is_veeva_master__v,  
address.created_date__v,  
address.modified_date__v
```

To fix the issue, edit the column name. For example, add an `hco_` prefix to the `created_date__v` column name. When the issue is resolved, the validation icon updates to a green checkmark.

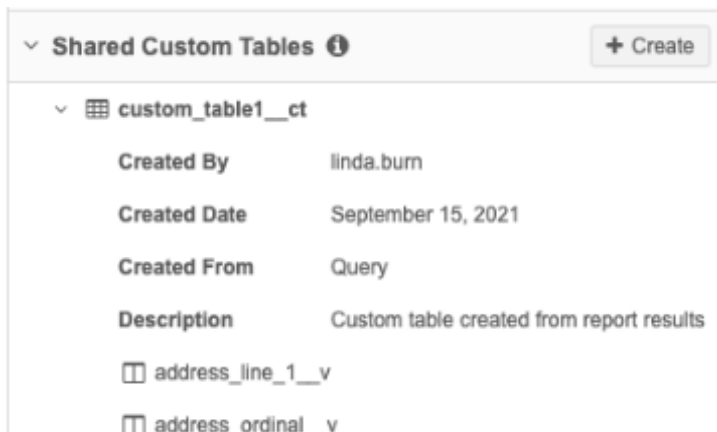


- When any column header validation issues have been resolved, click **Create Table**. The table will be added to the custom table section that you specified.

**Tip:** To share the tables you created in the **My Custom Tables** section, you can drag and drop them into the **Shared Custom Tables** section.

Expand the table name to view the table metadata and the columns that are available to use in your queries.

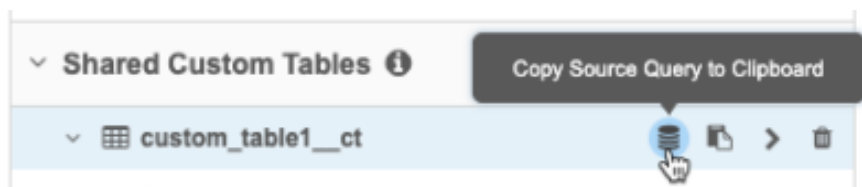
**Note:** All fields under custom tables are `text` data type fields.



### Retrieving the source query

If you create a custom table using report results, you can retrieve the query that was used to create the table.

- Hover over the custom table name to display the action buttons. Click the **Copy Source Query to Clipboard** icon to copy the query.



### Deleting tables

You can clean up the custom tables that you no longer use by deleting them.

- To delete a table, hover over the custom table name to display the action buttons. Click the **Delete** icon.

### My Custom Tables

All of the tables in this section can be deleted because you created them.

### Shared Custom Tables

Tables in this section can be deleted if you created them. System Administrators and System and Data Admin users can delete any custom table.

If the **Delete** icon is dimmed, you do not have access to delete the table.



### Creating folders

To organize your tables, you can create folders and sub-folders in the custom table sections.

To create a folder:

1. In the **My Custom Tables** or **Shared Custom Tables** section, click **Create** and choose **Folder**.
2. On the **Create Folder** pop-up, type the folder name. Click **Create Folder**.

The folder is added to the section above any existing tables.

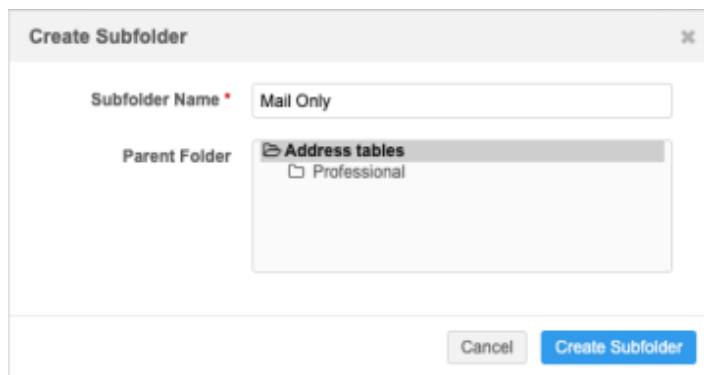


3. To organize your existing tables, drag them into the new folder. The hierarchy will be updated.



4. You can also create sub-folders within a folder. Hover over the existing folder and click the **Create** (+) icon and click **Subfolder**.

The **Create Subfolder** pop-up displays the hierarchy so you can choose where to add the sub-folder.



### Edit folder names

Folders and sub-folder names can be changed.

- Hover over the folder and click the **Pencil** icon. Make your updates in the name field. Folder names must be unique within the hierarchy; for example, in a top-level folder, two sub-folders cannot contain the same name.

### Move folders

Folders can be moved into other folders so you can easily organize the hierarchy within your **My Custom Tables** and **Shared Custom Tables** sections.

- Drag and drop a folder into another folder.

The contents of the folder and any sub-folders will also move. Folders cannot be moved between the two sections.

### Delete folders

Folders and sub-folders in the **Shared Custom Tables** sections can be deleted by all reporting users. You can delete all folders in your **My Custom Tables** sections.

