Veeva Network

Veeva Network 22R3.0.1 Release Notes

December 2022

Contents

About these Release Notes 8

Subscribe to release notifications 8

Software releases and maintenance 8

Release Notes and Data Governance documents 8

Browser requirements 8

Release Note updates 9

What's new 10

General updates 14

Veeva Connect 14

Joining the community 15

Notifications 15

Google Analytics consent 15

Providing consent 16

Reviewing consent 17

Logs 17

Hierarchy Explorer 18

Availability 18

Hashtags 19

Hashtag highlights 19

Identify records 19

Available hashtags 20

Include custom hashtags 20

Filter using hashtags 21

Exporting hashtags 23

Performance 24

Network hashtags 24

Name change 24

Profiles 24

Field Helper 24

Enable the feature 24

Provide access to users 25

View Field Helper 25

Managing Field Helper 26

Exporting field help 32

Inbox 33

DCR enhancements 33

Sections 33

Collapse or Expand sections 34

Identify sub-objects 34

Add sub-objects 35

Suspect match enhancements 35

Sections 35

Collapse or Expand sections 35

Task details 36

DCR Detailed View 36

Viewing processed DCR details 37

Address details 38

Parent affiliations 39

Approve tasks in bulk 40

Bulk approve options....40
Supported tasks....41
Approve selected tasks....42
Upload a file....46
Permission sets....48
Reject suspect match tasks....49
Reporting....50
Reporting on OpenData....50
Enable the feature....50
Supported country subscriptions....50
Using OpenData tables....50
Access the reporting tables....51
Table data....52
Instance-level access....53
User-level access....53
Sample queries....54
Data transformation queries....60
Sandbox considerations....60
Sample queries....60
Merged HCO Report....60
Merged HCP Report....61
Use a sample query....61
File Explorer....62
Smart tables....62
Hierarchies....62

Hierarchy management 62
Hierarchy management benefits 63
Default hierarchies 63
Existing custom hierarchies for Hierarchy Explorer 64
Existing customizations for the flat hierarchy reporting table 64
Add a hierarchy 64
Hierarchy Explorer widget configuration 71
Flattened hierarchy reporting 72
Hierarchy management page 73
Logs 74
Managing configurations 74
Reporting on custom objects 74
Data model 76
New languages 76
Data transformation queries 77
Custom table output 77
Benefits 77
Configure transformation query output as custom tables 77
Subscription configuration updates 78
Example 1 - Create snapshots of current data 79
Example 2 - Prevent intermediate files in subscription packages 82
Example 3 - Loading data directly from source subscriptions 86
Managing configurations 91
OpenData subscriptions 92
Veeva OpenData Subscriptions page 92

Subscribed countries 92
Other Veeva OpenData country subscriptions 93
Sort the table 93
Save subscription changes 93
Country subscription configurations 94
Job Schedule & Triggers 94
Veeva OpenData Subscription Details 95
Source subscriptions 95
Merging duplicate addresses 95
Addresses supported for bulk merge 95
Source file requirements 96
Source subscription properties 97
Job issues 97
Network address inheritance considerations 97
Primary address considerations 98
License considerations 98
Data change requests 98
US Compliance subscriptions 99
CMS Teaching Hospital - Years 99
Exporting all data 100
CMS Teaching Hospital - CCN ID 100
MA CRI ID 101
Integrations 103
Network Bridge - License fields 103
Mapping details 103

Supported records 104
CRM configuration 104
Network configuration 104
Network hashtags in Veeva CRM 105
Veeva CRM Connector 105
Extract connectors 106
Compress files 106
Upsert connectors 107
Security 108
SSL certificate update 108
veevanetwork.com certificate 108
Intermediate CA certificate 109
View updated certificates 109
Admin settings 110
Workflow settings 110
API 110
Version Update 110

About these Release Notes

These Release Notes describe all features that are included in Veeva Network 22R3.0.

SUBSCRIBE TO RELEASE NOTIFICATIONS

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

Software releases and maintenance

- Veeva Trust Site

  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

These documents are posted in the following locations:

- Veeva Connect - Join the Network Community.

  To be notified as soon as the Release Notes are posted, go to your Veeva Connect profile and click **Settings**. On the Email Frequency page, expand the list and choose **Immediate**. Other notification options are **Daily** and **Weekly**.

- Veeva Product Support Portal

  Click **Follow** on Network Release Notes page to be notified when release documents are posted.

For more information, see About Network Releases in the *Veeva Network Online Help*.

Browser requirements

Veeva Network is tested and supported on the latest version of these browsers:

- Google Chrome™
- Apple® Safari®
- Microsoft® Edge

Veeva Network is not supported on mobile devices.

Release Note updates

The following topic has been added since the Sandbox Release Notes were published:

- **Veeva Connect** - The Network community is now live on Veeva Connect! Join the community to collaborate with Veeva professionals and other customers.

The following topic has been updated since the Early Release Notes were published:

- **SSL certificate update** - The certificates for `veevanetwork.com` are now available.

Note: Only customers who explicitly download and install certificates on any site caches or proxy servers must update their certificates.

You should review all material in the Release Notes to ensure that updates to existing topics are noted.

What's new

The following key enhancements comprise the Veeva Network 22R3.0 major release.

			ST	DS	DM	AD
General updates						
Veeva Connect	Join the Network community on Veeva Connect to collaborate with Veeva professionals and other customers.	22R3.0	●	●	●	●
Google Analytics cookies	Users are asked for consent to allow Network to use cookies to collect usage data that is used to improve the application.	22R3.0	●	●	●	●
Hierarchy Explorer widget						
Availability	Hierarchy Explorer is now available for all customers.	22R3.0	●	●	●	●
Network hashtags	Hashtags are now supported for the widget.	22R3.0	●	●	●	●
Performance	Widget users will notice performance improvements for page loading times.					
Network Hashtags						
Name change	The existing #phsymed hashtag is renamed to #physmed.	22R3.0	●	●	●	●
Profiles						
Field Helper	You can now add and manage contextual help for fields and field values within Network to provide Data Stewards with information and training when they are stewarding fields on the Profile page.	22R3.0	●	●	●	●
Inbox						
DCR enhancements	Data stewards can more easily navigate the page and identify sub-objects on add and change requests.	22R3.0		●	●	
Suspect match enhancements	Data Stewards can more easily navigate the suspect match page.	22R3.0		●	●	
DCR Detailed View	Data Managers and Data Stewards can now review the detailed changes of processed data change requests (DCRs)	22R3.0		●	●	
Bulk approve tasks	Users can now approve tasks in bulk using the DCR Cleanup operation.	22R2.1		●	●	
Reject suspect match tasks	Suspect match tasks can now be included in bulk reject operations.	22R2.1		●	●	

			ST	DS	DM	AD
Reports						
Reporting on OpenData	Advanced reporting users can now report on country data within OpenData instances.	22R3.0	●	●	●	●
New sample queries	The Merged HCO and Merged HCP reports are now available as sample queries in the SQL Query Editor.	22R2.1	●	●	●	●
File Explorer						
Smart tables	Enhancements have been made to improve your user experience.	22R2.1	●	●	●	●
Hierarchies						
Hierarchy management	Administrators can create custom hierarchies to use in Network reports and the Hierarchy Explorer widget.	22R3.0	●	●	●	●
Data Model						
New languages	Several new languages are now supported for data model fields and reference codes.	22R3.0			●	●
Data Transformation Queries						
Custom table output	Transformation query output can be loaded directly into custom tables.	22R3.0			●	●
Veeva OpenData subscriptions						
Veeva OpenData subscription page	This page is updated to help you quickly access your subscribed countries.	22R2.1			●	●
Country subscription configurations	Country subscriptions now include details about the Veeva OpenData instance that your Network instance is connected to and the time that exports are typically available.	22R2.1			●	●
Source subscription						
Merge duplicate addresses	Administrators can merge addresses in bulk on entities using source subscriptions.	22R2.1			●	●

			ST	DS	DM	AD
US Compliance subscriptions						
CMS Teaching Hospital - Years	Administrators can now choose to export CMS teaching hospital data for all years.	22R3.0			●	●
Export all data	US Compliance target subscriptions are set to export all available data by default in new Network instances.	22R3.0			●	●
CMS Teaching Hospital - CCN ID	The CCN ID is now visible in compliance data on profiles and is included in subscriptions.	22R3.0			●	●
MA CRI ID	Multiple MA CRI IDs are now included in compliance data on profiles.	22R3.0			●	●
Integrations						
Network Bridge - License fields	Additional state license fields for the US are available and are automatically mapped to Veeva CRM.	22R3.0			●	●
Network hashtags in CRM	Hashtags display on accounts for DCR Import and Parent HCO Import for Network Account Search.	22R3.0			●	●
Veeva CRM Connector	The CRM connector type has been renamed to Salesforce.	22R2.1			●	●
Extract connectors	The Salesforce and Vault Extract connectors can now extract files into a single compressed file.	22R2.1			●	●
Upsert connectors	The Salesforce and Vault Upsert connectors can skip files that do not contain data.	22R2.1			●	●
Security						
SSL certificates	Customers who explicitly download and install certificates must update the certificate for veevanetwork.com.	22R3.0				●
Admin settings						
Workflow settings	A description is added to the Workflow settings page in Sandbox instances to indicate how data change requests will be processed.	22R2.1				●
API						
Version update	The Network API is updated to v28.0.	22R3.0		Developers		

Note: The System and Data Admin user has all of 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.

General updates

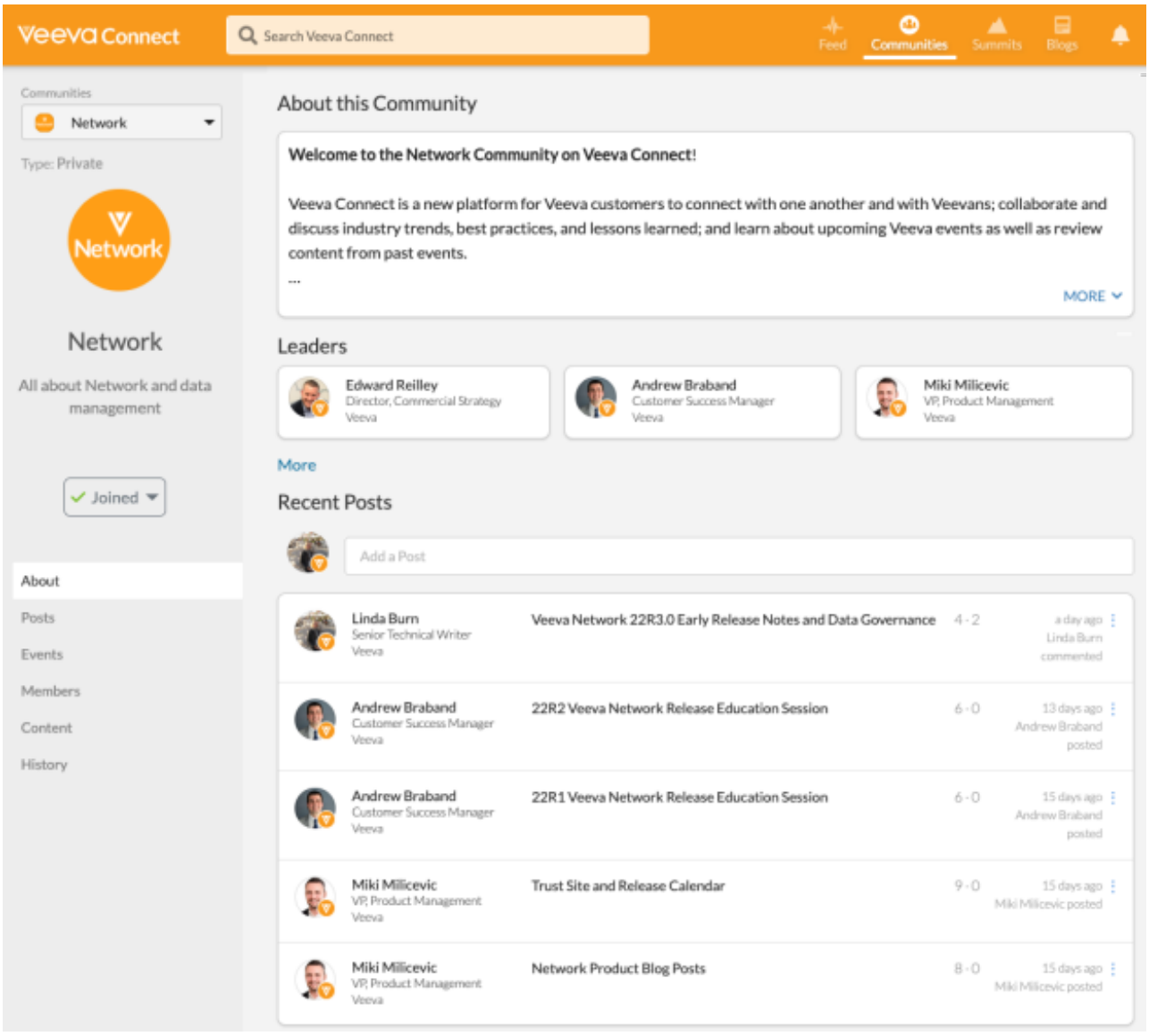
VEEVA CONNECT

22R3

The Network community is live on Veeva Connect!