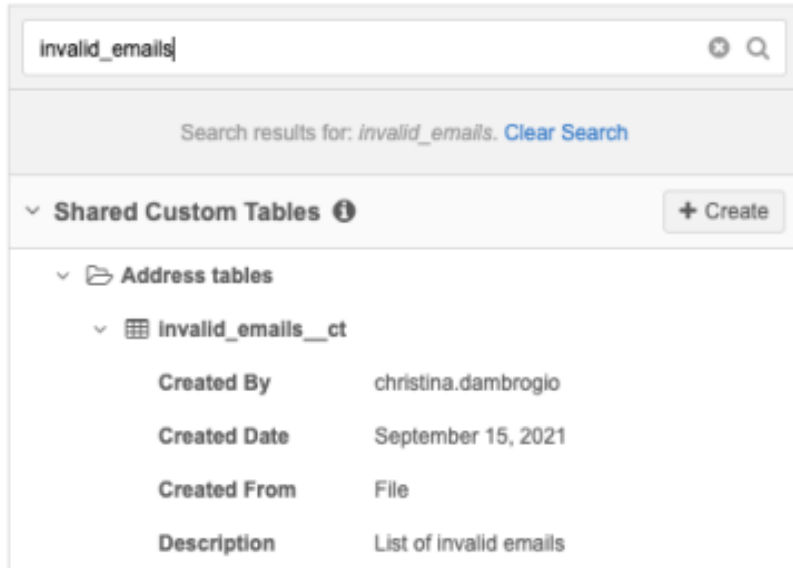
- Hover over the folder and click the **Delete** icon. In the confirmation pop-up, click **Yes, Delete Folder**. The folder is removed from the custom table section.

The icon is dimmed if the folder contains tables. When you delete a folder that contains empty sub-folders, all of the folders are deleted at the same time.

### *Search for tables*

Use the search bar in the tree view to find custom tables and their fields. Folders do not display in the search results.

Your search term displays below the search bar so you can see what the results are filtered on. Click **Clear Search** to clear the filtering and view the entire tree view again.



### Logs

All of the actions (creating, deleting, and editing table names and folders) are tracked in the System Audit History (**Logs**).

### Saved reports considerations

Tables from the **My Custom Table** category can be used in Saved Reports. Saved Reports use the data permissions of the user who last modified the report. When the user who last modified the report is the creator of the private custom table the report will run successfully. If the Saved Report results are shared with other users, those users might see data from the private custom table. This is expected behavior.

If the Saved Report contains a private custom table and the user that last modified the report is not the creator, then the SQL validation will fail or the user will see an error.

### REAL TIME EXPORTS TO THE REPORTING DATABASE

As part of our ongoing Network Reporting infrastructure improvements, entity-level updates are now immediately exported to the reporting database. This means that you can report on updated data as soon as changes are made in Network.

This significantly improves on the existing process of scheduled database updates and eliminates the need for the **Reporting Database Last Updated** timestamp on the reporting pages.

These improvements are enabled by default in your Network instance.



## Data model

---

### COUNTRY SUPPORT

Veeva OpenData data models have been added for countries in Latin America.

- Bahamas (BS)
- Barbados (BB)
- Bermuda (BM)
- Cayman Islands (KY)
- Curacao (CW)
- Jamaica (JM)
- Trinidad and Tobago (TT)

The data models are based on the Other Countries (ZZ) data model. The data model also includes additional fields so they are consistent with other Latin American OpenData data models.

The activated reference codes are based on the reference codes that are activated for Other Countries (ZZ), along with additional reference codes supported by the Latin America OpenData team.

### Localization

- Jamaica - English (en) translations will be used for the Network UI, data model fields, and reference data.
- All other new countries - Spanish (es) translations will be used for the Network UI and data model fields. Spanish-Mexico (es-MX) translations will be used for reference data.

### NEW LANGUAGE

Korean (KO) is now supported for data model fields and reference codes. Korean characters can also be used in Network search. Korean is not supported for the Network UI.

This enhancement is enabled in your Network instance by default.

### *Select the language for reference codes*

To view reference codes in this language:

1. On the Network menu bar, click **My Profile**.
2. In the **Settings** section, expand the **Language** list and select **Korean**.
3. **Apply** your changes.



## CLUSTER MANAGEMENT

Customers can enrich addresses for additional providers and countries by adding cluster codes. In this release, Network has included support for the following country/third party cluster provider combination:

- Ireland - IQVIA™
- Netherlands - IQVIA
- Russia - IQVIA
- Switzerland - SM Service Marketing™

A TPA must be signed with the third party cluster provider to use the cluster management feature. For more information, see the topic called [Managing clusters](#) in the *Veeva Network Online Help*.

## DATA PRIVACY OPT OUT DATE

The **Customer Data Privacy Opt Out Date** field will become read-only in Network version 21R3.0. The field was introduced in version 20R3.1 to capture the date that the data privacy opt out flag is set to **True**. The field has been editable so administrators could backfill the date on locally managed HCPs records that were opted out before the field existed.