Veeva Connect is a customer community that you can join to collaborate with Veeva professionals and other customers. Use the platform to discuss industry trends, learn about best practices, and to ask questions.

Note: This community will replace the Network Community on the Veeva Support website.



Joining the community

You will receive an email invitation from Veeva Connect to join the Network community. Click the link and create a profile to begin collaborating with other community members.

Notifications

After you join, you will be notified by email when new items are posted to the Network Community.

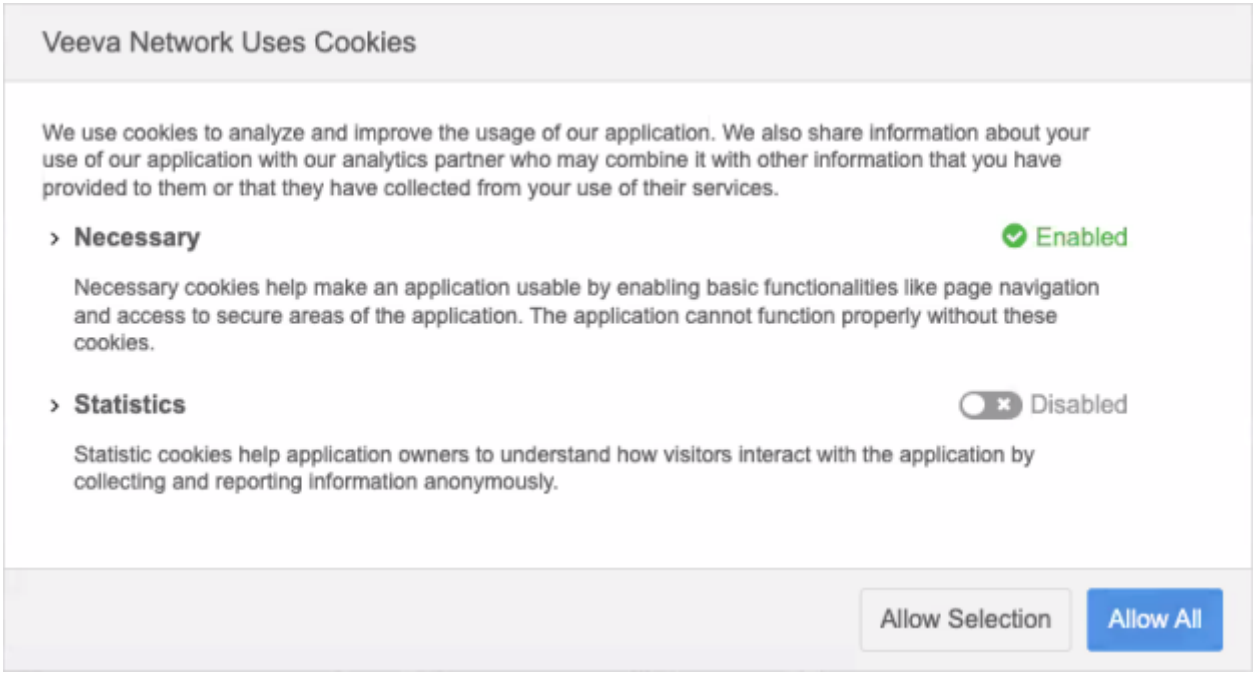
To customize the frequency of your notifications:

1. In Veeva Connect, click your user profile in the top-right corner.
2. Select **Settings**.
3. On the Email Frequency page, expand the list and select one of the options:
    - Immediate
    - Daily
    - Weekly
4. Click **Save Preferences**.

GOOGLE ANALYTICS CONSENT

22R3

Network uses Google Analytics® cookies to analyze your interaction with the application so we can continue to make improvements. To comply with data privacy regulations, you will be asked to consent to allow Network to collect your anonymized usage data through Google Analytics.



New users will be asked for consent the first time they log into Network. Existing users will be asked for consent the first time they log into Network after version 22R3.0 is deployed to their Network instance.

This enhancement is enabled by default in your Network instance.

Providing consent

When the **Veeva Network Uses Cookies** dialog displays, you must make a choice before you can continue and access the Network application.

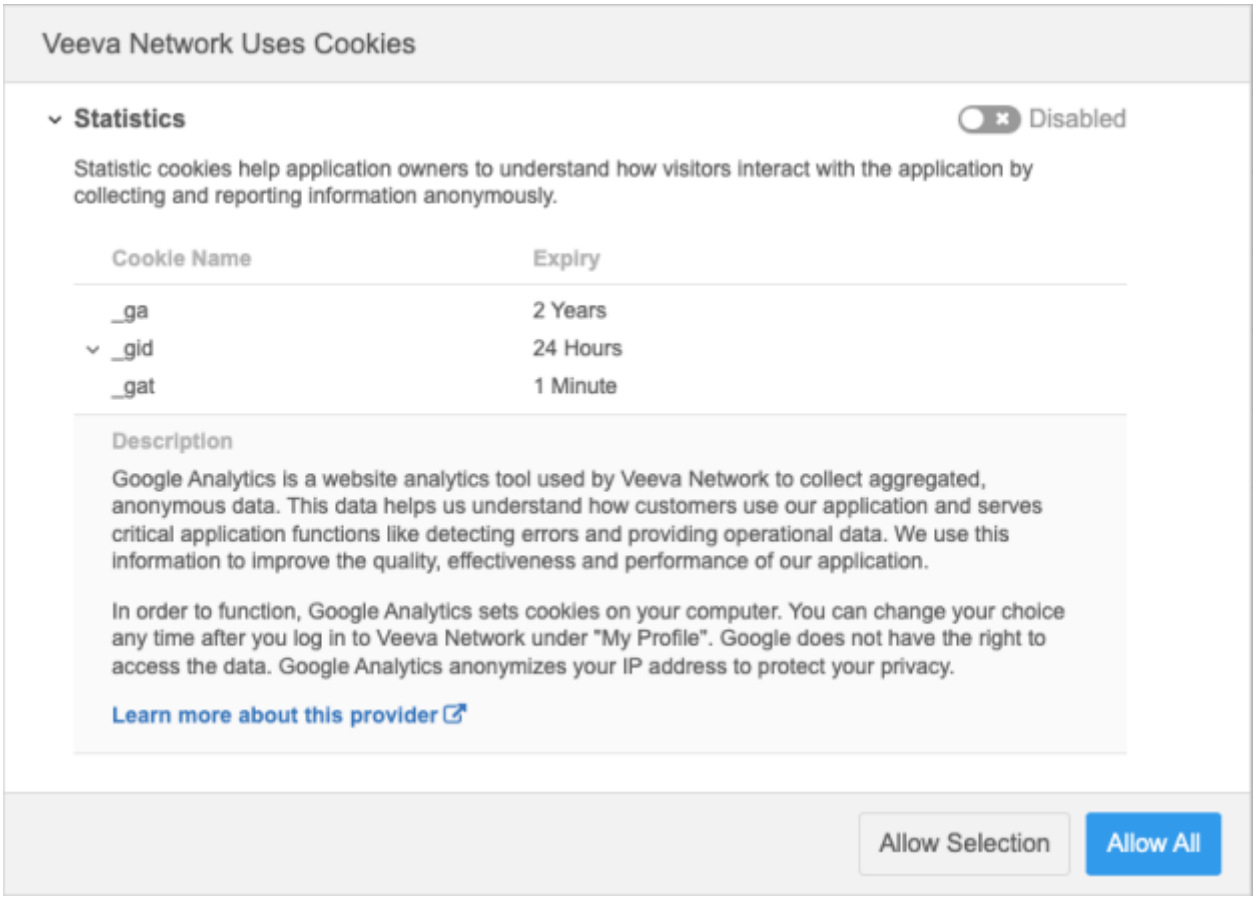
The dialog provides details about the cookies that are used:

- **Necessary** - Cookies that are, for example, used to manage your session within the application. These cookies are mandatory and must be accepted.

  Expand the section to see a comprehensive list of all cookies that could be used for all user types and all Network application features.

- **Statistics** - Cookies that Google Analytics sets on your computer so Veeva Network can collect anonymous data to help improve the application. By default, these cookies are disabled.

Expand the section to review the cookies that will be set and to learn more about why the data is collected. Click the link to navigate to Google's privacy policy.



Users can choose one of the following options:

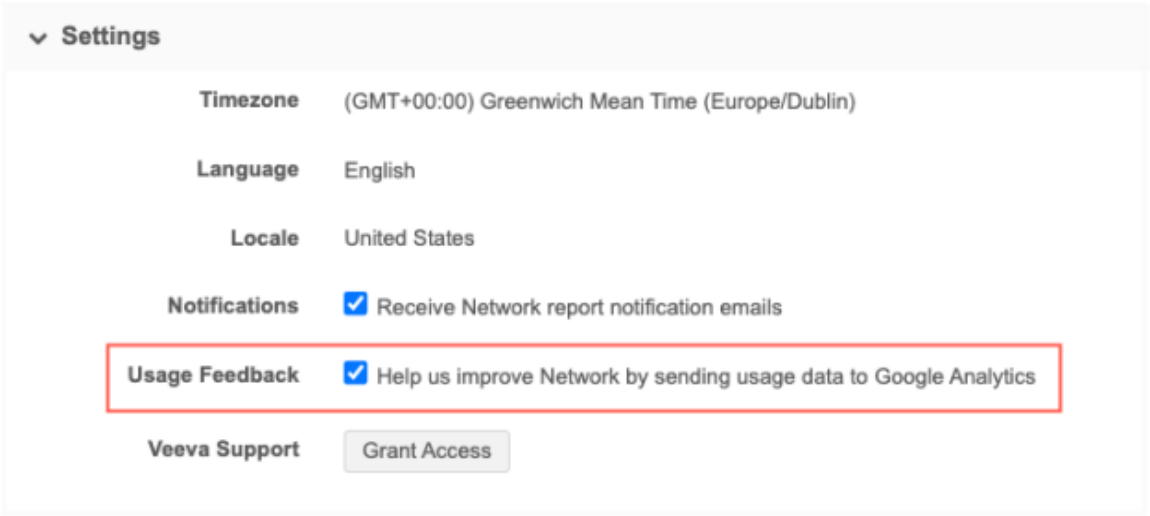
- **Allow All** - Allow both the **Necessary** and **Statistics** cookies. The **Necessary** cookies are enabled by default, so this option allows for the **Statistics** cookies to be set on your computer.
- **Allow Selection** - Accept the current selection; allow only the **Necessary** cookies. This choice will opt you out of allowing Google Analytics to set cookies on your computer for usage data.

Reviewing consent

The **Veeva Network Uses Cookies** dialog displays only one time. After you make a choice, you can review or change your consent on your user profile.

To view or change consent:

1. On the Network menu bar, click your username and select **My Profile**.
2. In the **Settings** section, the **Usage Feedback** contains your consent details.
3. If you modify the setting, **Apply** your changes.

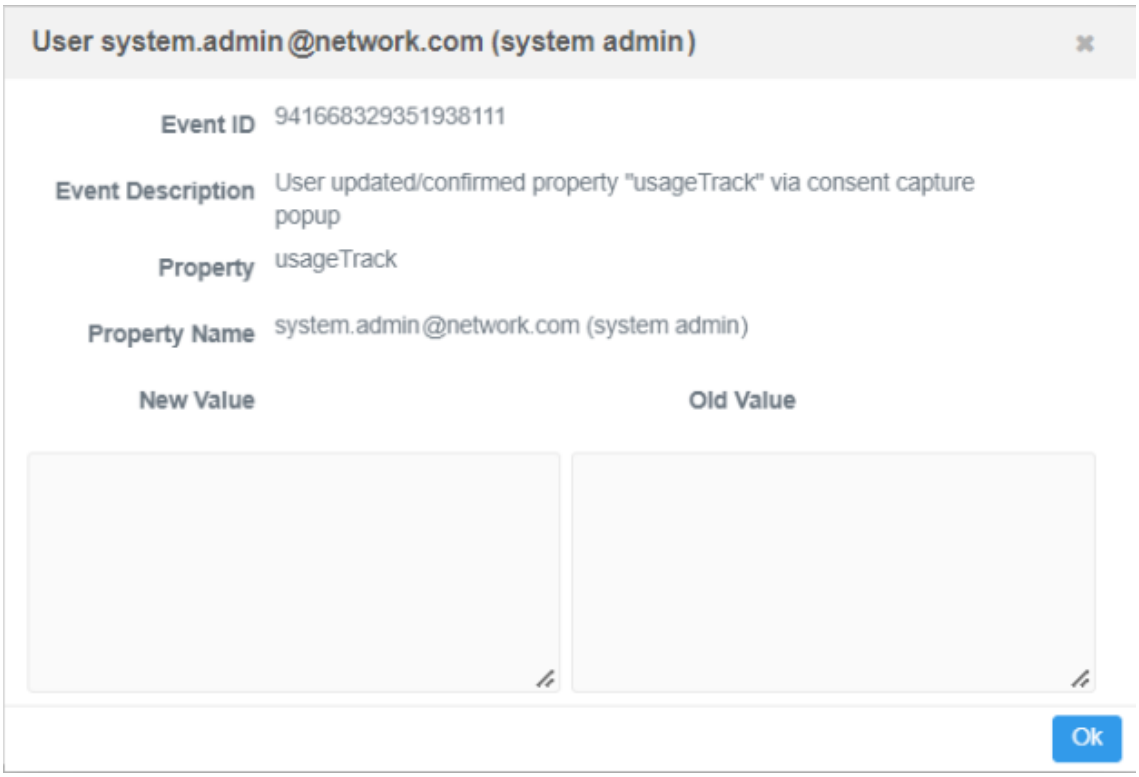


Logs

Administrators can track in the **System Audit History** whether a user confirmed or updated their usage tracking setting.

Example log

This log entry indicates that the user was presented with the dialog and confirmed or updated their usage tracking setting.



Hierarchy Explorer

AVAILABILITY

22R3

The Hierarchy Explorer widget is now available for all customers. Previously, it was available for early adopters only.

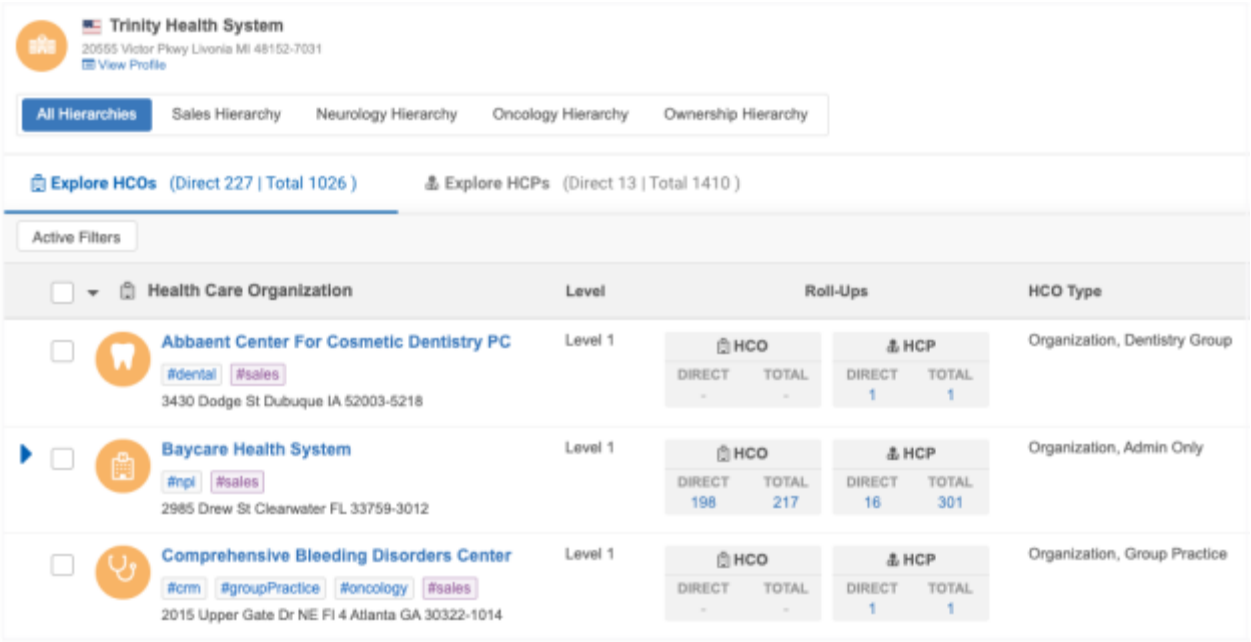
The feature is not enabled by default. To enable the Hierarchy Explorer widget for your Network instance, create a Veeva Support ticket.

To learn more about visualizing health system hierarchies with this robust tool, see Hierarchy Explorer widget in the *Veeva Network Online Help*.

HASHTAGS

22R3

Network hashtags are now supported for HCOs and HCPs in the Hierarchy Explorer widget.



Hashtags provided by Network display in the Hierarchy Explorer by default. Custom hashtags can be enabled to display.

Hashtag highlights

- Hashtags display on records so you can immediately identify key information about the record.
- Users do not need to understand the data model and reference values to find and filter records.
- Extend the information users can see for each record in the widget. For example, records tied to sales or records that are in Veeva CRM are indicated through custom keys. This information can display and be filtered by users using hashtags in Hierarchy Explorer.
- Network-provided hashtags display by default. Custom hashtags are supported.
- They can be used to quickly filter the hierarchy.
- Hashtags are exported with the hierarchy.

Identify records

Hashtags are dynamically calculated for records. When you open a hierarchy, the relevant hashtags are added to each record. Use the hashtags to summarize the record. Previously, you might have added columns to the hierarchy to display additional information for records. Now, you can identify these key details using hashtags.

Note: In Veeva Network, users can hover on hashtags for more details. These tooltips are not available in Hierarchy Explorer.

Available hashtags

Network provides a set of predefined hashtags. These hashtags are available in the Hierarchy Explorer widget by default.

Predefined hashtags not available by default

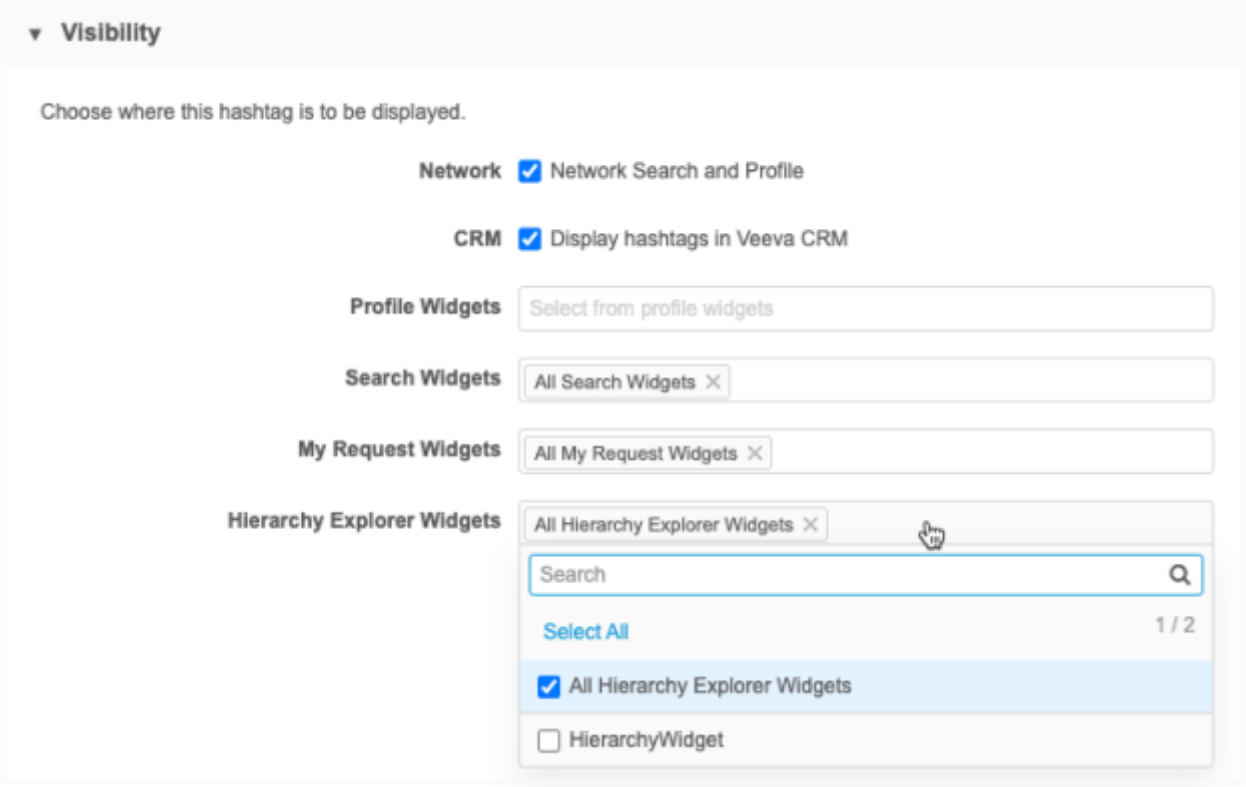
- `#candidate`
- `#infusion`
- `#medicare`

Include custom hashtags

Hashtags that you have already created for your Network instance or new hashtags that you create can be added to Hierarchy Explorer.

To include a custom hashtag:

1. Open a custom hashtag configuration (**Data Model > Network Hashtags**).
2. In the **Visibility** section, click the **Hierarchy Explorer widgets** box and select **All Hierarchy Explorer Widgets** or individual widgets.



Note: The field used in the hashtag rule must be included in the Hierarchy Explorer index file. If the field is not included, an error will occur when you save the hashtag configuration. To add a field to the hierarchy index, create a Veeva Support ticket.

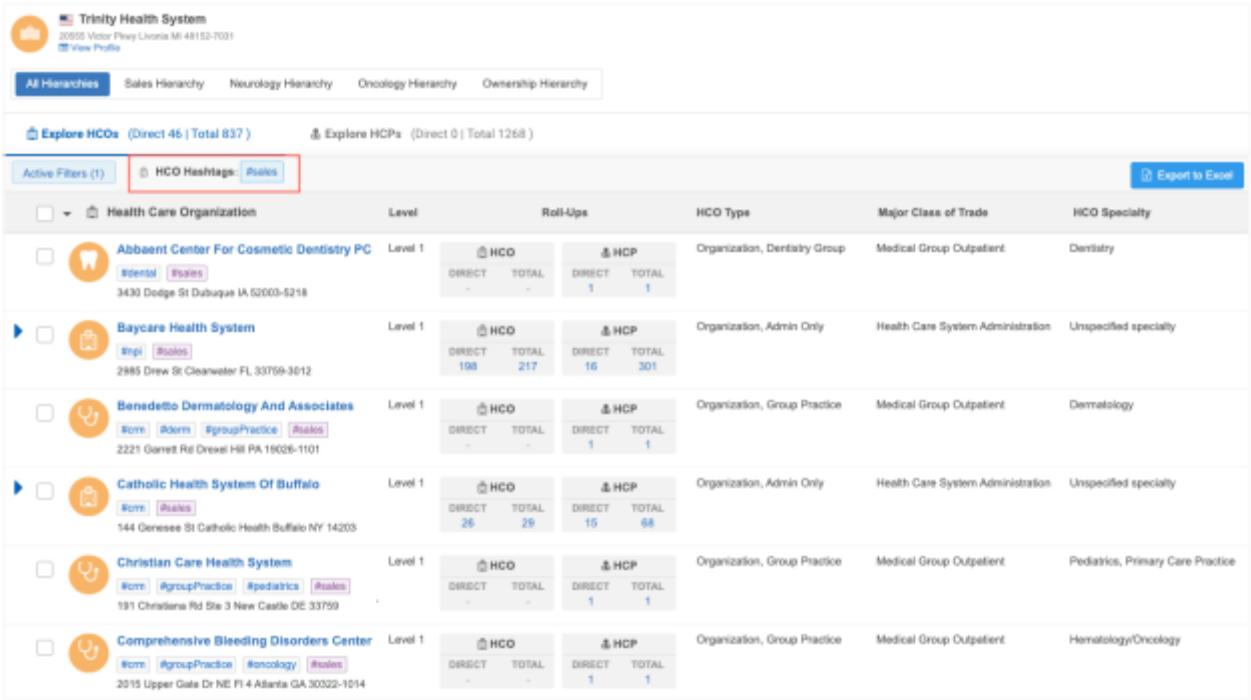
Filter using hashtags

Using hashtags is a quick way to filter the hierarchy for specific criteria.

You can filter using one of the following methods:

Click a hashtag

Quickly filter the hierarchy by clicking any hashtag on a record. For example, to find HCOs that are sales accounts, click the `#sales` hashtag on any HCO record. The hierarchy is immediately filtered. One hashtag can be selected at a time.