If you are planning to backfill the **Customer Data Privacy Opt Out Date** field, the updates must be completed before version 21R3.0. For detailed instructions, see the [Data privacy opt out date](#) topic in the *Veeva Network Online Help*.

This update will be enabled by default in your Network instance in version 21R3.0.

## GEOCODES

Latitude and longitude fields are now available for addresses in all countries. Geocodes are available when address cleansing is enabled in your Network instance. These values will display on address records after they are loaded, or after they have been updated.

This enhancement will be enabled by default.

### *Enable the field*

The `geo_accuracy_code_v` field will be enabled by default in all new and existing Network instances. The field cannot be disabled.

### *Profile layouts*

The Geo Accuracy Code field is automatically added to the **Address** section on standard profile layouts. To view the **Latitude** and **Longitude** fields on records, users can click the **Extended Info** link in the **Addresses** profile section. Administrators can add the Geo Accuracy Code field to custom profile layouts.



## Custom objects

---

### HARD DELETING CUSTOM OBJECT RECORDS

Custom object records can now be hard deleted. Previously, the records could be soft deleted (record state is DELETED) but the custom object definition could not be deleted because tasks and records still existed in the database. Now, the custom object records can be flagged for hard deletion. After Veeva Support deletes the records, administrators can delete the custom object definition.

This feature is enabled by default if you have custom objects enabled in your Network instance.

#### *About hard deleted records*

Hard deleting records is helpful when you have loaded data for testing but you no longer want the object and records in your Network instance.

When custom object records are hard deleted:

- They are permanently removed from your Network instance.
- Pending and closed add and change requests are deleted.
- Pending and closed suspect match tasks are deleted if they contain deleted records.
- Source subscription jobs for the deleted records are still available for audit purposes.
- Reports cannot be run on the records. Reports that previously ran using the deleted records are available to view.

#### *Deletion process*

The deletion process for custom object records requires assistance from Veeva Support.

Administrators must complete the following tasks:

- Run the **Delete Custom Object Records** data maintenance job to soft delete the records. The records will be updated to the DELETED record state.

**Note:** If records were marked INVALID or DELETED using other subscriptions, they will need to be soft-deleted by this data maintenance subscription again. Only this data maintenance job properly updates the record state for the hard deletion process.

- Flag the records to be hard deleted.
- Submit a ticket to Veeva Support to hard-delete the records.

Veeva Network automatically exports the flagged records to your FTP folder (outbound/hard\_delete\_backup) before they are hard deleted. After the deletion is complete, the action cannot be reversed; the records and data are permanently removed.

When the records have been deleted, administrators can delete the custom object definition in the data model.





### ***Run the data maintenance job***

To soft delete the custom object records, run the **Delete Custom Object Records** job. Records for one main custom object can be deleted for each job.

When you use the data maintenance job, you have two options:

- Delete all records for the object.
- Delete specific records by identifying them by Veeva ID in a .csv file.

If you delete records using a file, remember to include any unverified records that are invalid. When unverified records are rejected by data stewards, the record state is updated to Invalid. These also need to be updated to DELETED.

For details about creating and running the data maintenance job, see [Deleting custom object records](#) in the *Veeva Network Online Help*.



### Reviewing the soft delete job details

After the data maintenance jobs runs, you can click the Job ID in the **Job History** section to review the details.

## Job Details (ID: 709) Cancel Job

---

**▼ Overview**

<b>Subscription</b> SoftDeleteCustomObject	<b>Action</b> Delete Custom Object Records
<b>Start Time</b> 2021-09-16 20:01:00 IST	<b>Job ID</b> 709
<b>Duration</b> a few seconds	<b>Percent Complete</b> 100.00%
<b>Current Stage</b> FinalStage	<b>Outcome</b> COMPLETE
<b>Started By</b> PM Admin	

**▼ Data Load Summary**

ENTITY	ROWS READ FROM FILE	ROWS PARSED
PRODUCT_V__C	7	7

**▼ Entities Updated Summary**


ENTITY	RECORDS DELETED	RECORDS INVALIDATED	RECORDS INACTIVATED
PRODUCT_V__C	7	0	0
INDICATION_V__C	1	0	0
CUSTOMKEY	0	0	14

**▶ Job Trigger Summary**

### *Flag records for deletion*

When records for main custom objects are deleted, records for custom sub-objects and relationship objects might also be deleted. The impacted objects are identified before you flag the custom object records.





## Product

OBJECT

On this page: [Object Details](#) · [Fields](#) · [Labels](#) · [Sub-Objects](#) · [Relationship Objects](#) · [Dynamic Access Control](#) · [Source Survivorship Rules](#) · [Object Icon](#) · [Delete Records](#) · [Delete Object](#)

---

### ▼ Delete Records

To delete records for this object:

1. Run the Delete Custom Object Records data maintenance job to soft delete the records (mark as Deleted).
2. Select this option to flag the records for hard deletion:

Flag soft-deleted records for hard-deletion

⚠ Records will not be flagged for hard-deletion until you save the object.