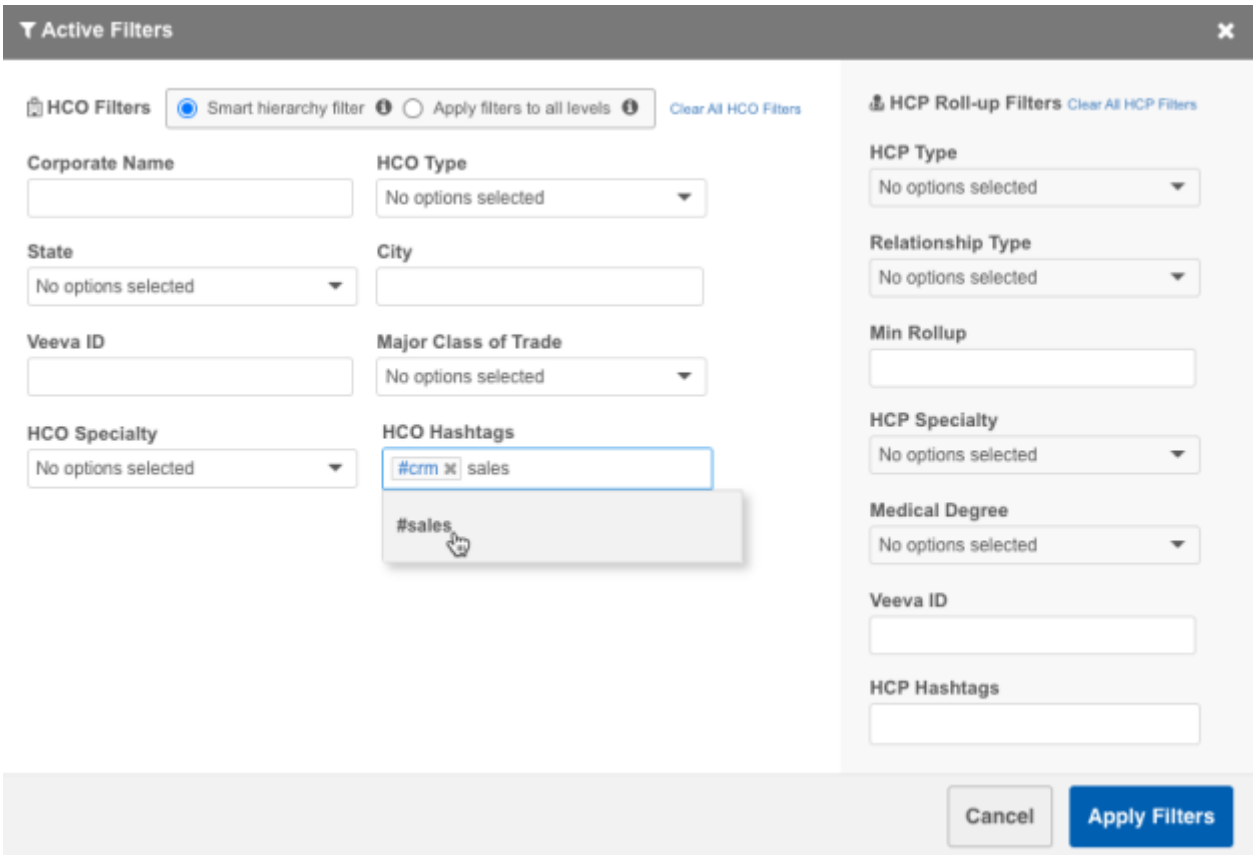
Active Filters

The **Active Filters** dialog includes fields for **HCO Hashtags** and **HCP Hashtags**. You can search against the hashtag description or the hashtag itself.

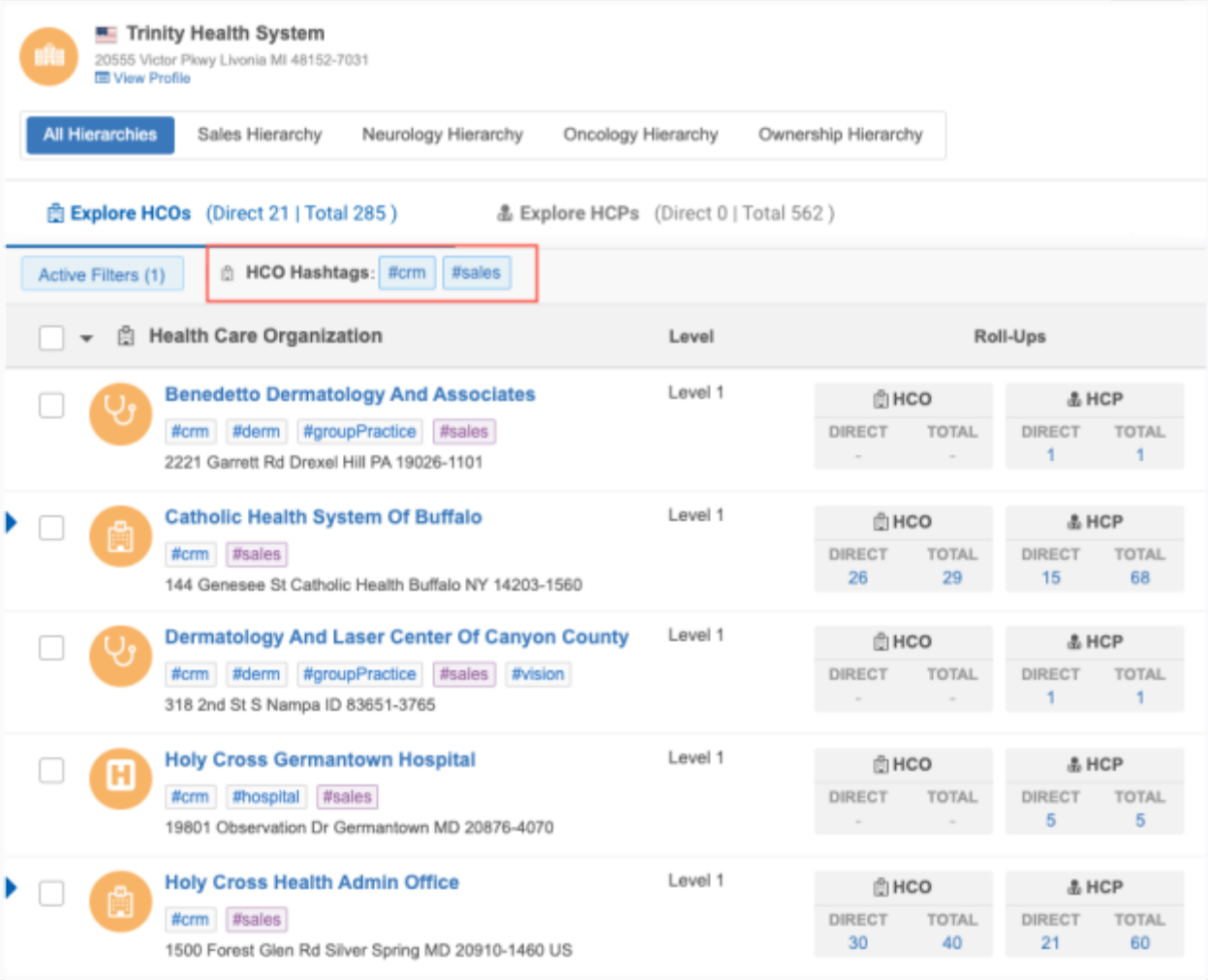
Filtering by hashtag can be easier than finding a specific field value in the **Active Filter**. Hashtags can also be used to filter on custom fields that are not available in the **Active Filters**.

Example

If you have a custom field or a custom key to identify HCOs that have sales against them, you can filter on a `#sales` hashtag and the `#crm` hashtag.

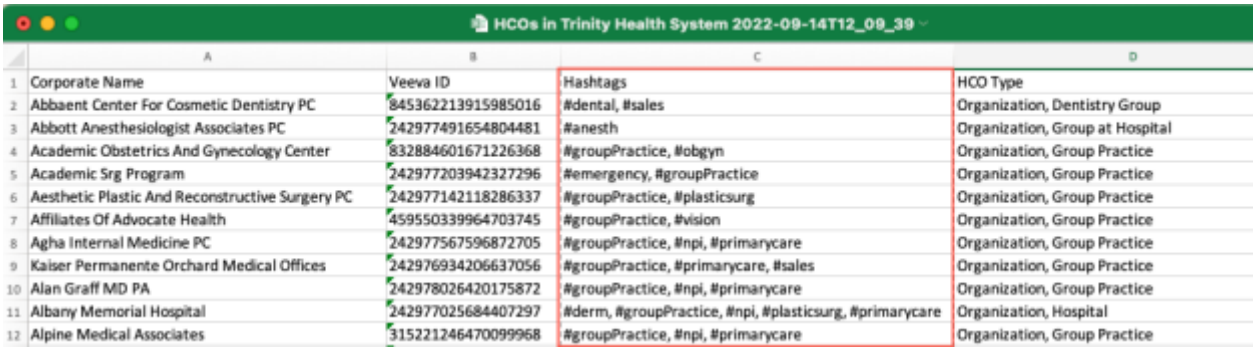


The hierarchy is filtered to display only the HCOs that have sales and that are in Veeva CRM.



Exporting hashtags

Hashtags are included when you export a hierarchy as a Microsoft Excel file. You can filter the file using the Hashtags column to quickly find relevant records.



	A	B	C	D
1	Corporate Name	Veeva ID	Hashtags	HCO Type
2	Abbaent Center For Cosmetic Dentistry PC	845362213915985016	#dental, #sales	Organization, Dentistry Group
3	Abbott Anesthesiologist Associates PC	242977491654804481	#anesth	Organization, Group at Hospital
4	Academic Obstetrics And Gynecology Center	832884601671226368	#groupPractice, #obgyn	Organization, Group Practice
5	Academic Srg Program	242977203942327296	#emergency, #groupPractice	Organization, Group Practice
6	Aesthetic Plastic And Reconstructive Surgery PC	242977142118286337	#groupPractice, #plasticsurg	Organization, Group Practice
7	Affiliates Of Advocate Health	459550339964703745	#groupPractice, #vision	Organization, Group Practice
8	Agha Internal Medicine PC	242977567596872705	#groupPractice, #npi, #primarycare	Organization, Group Practice
9	Kaiser Permanente Orchard Medical Offices	242976934206637056	#groupPractice, #primarycare, #sales	Organization, Group Practice
10	Alan Graff MD PA	242978026420175872	#groupPractice, #npi, #primarycare	Organization, Group Practice
11	Albany Memorial Hospital	242977025684407297	#derm, #groupPractice, #npi, #plasticsurg, #primarycare	Organization, Hospital
12	Alpine Medical Associates	315221246470099968	#groupPractice, #npi, #primarycare	Organization, Group Practice

PERFORMANCE

22R2.1

Widget users will notice performance improvements when they change a hierarchy view by clicking a roll-up count or when they filter the hierarchy. The new hierarchy view opens and loads the data more quickly.

Network hashtags

NAME CHANGE

22R3

The existing `#phsymed` hashtag is updated to `#physmed` to correct the spelling error.

This update is enabled in your Network instance by default.

Profiles

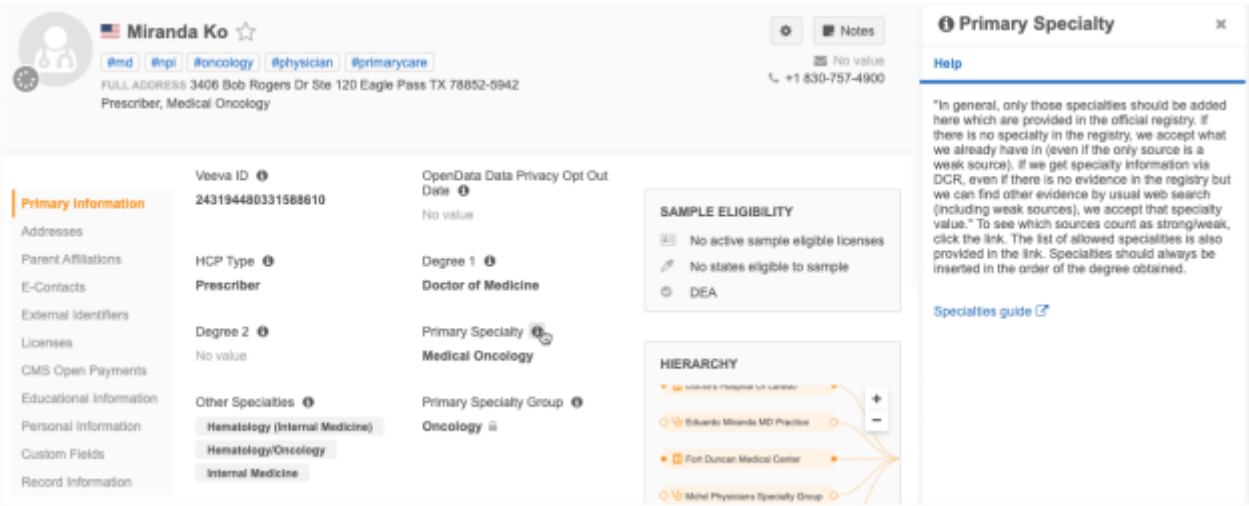
FIELD HELPER

22R3

Field help can now be managed within Network to provide Data Stewards with information and training when they are stewarding fields on the Profile page.