The following sub-object and relationship-object records will also be hard-deleted:

**Sub-Object**

Indication (INDICATION\_V\_\_C)

**Custom Keys**

3. Submit a ticket in Veeva Support to hard delete the records.  
Network exports the flagged records into your FTP folder `outbound/hard_delete_backup` before they are hard deleted.

ⓘ After Veeva Support has performed the hard deletion, the action cannot be reversed; the records and data are permanently deleted.

### ▼ Delete Object

The object cannot be deleted because it contains data.  
Complete the steps in the "Delete Records" section. The object can be deleted after its records have been deleted.

To flag records:

1. In the Admin console, click **Data Model** and choose the data domain that contains the custom object.
2. On the custom domain page, select the custom object.
3. Click the **Delete Records** link on the summary header to go to that section. Review any sub-object or relationship objects that will also have records deleted.
4. Select **Flag soft-deleted records for hard-deletion**.

Note that the **Delete Object** button is dimmed. You cannot delete the custom object until the records are hard deleted.

5. In the confirmation dialog, click **Flag Record Deletion**.
6. **Save** your changes.



**Note:** If the records were flagged in error, you can clear the **Flag soft-deleted records for hard-deletion** checkbox any time before Veeva Support begins the hard deletion. Only the records that are flagged at the time of hard deletion will be included in the job.

**Tip:** If you want to delete the custom object after the records are hard deleted, ensure that new records are not loaded for the object through your subscriptions.

### Create a Veeva Support ticket

After the records have been flagged, create a ticket for Veeva Support. Veeva Support will contact you to plan a time for a maintenance window to complete the job. The flagged records will be exported to your FTP folder (`outbound/hard_delete_backup`) before they are hard deleted.

### Hard deleting records

Only records that were soft-deleted by the **Delete Custom Object Records** data maintenance job will be hard-deleted by Veeva Support. Records that were updated to DELETED record state using a source subscription will not be included in the hard deletion job.

When Veeva Support has completed the job, the records and any tasks for the records are permanently removed.

To review the job details:

- On the Data Maintenance Subscriptions page, click the **hard\_delete\_custom\_\_v** subscription name in the list. This subscription is generated by Veeva Network.

NAME	ACTION	SCHEDULE	LAST JOB TIME	LAST JOB STATUS	STATUS
<a href="#">hard_delete_custom__v</a>	Delete Custom Object Records	Manual	2021-09-16 20:02:52 IST	COMPLETE	✓ Enabled
<a href="#">SoftDeleteCustomObject</a>	Delete Custom Object Records	Manual	2021-09-16 20:01:17 IST	COMPLETE	✓ Enabled

The Custom Object Deletion Summary page lists the hard delete jobs for your Network instance. Each job displays the job ID, Zendesk #, objects that were deleted, the time the job started and the outcome.



### Custom Object Deletion Summary

ID	ZENDESK #	OBJECTS	START TIME	OUTCOME
<a href="#">710</a>	256478	MARKET_BASKET__C, PRODUCT_V__C	2021-09-16 20:02:14 IST	COMPLETE
<a href="#">702</a>	256478	MARKET_BASKET__C	2021-09-16 19:29:06 IST	COMPLETE
<a href="#">667</a>	123123	MARKET_BASKET__C	2021-09-15 04:27:31 IST	COMPLETE

Click the job **ID** to review the job details.

### Job Details (ID: 667) Cancel Job

**Overview**

<b>Subscription</b>	hard_delete_custom__v	<b>Action</b>	Delete Custom Object Records
<b>Start Time</b>	2021-09-15 04:27:00 IST	<b>Job ID</b>	667
<b>Duration</b>	a few seconds	<b>Percent Complete</b>	100.00%
<b>Current Stage</b>	FinalStage	<b>Outcome</b>	COMPLETE
<b>Started By</b>	System	<b>Zendesk #</b>	123123

**Entities Deleted Summary**

ENTITY	RECORDS DELETED
PRODUCT_V__C	7
INDICATION_V__C	1
CUSTOMKEY	14

**Hard Delete Records Export FTP**

Records that have been hard-deleted are exported to:

<b>FTP Folder</b>	outbound/hard_delete_backup/
<b>Filename</b>	hard-delete-backup-job710-MARKET_BASKET__C-PRODUCT_V__C.zip

This page displays the status of the job, records that were deleted, and the Veeva Support (Zendesk) ticket that was assigned to the job. The **Hard Delete Records Export FTP** section contains the path to your backed-up records. The filename is unique for each hard delete job; it contains the job ID and objects that were deleted.



### *Delete the custom object*

After Veeva Support has hard deleted the records, you can delete the custom object from the data model. Veeva Support does not delete the custom object when they delete the records. This gives you the option to load new records or to delete the custom object yourself.

On the custom object data model page, the **Delete Object** button is no longer dimmed because the records and tasks have been hard deleted and removed from the database.



### *Logs*

The soft delete and hard delete jobs are tracked in the **System Audit History (Logs)**.

## OpenData subscriptions

### **MAIL ONLY ADDRESSES**

Mail only addresses on Veeva OpenData records can now be invalidated automatically. Network Expression rules can be used to invalidate these addresses after they are downloaded from Veeva OpenData but if the addresses are merged into other addresses in the OpenData instance, those updates will not occur in your Network instance.

Using this feature, mail-only addresses from OpenData subscriptions, ad hoc download jobs, and change requests are automatically updated to the INVALID record state after merge updates. Additionally, the feature ensures that invalid addresses are not set as primary addresses. Custom keys are not inactivated when mail-only addresses are invalidated.

This feature is not enabled by default. To enable the feature, contact Veeva Support.

**Important:** Before the feature can be enabled, any Network Expression rules that drop or invalidate mail only addresses must be removed from your Network instance. Create a Veeva Support ticket to have the rules removed.



## Source subscriptions

### NETWORK EXPRESSIONS

A new function, SETI, can be used in source subscriptions to help load dynamic attribute data from Veeva CRM.

```
SETI(field, value)
```

#### Example

##### Incoming file

A file from Veeva CRM includes columns for dynamic attributes.

VID	Dynamic_Attribute_Name_vod__c	Dynamic_Attribute_Value_Checkbox_vod__c
929348577348723909	Key_Account	TRUE
929348674539980761	Key_Account	FALSE

##### NEX rule

In the source subscription, create a File Preparation rule.

▼ Network Expression Rules ?

RULE POINT	FILE / ENTITY	RULE
File Preparation	KeyAccount	[ "field =if(Dynamic_Attribute_Label_vod__c == 'Key_Account', 'key_account__c')," "seti(field,Dynamic_Attribute_Value_Checkbox_vod__c)" ]

Verify Add Rule

To map the dynamic attributes field names to Network field names, in the file preparation stage, create a new attribute called `field`. In this case, we map the dynamic attribute, `key_account`, to `key_account__c`. Then, use the SETI function to set the value of the custom Network field using the dynamic attribute value.

- **Field** is set to `Key_Account`.
- **Dynamic\_Attribute\_Value\_Checkbox\_vod\_\_c** is set to `True` or `False` (checkbox field).



```
[
  "field =if(Dynamic_Attribute_Label_vod__c == 'Key_Account',
'key_account__c')",
  "seti(field, Dynamic_Attribute_Value_Checkbox_vod__c)"
]
```

If the field has been added to the profile layout, it displays so users can view the data.

**Jose Alvarez** ☆  
 FULL ADDRESS 751 S Bascom Ave San Jose CA 95128-2604  
 Prescriber, Emergency Medicine

<b>Primary Information</b> Addresses Parent Affiliations E-Contacts External Identifiers Licenses CMS Open Payments Educational Information Personal Information	Gender	Male	Place of Employment	City/County/State Government Hospital
	Major Professional Activity	Full-Time Hospital Staff	Type of Practice	Direct Patient Care
	Key Account	Yes/True	PDRP Opt Out?	No/False
	Associated with Kaiser?	No/False	PDRP Opt Out Date	No value

### About dynamic attributes

Dynamic attributes are special Veeva CRM fields created for an immediate business need; something that would not require a custom field. For example, business admins might collect information for an account for an upcoming conference.

Dynamic attributes can be extracted from CRM using the Veeva Connector. This is a one-way integration from Veeva CRM to Network.

**Tip:** The field should be read-only in Network so it cannot be updated.

For more information about dynamic attributes, see [Dynamic Attributes for Accounts](#) in the *Veeva CRM Online Help*.





## Users

---

### USER STATUS

For consistency, the **Status** label on Network user accounts has been changed from **Disabled** to **Inactive**.

The two user status options are now **Active** and **Inactive**.

## Network integrations

---

### TARGET SUBSCRIPTION WARNINGS

Detailed warnings now display in your Network Bridge configuration if you link the Bridge to an incorrectly configured target subscription. The warnings will prevent data issues in Veeva CRM.

#### Common issues for target subscriptions

- The **Record State** setting is set to **Valid & Under Review**  
Records that are INVALID or MERGE\_INTRO state are not sent downstream so merges don't occur; duplicate records will be created in Veeva CRM.
- The **Full Data Extract** setting is set to **Full** instead of **Delta**  
When you export the full set, entities that haven't changed are continually sent to Veeva CRM. This increases the Network Bridge job time and increases the time to sync and download to mobile devices.

When these issues are identified for the target subscription that you link to your Network Bridge, the warnings display in your Network Bridge configuration so you can make changes.

This enhancement is enabled in your Network instance by default.

### *Network Bridge*

When you select the target subscription for your Network Bridge configuration, a warning displays if an issue is identified. Click the link to view the details.