Field help is created and maintained by your internal team. It can be managed for the countries and objects that you have access to through your data visibility profiles. Administrators can give any user access to manage or view field help.

Data Stewards can click the **Info** icon beside a field to display a panel containing information about the field and about stewarding the data.



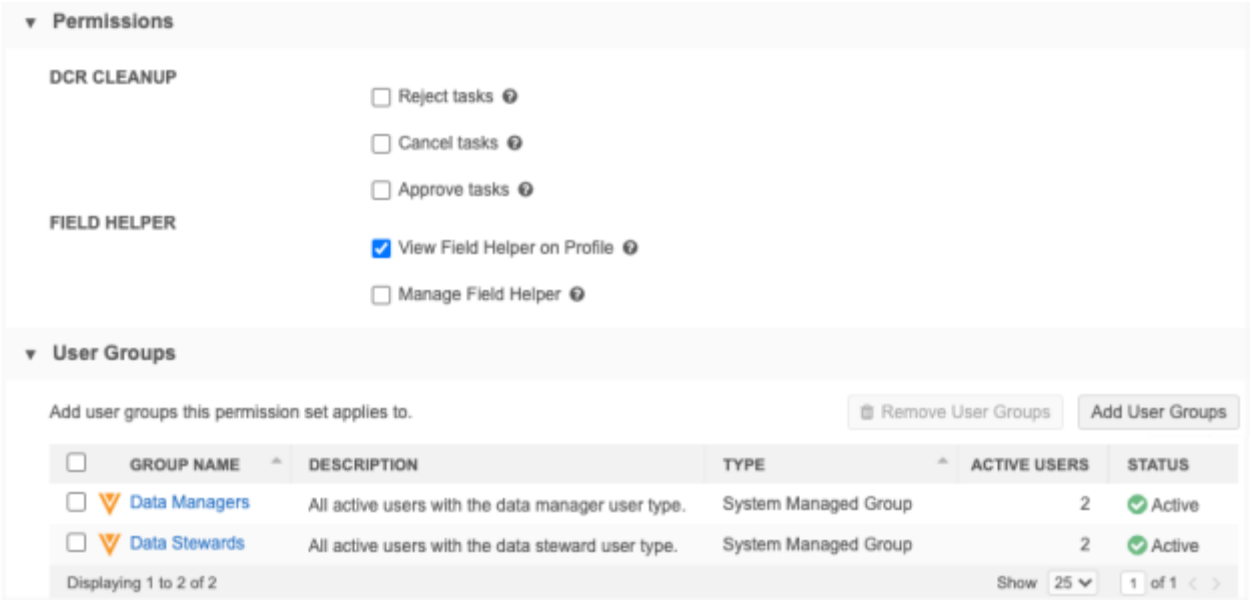
Enable the feature

This feature is enabled by default in your Network instance.

Provide access to users

Field Helper is available only to users that have access to it through permission sets. If you do not have view or manage access to Field Helper, the **Info** icons do not display on record profiles.

Administrators must create permission sets and provide access to users.



There are two options:

- **View Field Helper on Profile** - Allow user to see Field Helper. Users with this permission will see the **Info** icon on the Profile page.
- **Manage Field Helper** - Allow user to create and maintain Field Helper. Users will have access to the Field Helper page in the Admin console (**Data Model**).

Note: Viewing and managing contextual field help is restricted to the objects and countries that you have access to through your data visibility profiles.

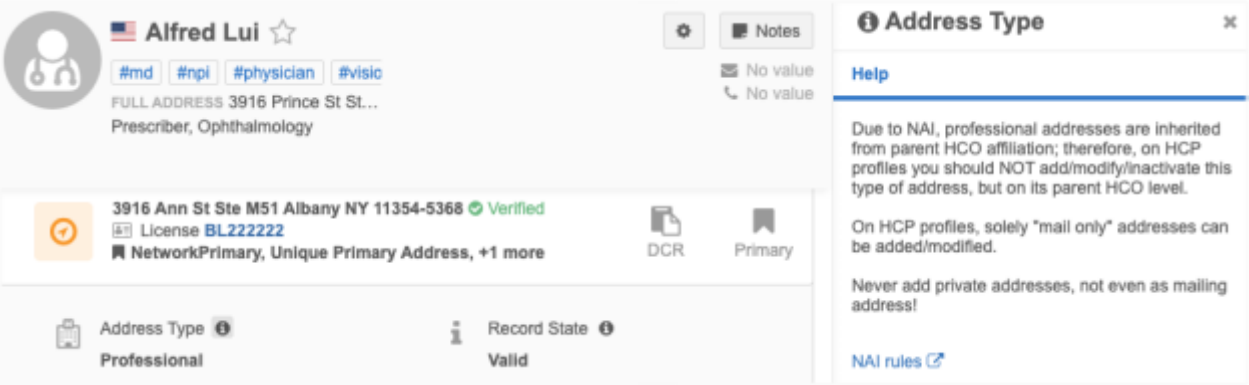
For information about creating permission sets, see the Permission Sets topic in the *Veeva Network Online Help*.

View Field Helper

Users with access to view Field Helper will see **Info** icons displayed beside all fields on the Profile page. Click the icon to open the **Help** pane.

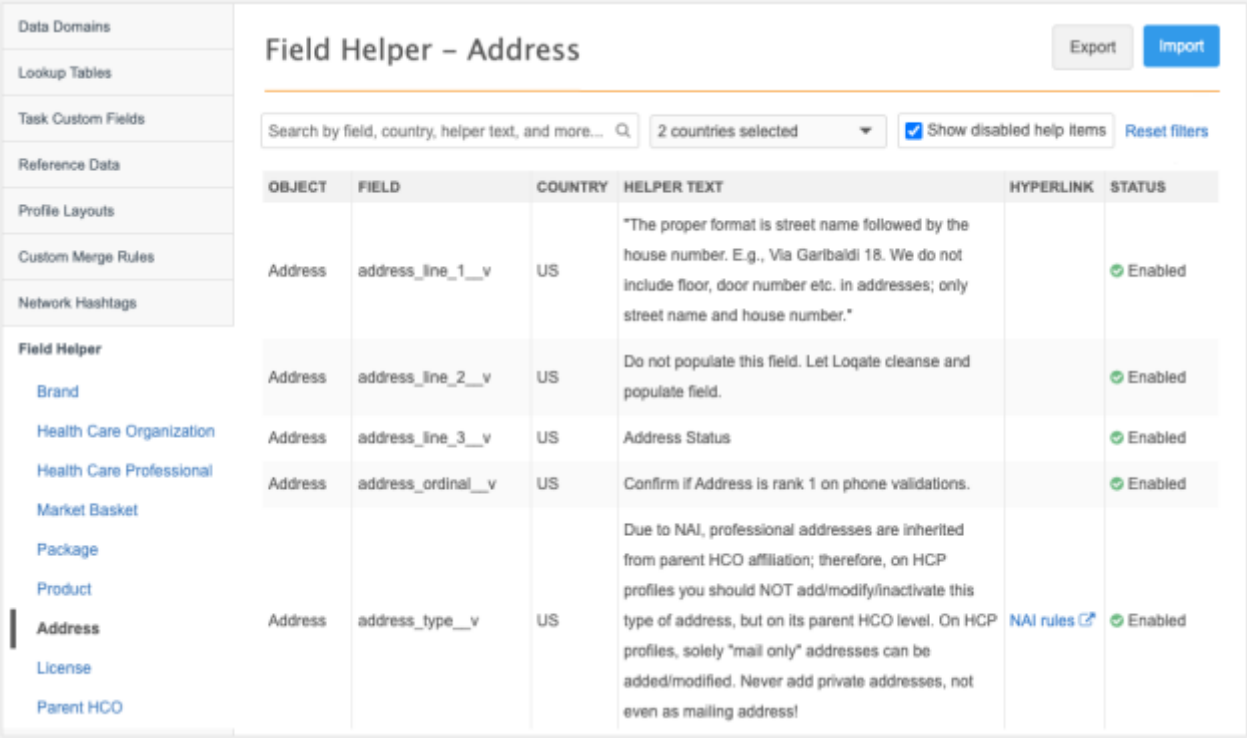
In the **Help** pane, the field name displays as the title and any information that has been provided displays below it. The information displays in the language specified in the user's profile.

If there is no help for a field, the message "*No help defined for this field*" displays.



Managing Field Helper

The fields that users can manage in Field Helper are restricted by object and country. This prevent users from overriding information for fields for other countries.



Access the Field Helper page

Field help can be added by any user that has access to the Field Helper page through permission sets.

- Administrators and Data Managers - In the Admin console, click **Data Model > Field Helper**.
- Data Stewards and Standard users - On the Network menu bar, click **Home > Manage Field Helper**.

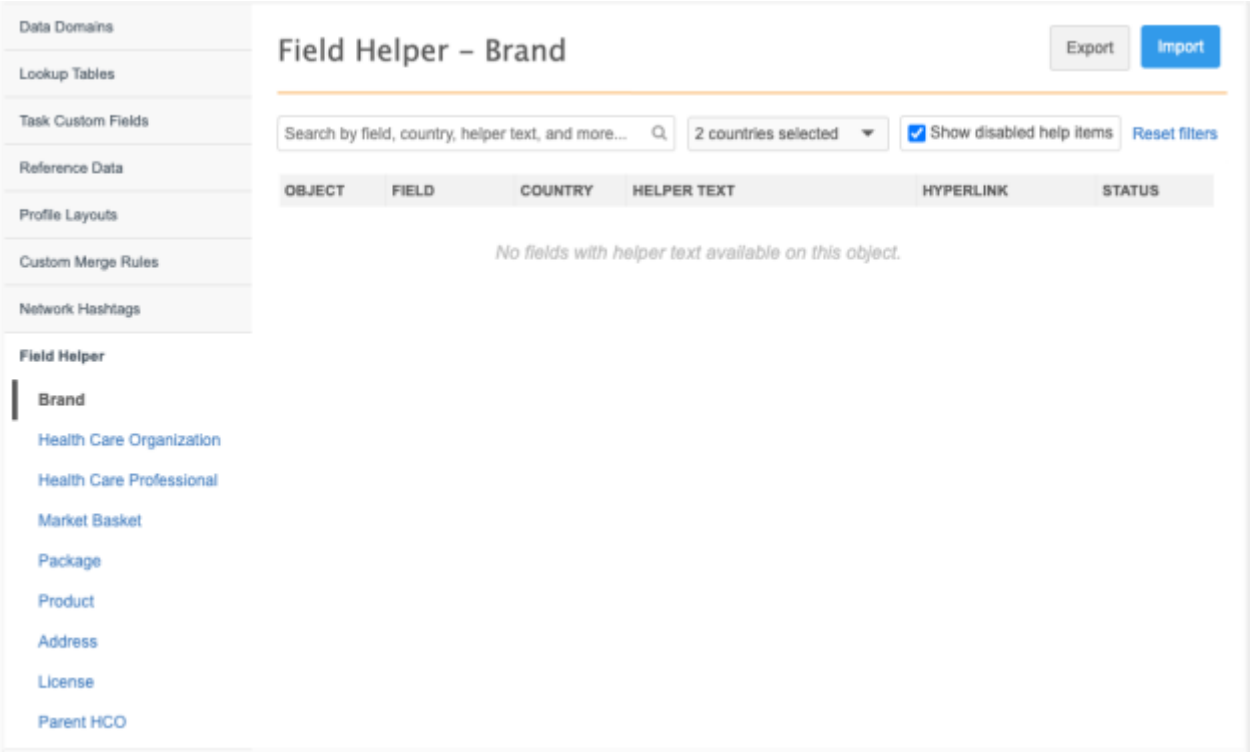
By default, all countries that you have access to are selected in the **Country** list.