### crm\_global\_bridge Details

**Details**

Name:

Type: Multi-Country CRM Data Subscription

Status:  Enabled  
 Disabled

**Countries**

Search for child bridges

<input type="checkbox"/>	COUNTRY	NAME	LAST JOB TIME	LAST JOB STATUS	STATUS
<input type="checkbox"/>	Canada	<a href="#">crm_global_bridge_CA</a>	2021-09-03 02:02:02 IST	FAILED	Disabled
<input type="checkbox"/>	Mexico	<a href="#">crm_global_bridge_MX</a>	2021-09-03 02:02:02 IST	FAILED	Disabled
<input type="checkbox"/>	United States	<a href="#">crm_global_bridge_US</a>	2021-09-07 02:04:01 IST	COMPLETE	Enabled

**Network Data**

System:

Target Subscription:

Issues found with Target Subscription. [Click Here](#) for details.

A dialog opens to provide more details about the warnings. Click the name of the target subscription to open the subscription details.

Click **OK** to close the dialog. You can choose a different target subscription or keep the defined subscription understanding that possible issues can occur.



**Warnings Found**

Target Subscription  
**crm\_global\_all\_records**

**Warning 1:** This Target subscription is configured to export record state **Valid & Under Review** instead of **All**. This will cause Network Bridge jobs to not process merges, so duplicate records will be created in Veeva CRM.

**Warning 2:** This Target subscription is configured to export **Full** instead of **Delta**. This will increase the time of each Network bridge job because of unnecessary updates in Veeva CRM.

**Are you sure you want to use this target subscription?**

**OK**

**Note:** The warning behavior is the same for single country Bridges and multi-country bridges.

### Network Bridge error log

The error log that you can download from the Network Bridge Job Details page is updated to include the ID for the Bridge job. Previously, the **job\_id** column in the error log contained the ID of the target subscription job. Now, the **job\_id** column contains the Bridge job ID and a new column, **target\_subscription\_job\_id**, contains the target subscription job ID.

A	B	C	D	E	F	G	H	I	J	K
job_id	target_subscription_job_id	country_code	source_object	network_id	custom_ic	network_crm_fielc	error_category	error_details		
4361	4358	US	PARENTHCO	93020110185601631			Salesforce Upsert Error	INVALID_FIELC		
4361	4358	US	PARENTHCO	93020110187299012			Salesforce Upsert Error	INVALID_FIELC		
4361	4358	US	PARENTHCO	69020939355537921			Salesforce Upsert Error	INVALID_FIELC		
4361	4358	US	LICENSE	24324715254382696			Salesforce Upsert Error	REQUIRED_FIE		
4361	4358	US	LICENSE	24324400388820280			Salesforce Upsert Error	REQUIRED_FIE		
4361	4358	US	LICENSE	24339636355806105			Salesforce Upsert Error	REQUIRED_FIE		
4361	4358	US	LICENSE	93155614937311017			Salesforce Upsert Error	REQUIRED_FIE		
4361	4358	US	LICENSE	93155069337023478			Salesforce Upsert Error	REQUIRED_FIE		

### Target subscriptions

The table on the Target Subscriptions page now includes two new columns to help you easily identify the extract and state for each subscription.

- **Full Data Extract** - Identifies subscriptions as **Full** or **Delta** extracts
- **Record State** - Specifies if the subscription will export records with **All** record states or just those records that are **Valid & Under Review**.



**Target Subscriptions**

Search subscriptions   Show Disabled Subscriptions (2) Add Subscription

NAME	DATA SOURCE	TYPE	FULL DATA EXTRACT	RECORD STATE	SCHEDULE	LAST JOB TIME	LAST JOB STATUS	STATUS
<a href="#">AggregateSpend</a>	AggregateSpend	Data	Delta	Valid & Under Review	Manual	2021-05-18 22:50:21 IST	COMPLETE	Enabled
<a href="#">alignexport2</a>	Align-PS	Data	Full	Valid & Under Review	Manual	2020-05-12 17:56:40 IST	COMPLETE	Enabled
<a href="#">MedcommsExport</a>	VaultMedcomms	Data	Full	All	Manual	2020-05-11 23:00:21 IST	COMPLETE	Enabled
<a href="#">ServiceCloud</a>	ServiceCloud	Data	Full	All	Manual	2021-03-30 14:04:52 IST	COMPLETE	Enabled
<a href="#">us_crm_target</a>	VCRM-US	Data	Delta	All	Manual	2021-09-07 00:00:11 IST	COMPLETE	Enabled

### RECORD LEVEL NETWORK BRIDGE ERRORS

Administrators can now report on record level errors in Network Bridge jobs. Previously the Network Bridge job stats were not recorded in reporting. Now, you can query the data and error types for each Bridge job in the SQL Query Editor.

This enhancement is available by default in your Network instance.

**Note:** The Network Bridge job stats are available for Bridge jobs that started after the version 21R1.1 release.

#### Reporting on jobs with issues

Job triggers can notify you when jobs fail, but they don't notify you about completed jobs that have errors. A sample query, **Bridge Jobs with Issues**, is now available so you can report on Network Bridge jobs that have failed or completed in the last day with record level errors. You can use this query as it is or customize it to get more granular record type errors.

**Tip:** Save the query as a saved report so you can schedule it to run and to be notified when there are errors.

The data from Network Bridge jobs is available in Network Reports almost immediately after the job has run.

To use this query:

1. On the Network menu, click **Reports > SQL Query Editor**.
2. In the query box, click the **Sample Queries** button.
3. Use the search bar to find the **Bridge Jobs with Issues** query.
4. Select the query and click **Preview Query** to review it.
5. To use the query, click **Insert Selected Query**.



```
SELECT
  job.job_id,
  job.job_type,
  job.subscription,
  job.job_system,
  job.status,
  job.start_time,
  job_stats_view. "hco.errors",
  job_stats_view. "hcp.errors",
  job_stats_view. "address.errors",
  job_stats_view. "parenthco.errors",
  job_stats_view. "license.errors",
  job_stats_view. "license_assmca.errors",
  job_stats_view. "license_dea.errors",
  job_stats_view. "license_oh.errors",
  job_stats_view. "license_dea_cleanup.errors",
  job_stats_view. "license_oh_cleanup.errors",
  job_stats_view. "license_state.errors"
FROM
  job LEFT OUTER JOIN (
    SELECT
      mainTbl.job_id,
      tbl1.counter AS "hco.errors",
      tbl2.counter AS "hcp.errors",
      tbl3.counter AS "address.errors",
      tbl4.counter AS "parenthco.errors",
      tbl5.counter AS "license.errors",
      tbl6.counter AS "license_assmca.errors"
```

The query will be added to the SQL query box. A green checkmark displays at the bottom to indicate that the query is valid.

6. Click **Run Query**. The results display below the query box.

Any Network Bridge jobs that ran in the last 24 hours and failed or completed with record level errors will display.

JOB ID	JOB TYPE	SUBSCRIPTION	SYSTEM	OUTCOME	START TIME	HCO.ERRORS	HCP.ERRORS	ADDRESS.ERRORS	PARENTHCO.ERR
16236	bridge	mult_country_CA	VCRM	FAILED	2021-09-13 10:46:47				
16237	bridge	mult_country_MX	VCRM	COMPLETE	2021-09-13 10:46:47	0	0	1	0
16238	bridge	mult_country_US	VCRM	COMPLETE	2021-09-13 10:46:47	0	0	2	0

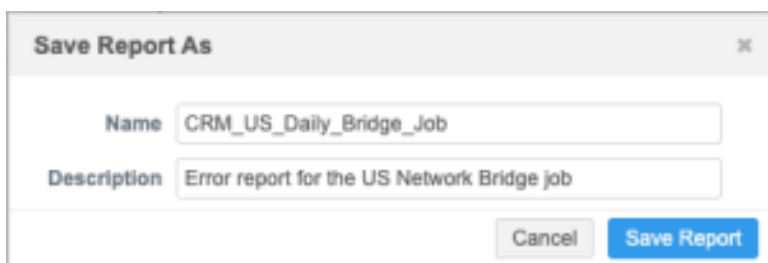


### *Notifications for record level errors*

You can save your queries as saved reports so the report can be scheduled to run after a Network Bridge job. You can also choose to receive an email notification when report results are created. For example, save the **Bridge Jobs with Issues** sample query and schedule it to run daily after your Network Bridge job runs so you can be notified if record level errors occur.

To save the report:

1. In the SQL Query Editor, insert the query into the query box and click **Save Query**.
2. On the **Save Report As** dialog, type a **Name** and **Description**. Click **Save Report**.



The saved report configuration page displays.

3. In the **Schedule** section, click **Enabled** and choose the schedule. For example, if your Network Bridge job runs daily, schedule the report to run every day at a specific time (for example, 30 minutes after the Bridge job typically completes).
4. In the **Share Report** section, add users to the **Viewers** and **Editors** fields. These users will have access to view or edit the report.
5. Click **Send Email Notification** so the users will be notified when the report has run. The report details will not be included in the email notification. Users must log into Network to view the details.

**Note:** The Bridge Job with Issues is configured to have results only if the Bridge job has failed or completed with record level errors in the past 24 hours. If there are no results, the email notification is not sent.

6. Continue configuring the saved report to specify your download preferences and click **Save**.



### CRM\_US\_Daily\_Bridge\_Job

Error report for the US Network Bridge job

Created by scott.woods@verteo.com

---

**▼ Schedule**

Enabled

Schedule

Every  at the following time

:

[+ Add Schedule](#)

---

**▼ Share Report**

Viewers

Editors

Send Email Notifications

⚠ Recipients should add "network-emails@veevanetwork.com" to their Inbox Email Safe List.

This report will now run every day. If a Network Bridge job completes or fails with errors, an email notification will be sent to the specified users.