Add field help

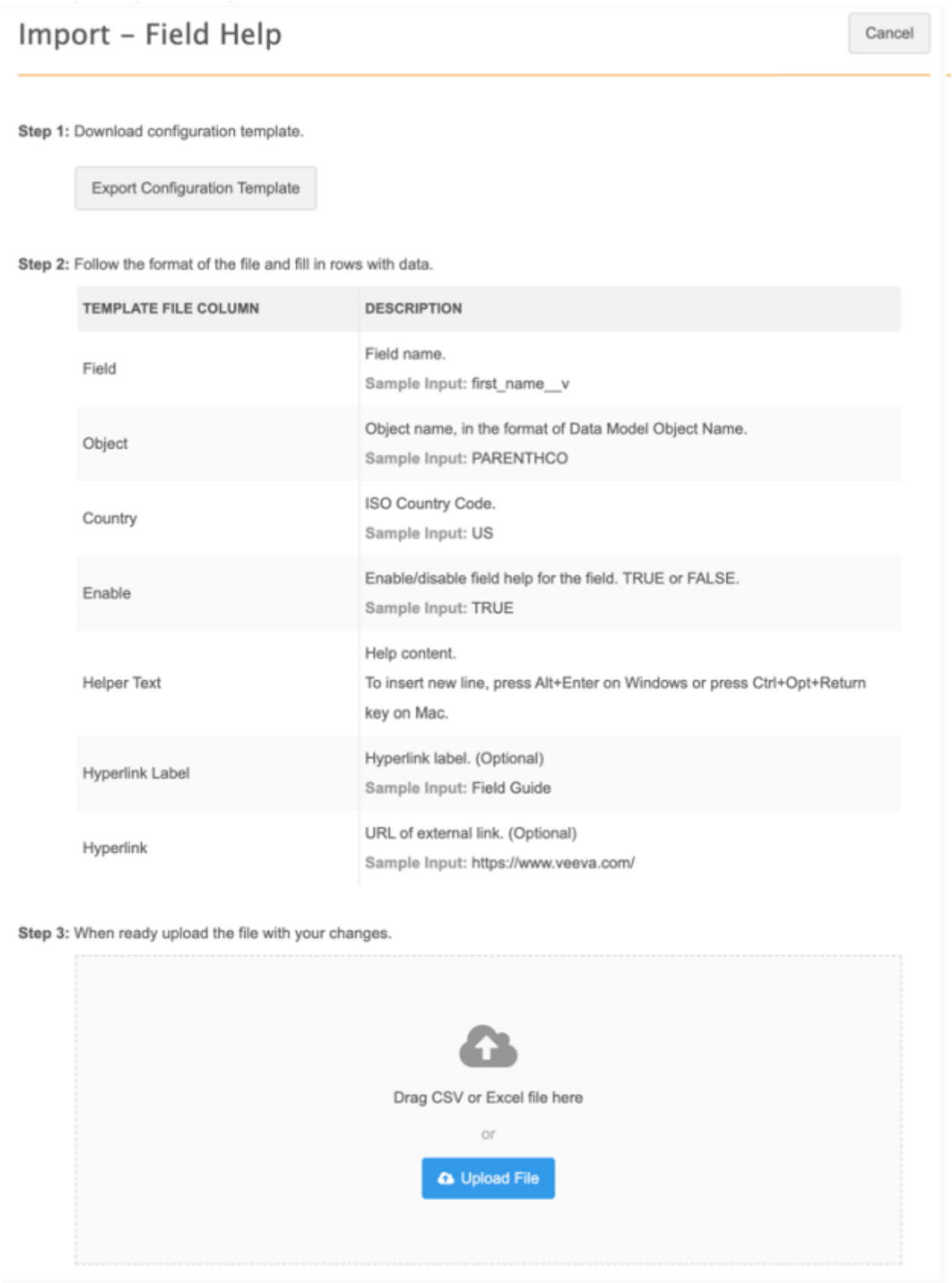
By default, no field help is provided.

To add information to fields:

1. The Field Helper page opens to the first object listed alphabetically in the left pane. All objects that are enabled in your Network instance are listed.



2. Click **Import**.
3. On the Import - Field Help page, click **Export Configuration Template** to download the Microsoft Excel (.xlsx) file.
   The file is saved on your local computer with the following naming convention: `field_helper_template_<unique_number>`.



Import – Field Help

Cancel

Step 1: Download configuration template.

Export Configuration Template

Step 2: Follow the format of the file and fill in rows with data.

TEMPLATE FILE COLUMN	DESCRIPTION
Field	Field name. Sample Input: first_name__v
Object	Object name, in the format of Data Model Object Name. Sample Input: PARENTHCO
Country	ISO Country Code. Sample Input: US
Enable	Enable/disable field help for the field. TRUE or FALSE. Sample Input: TRUE
Helper Text	Help content. To insert new line, press Alt+Enter on Windows or press Ctrl+Opt+Return key on Mac.
Hyperlink Label	Hyperlink label. (Optional) Sample Input: Field Guide
Hyperlink	URL of external link. (Optional) Sample Input: https://www.veeva.com/

Step 3: When ready upload the file with your changes.

Drag CSV or Excel file here

or

Upload File

4. Open the .xlsx file and add your data to the columns. Follow the example on the Import page.
    - **Field** - The field that this help information applies to.
    - **Object** - The object that the field and help applies to. Use the exact data model name; for example, PARENTHCO, BRAND_V__C, ADDRESS.
    - **Country** - The country that this field information applies to. Use the ISO country code; for example, US, DE, FR.

      Note: One country can be specified per row. If the helper text applies to more than one country, create a row for each country.

    - **Enable** - To enable this information for the field, type TRUE. Type FALSE if you do not want the field help to display on the Profile page.
    - **Helper text** - The information that will display in the **Help** pane when users click the icon beside the field.

      Line breaks are supported. Type `\n` or add a new line in Microsoft Excel.

    - **Hyperlink Label**(optional) - If you add a hyperlink, define the link name here.
    - **Hyperlink**(optional) - The link to supplementary information that is helpful for Data Stewards.

Example template

	A	B	C	D	E	F	G
1	Field Name	Object	Country	Enable	Helper Text	Hyperlink Label	Hyperlink
2	specialty_1__v	HCP	US	TRUE	"In general, only those specialties should be added here which are provided in the official registry. If there is no specialty in the registry, we accept what we already have (even if the only source is a weak source). If we get specialty information via DCR, even if there is no evidence in the registry but we can find another evidence by usual web search (including weak sources), we accept that specialty value." To make sure which sources count as strong/weak, click the link. This list of allowed specialties is also provided in the link. Specialties should always be inserted in the order of the degree obtained	Specialties guide	https://docs.google.com/spreadsheets/d/1QfBuKy13H1WiHvhJB9
3	first_name__v	HCP	US	TRUE	If you find different versions/spellings of the HCP's name, always provide the one available in the official registry. All first names of the HCP must be inserted in this field.		
4	last_name__v	HCP	US	TRUE	If you find different versions/spellings of the surname, always provide the one found in the official registry.		
5	gender__v	HCP	US	TRUE	HCP's gender		
6	hcp_type__v	HCP	US	TRUE	For categorization please always consult HCP mapping. This should always reflect the degree of the HCP	HCP mapping	https://docs.google.com/spreadsheets/d/1QfBuKy13H1WiH
7	primary_country_	HCP	US	TRUE	NEVER change the value in this field		
8	record_state__v	HCP	US	TRUE	Populated by system only		

Note: Do not modify the column header names. Network expects these headers when you import the file.

5. To import the .xlsx file into Network, drag the file to the box in **Step 3**, or click **Upload File**.

   The file is validated to ensure that the defined fields and objects are correct. Network also validates that the user has data visibility profile permissions for the objects and countries in the file.

   A count of the file changes displays.

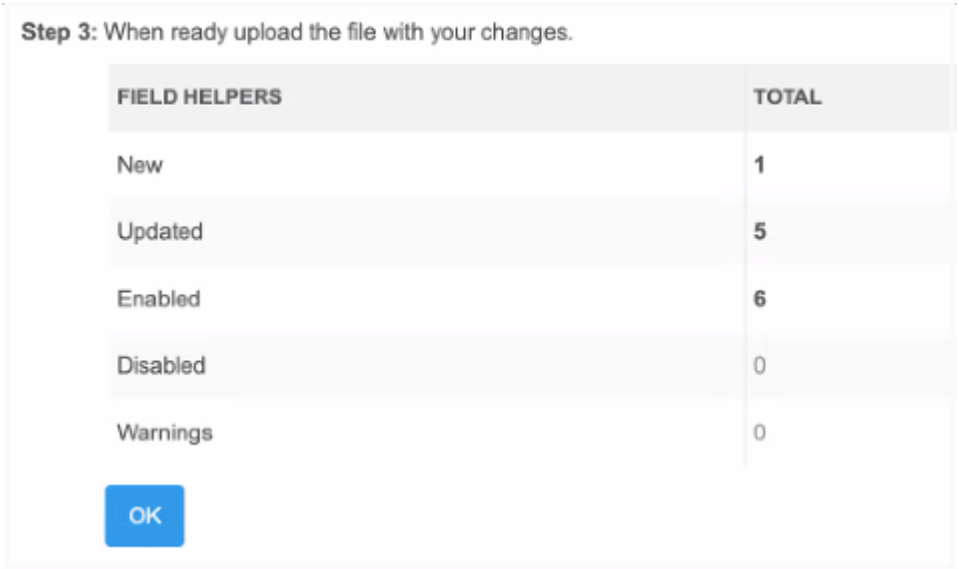
   - **New** - New fields or rows that are added.
   - **Updated** - Rows that were changed.
   - **Enabled** - Field help where the Status column was changed to Enabled.
   - **Disabled** - Field help where the Status column was changed to Disabled.
   - **Warnings** - Warnings display if more than one field in a field set is added to the .xlsx file.

     About field sets

     Some fields are grouped as a set; for example, email, specialty, and phone fields. If you define help for more than one of the fields in a set, only the first field in the set will be saved as help.

     For example, if you define help for `email_1__v` and `email_2__v`, only the help for `email_1__v` will be saved. When users click the **Info** icon for any **Email** field on the Profile page, the help you defined for `email_1__v` displays.

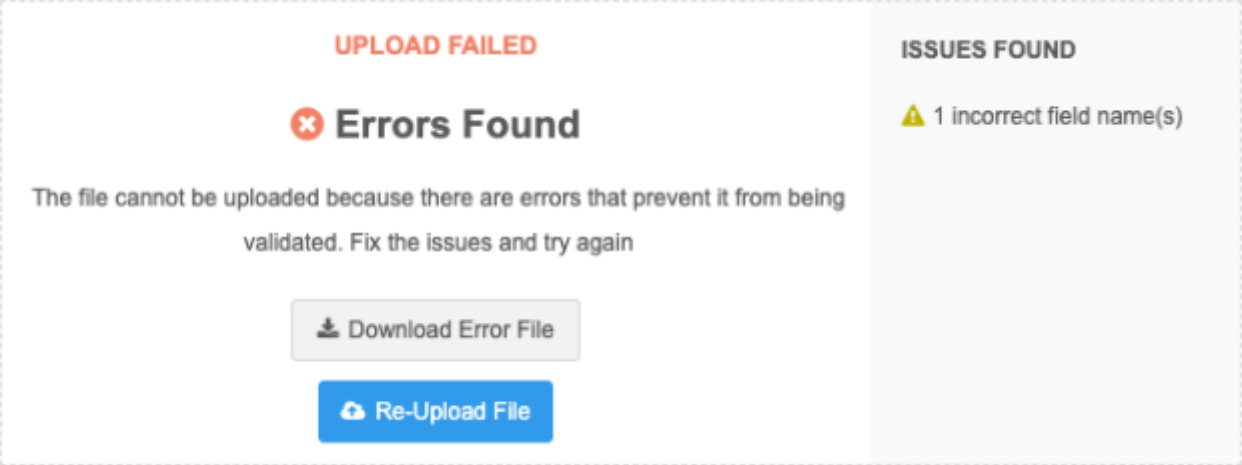
     Tip: If you have specific help for different fields in a group, add all of the details to the one field.



   Click **OK** to import the file to Network.

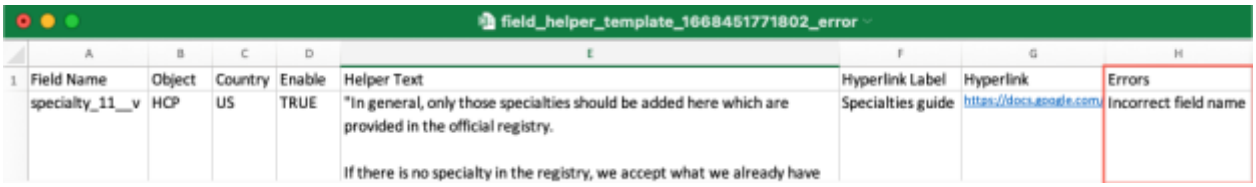
Validation errors

If validation errors occur, the upload fails and an error displays.