### Network Bridge stats

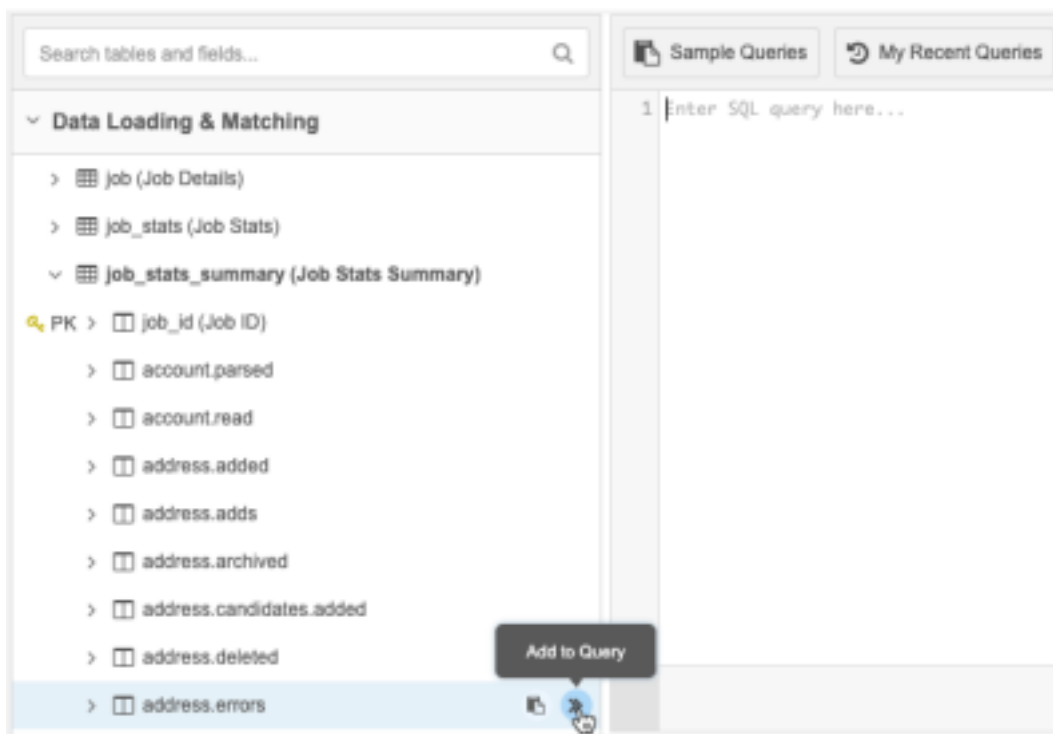
If you want to create your own query, the data from the **Bridge Summary** section on the Job Details page is available to report on in the SQL Query Editor.

OBJECT TYPE	ADDS	UPDATES	ERRORS
LICENSE_ASSMCA	0	0	0
LICENSE_DEA_CLEANUP	0	0	0
LICENSE_OH_CLEANUP	0	0	0
HCP	7	7189	0
HCO	0	8880	0
ADDRESS	8	31028	0
LICENSE	0	25413	4
PARENTHCO	0	16134	0



To query on the job stats:

1. In the tree view in the SQL Query Editor (**Reports**), click the **Data Loading & Matching** section.
2. Expand the **Job Stats Summary** section. The job stats are listed in alphabetical order. Highlight the job stat and click the Add to Query icon to move the column into the query box.



For more information about creating queries, see [Building reports with SQL queries](#) in the *Veeva Network Online Help*.

### Job stats by object

The following metrics are available for each object in the **Job Stats Summary** reporting table.

HCP	HCO	Address	License	Parent HCO
hcp.adds	hco.adds	address.adds	license.adds	parenthco.adds
hcp.updates	hco.updates	address.updates	license.updates	parenthco.updates
hcp.errors	hco.errors	address.errors	license.errors	parenthco.errors
			license_assmca.adds	
			license_assmca.updates	
			license_assmca.errors	
			license_dea_cleanup.adds	
			license_dea_cleanup.updates	
			license_dea_cleanup.errors	
			license_oh_cleanup.adds	
			license_oh_cleanup.updates	
			license_oh_cleanup.errors	





Additionally, there are two error type metrics that can be used:

- `errortype.unable_to_delete_address`
- `errortype.salesforce_upsert_error`

### *Error category stats*

You can also use the following error type metrics to query the error category statistics for each Network Bridge Job. For example, you might want to know only when APEX or locking errors occur.

- `errortype.locking_error`
- `errortype.mapping_error`
- `errortype.salesforce_upsert_error`
- `errortype.system_limit_exception_apex_limit_error`
- `errortype.system_limit_exception_too_many_query_rows_error`
- `errortype.trigger_flow_error`
- `errortype.unexpected_error_while_processing_bulk-api`

Use these metrics to report on more granular record type errors.

## **Security**

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### **TRANSPORT LAYER SECURITY (TLS)**

Veeva Network is deprecating the use of TLS 1.1. Network currently supports TLS 1.1 and TLS 1.2 security protocols for encrypted internet communications. After version 21R2.1 is released, only TLS 1.2 will be supported.

Support will be removed for the following TLS cyphers:

- DHE-RSA-AES256-GCM-SHA384
- DHE-DSS-AES256-GCM-SHA384
- DHE-DSS-AES128-GCM-SHA256