Click **Download Error File**. The import file will be saved with the `_error` suffix.

An **Error** column is added to the file. The error message displays in the rows that did not validate.



Correct the issue and click **Re-Upload File** to try to import the file again.

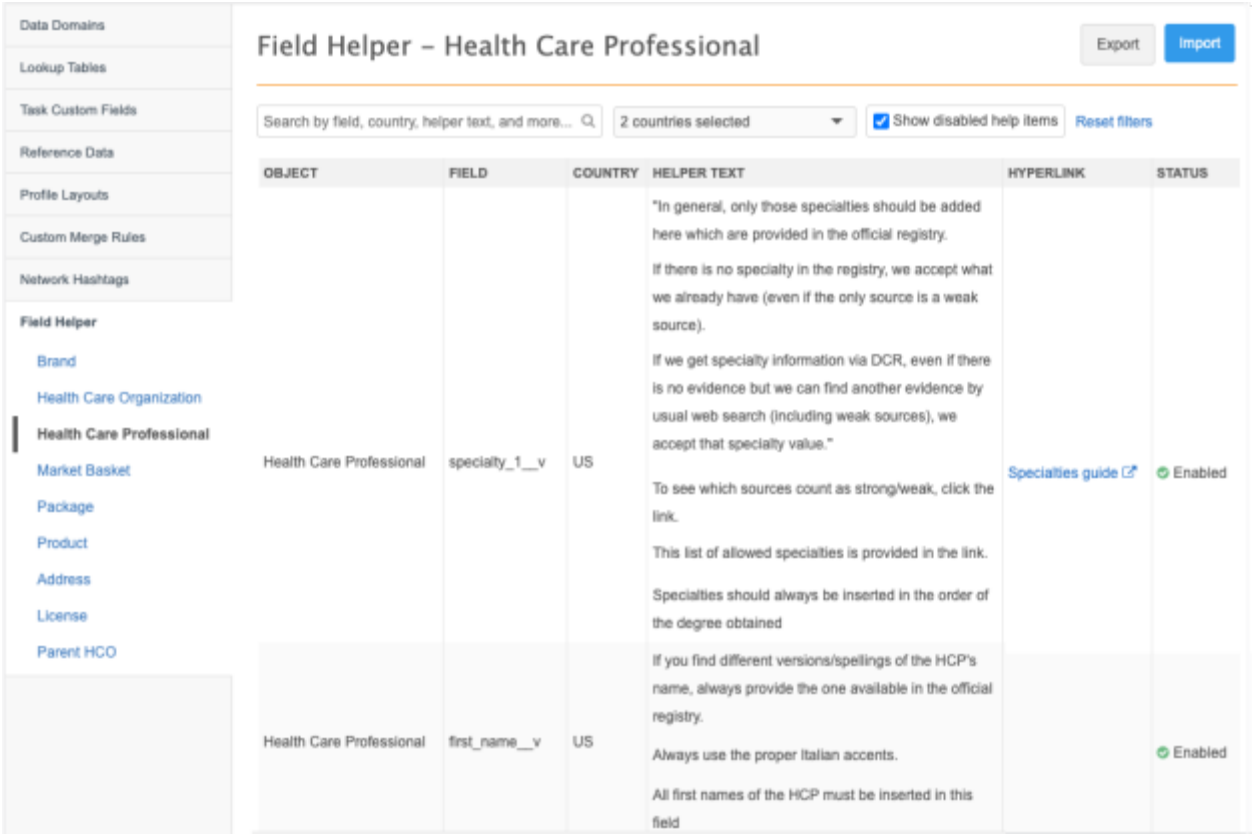
Possible validation errors

- **Incorrect field name** - The field name is typed incorrectly.
- **Insufficient permission to update country field** - You do not have access to the country through your data visibility profile permissions.
- **Unavailable field** - The field does not belong to the object or country defined in the file.
- **Invalid header** - A predefined header in the template have been modified.

Other field considerations

- **Duplicate fields** - If a field is defined more than once in the template, only the first help entry is saved. Any subsequent entry for that field is ignored.

When the import is successful, the Field Helper page for that object is updated with the information from the file. The fields display in the order that they were added.



When users click the **Info** icon beside a field that has help, the **Help** pane displays the information.

Exporting field help

To review or fix existing object field help, select the object in the left pane and click **Export**.

The .xlsx file is downloaded and contains the help information for that object only. Make any required changes and click **Import** to upload the file back into Network.

Inbox

DCR ENHANCEMENTS

22R3

Enhancements have been made to add requests and change requests so Data Stewards and Data Managers can more easily navigate the page. These changes include navigation links to page sections, the ability to collapse and expand all sections, and updated labels to differentiate sub-objects.

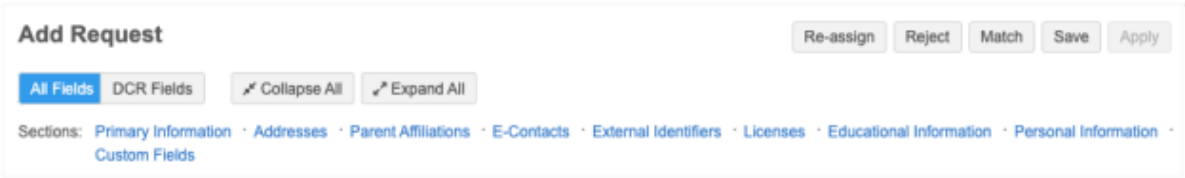
These enhancements are enabled by default in your Network instance.

Sections

Data change request (DCR) pages now include quick links to sections at the top of the page. This area remains fixed at the top of the page when you scroll through the page.

All Fields

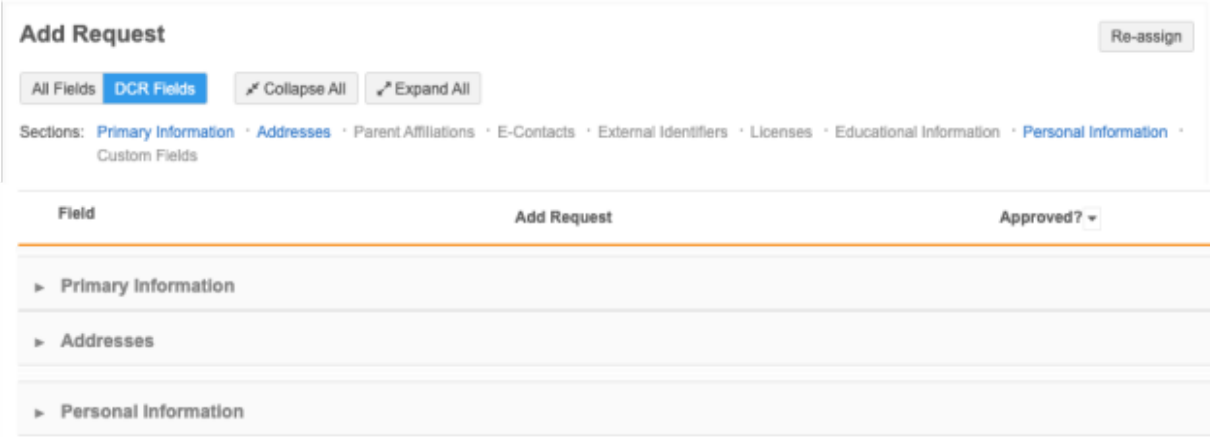
When Data Stewards are in the **All Fields** view, all of the section names are highlighted in blue. Click the section name to automatically scroll to that area on the page.



DCR Fields

In the **DCR Fields** view, only the section names included in the DCR are highlighted in blue. The other sections are listed but they are not highlighted (display as gray) so Data Stewards can easily identify the sections that apply to the request.

If you click a section name that is not included in the DCR, the page switches to the **All Fields** view and opens to the section that you selected.



If Data Stewards add field values to a section that was not included in the original DCR, that section is added to the **DCR Fields** view and the link is highlighted in blue.

Collapse or Expand sections

Use the **Collapse All** and **Expand All** buttons to hide or display all details in each section. By default, all sections are expanded when DCRs open. If you choose **Collapse All**, Network retains your preference if you reload or revisit the DCR.

For sub-objects and relationship objects, only the section is expanded; not each object within the section.

Identify sub-objects

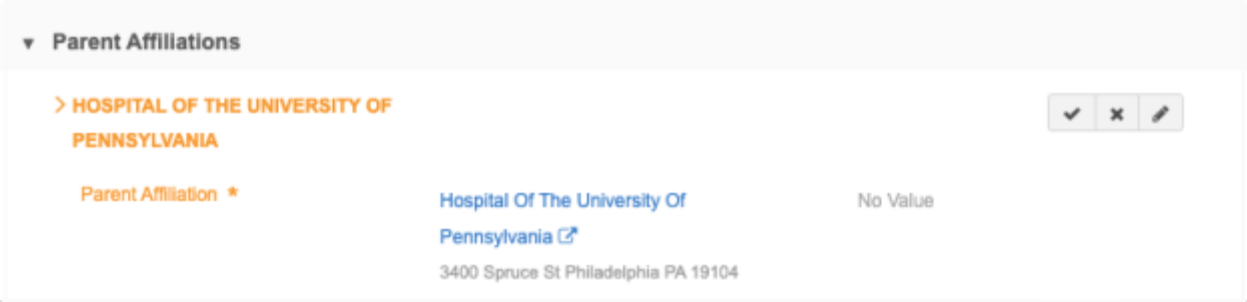
Data stewards can now easily identify each object in sub-object sections. Previously, each object was labeled as a count; for example, in the **Addresses** section, *Address 1*, *Address 2*, and so on displayed. Now each object is identified by relevant details.

The following label displays for each sub-object type:

- **Addresses** - Formatted address
- **Affiliations** - Corporate name of the HCO
- **Licenses** - License number

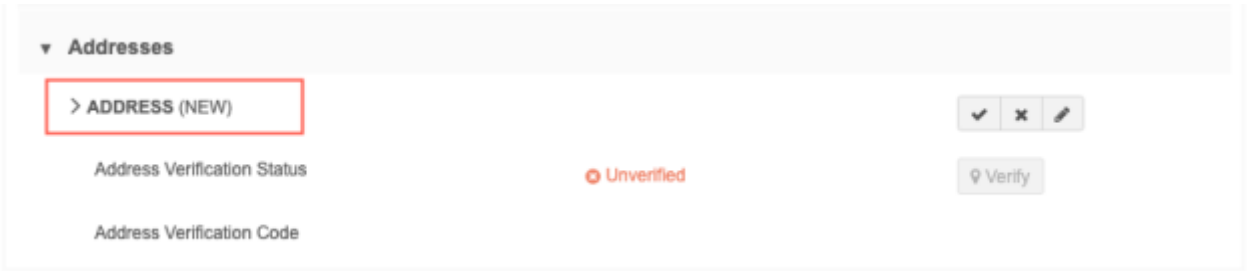
Example

In the **Parent Affiliations** section, each affiliation is identified by its corporate name.



New sub-objects will continue to display the sub-object type and the (NEW) label until it is approved and processed by Data Stewards.

Example



Add sub-objects

When Data Stewards click the **Add** + icon to add a sub-object to a DCR, the page scrolls to the (New) section so they can immediately begin adding the details. Previously, Data Stewards had to scroll to find the (New) sub-object section.

SUSPECT MATCH ENHANCEMENTS

22R3

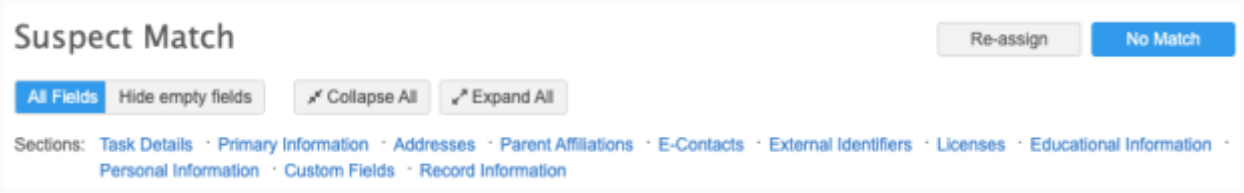
Suspect match tasks have also been updated to enhance the page navigation and usability.

Sections

Suspect match tasks now include quick links to sections at the top of the page. This area remains fixed at the top of the page when you scroll through the page.

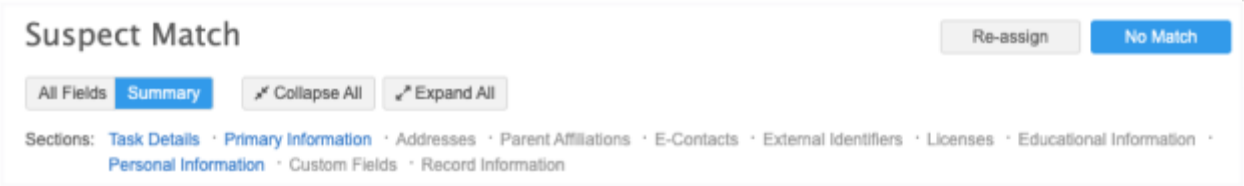
All Fields

When Data Stewards are in the **All Fields** view, all of the section names are highlighted in blue. Click the section name to automatically scroll to that area on the page.



Summary

When Data Stewards are in the **Summary** view, only the section names included in the suspect match are highlighted in blue. The other sections are listed but they are not highlighted (display as gray) so Data Stewards can easily find the sections and apply the changes.



If you click a section name that is not included in the suspect match, the page switches to the **All Fields** view and opens to the section that you selected.

Collapse or Expand sections

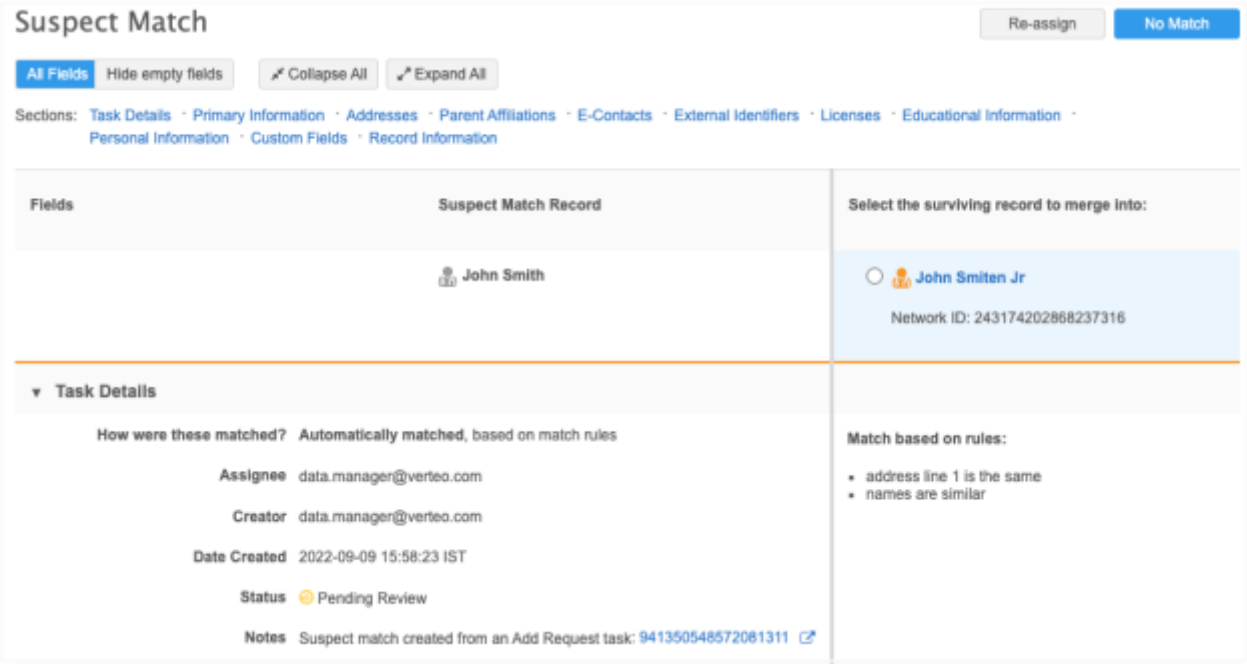
Use the **Collapse All** and **Expand All** buttons to hide or display all details in each section. By default, all sections are expanded when suspect match tasks open. If you choose **Collapse All**, Network retains your preference if you reload or revisit the DCR.

For sub-objects and relationship objects, only the section is expanded; not each object in the section.

Task details

The task details are relocated near the top of the Suspect Match page. Data Stewards can quickly review the details without scrolling to the bottom of the page.

This section also includes the **How were these matched?** details.

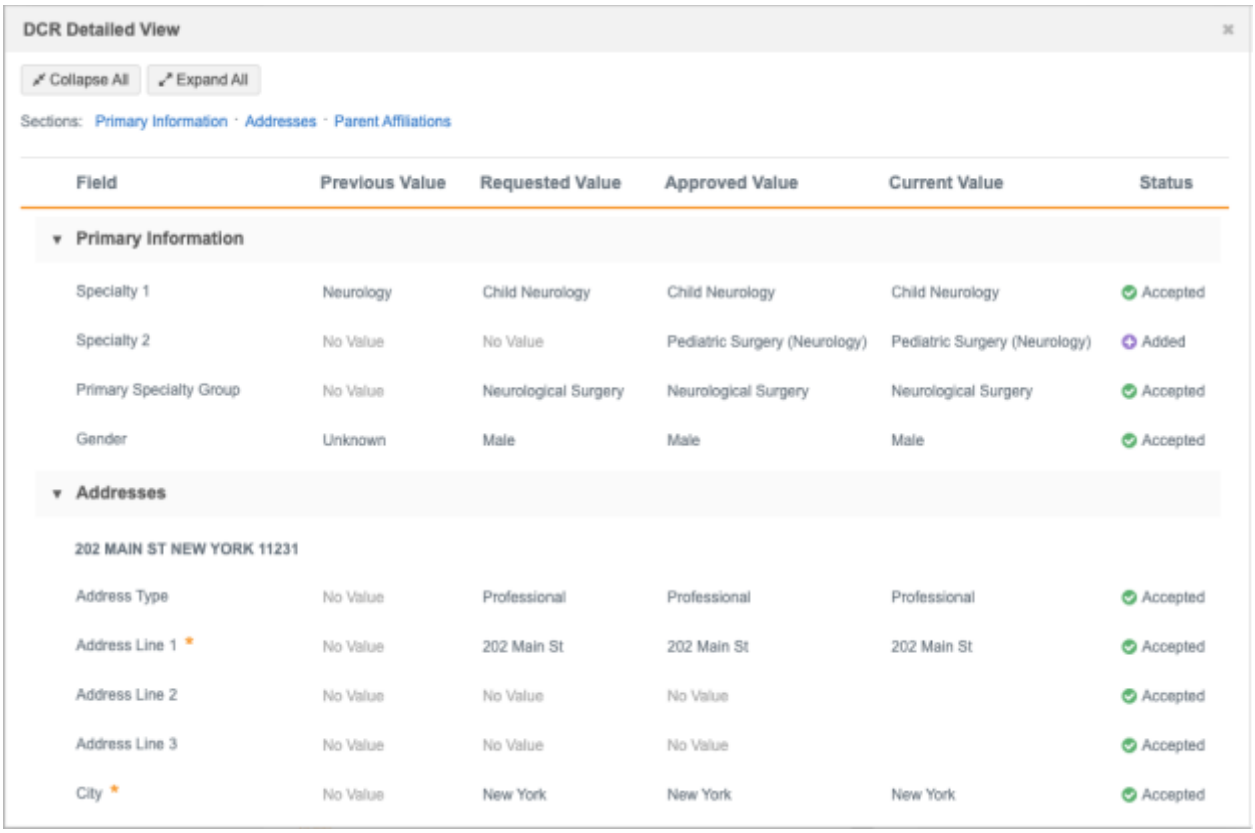


DCR Detailed View

22R3

Data Managers and Data Stewards can now review the detailed changes of processed data change requests (DCRs). The **DCR Detailed View** displays all of the values that were part of the DCR and the current value so you have a better understanding of the outcome for data quality purposes.

This view is available only for processed add and change requests.

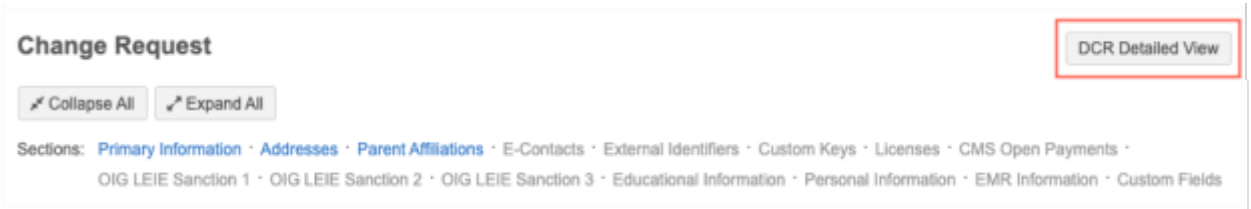


This enhancement is available by default in your Network instance.

Viewing processed DCR details

Data Stewards and Data Managers can open this view on processed tasks. The button does not display on pending tasks.

1. In the Inbox, open a processed DCR and click the **DCR Detailed View** button.



2. The **DCR Detailed View** dialog displays all of the values from the request and the current value on the record.
    - **Previous Value** (change requests only) - The value on the record that the user requested to change.
    - **Requested Value** - The value that was included on the DCR.
    - **Approved Value** - The value that was set on the DCR by a Data Steward.
    - **Current Value** - The value on the record right now.
    - **Status** - The action for each field value on the DCR.

Possible values:

- **Accepted** - The requested value is approved.
- **Added** - The Data Steward augmented the field value in the DCR. The field was not included in the original DCR.
- **Rejected** - The requested value was not approved.
- **Modified** - Data Stewards modified the requested field value before approving the DCR. The final approved value is different from the original requested value.

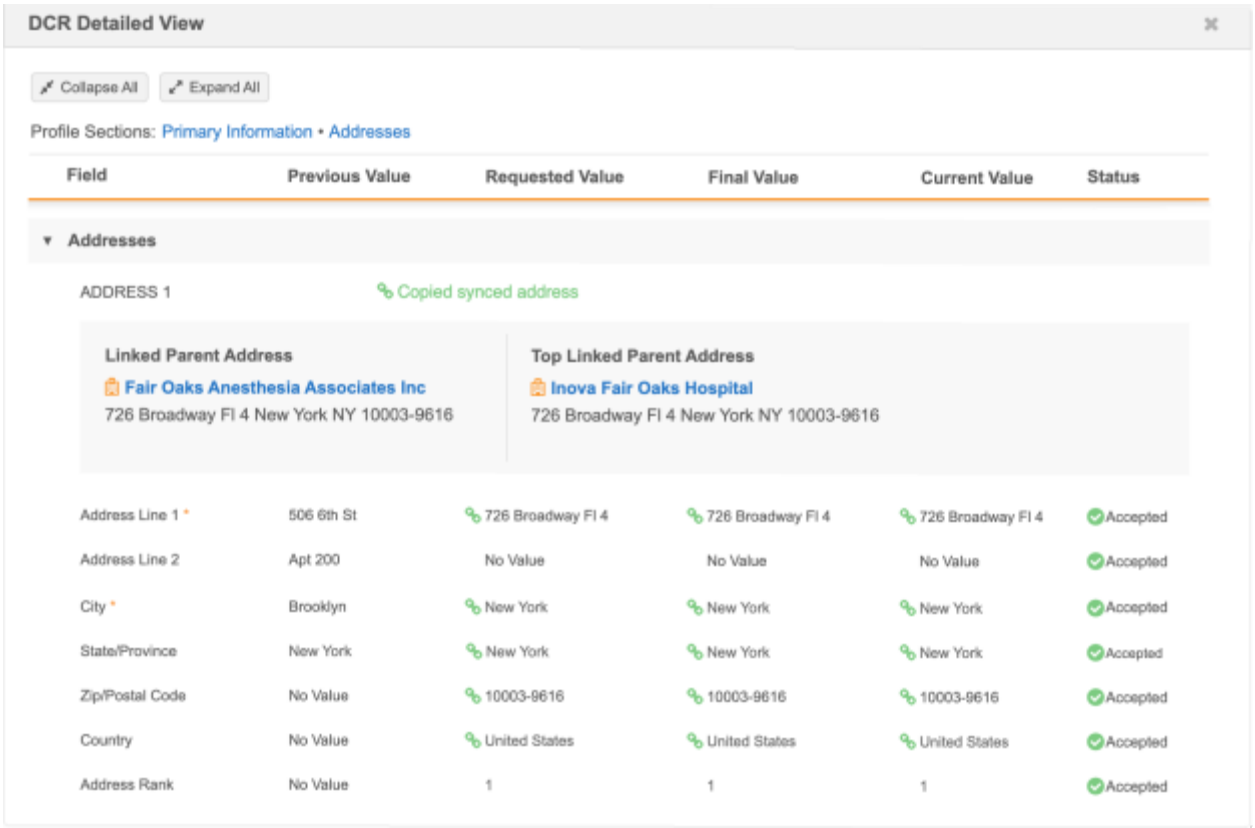
Address details

Network address inheritance

For addresses that have been copied from a parent address, an icon displays beside each field to indicate the final status after the task has been processed.

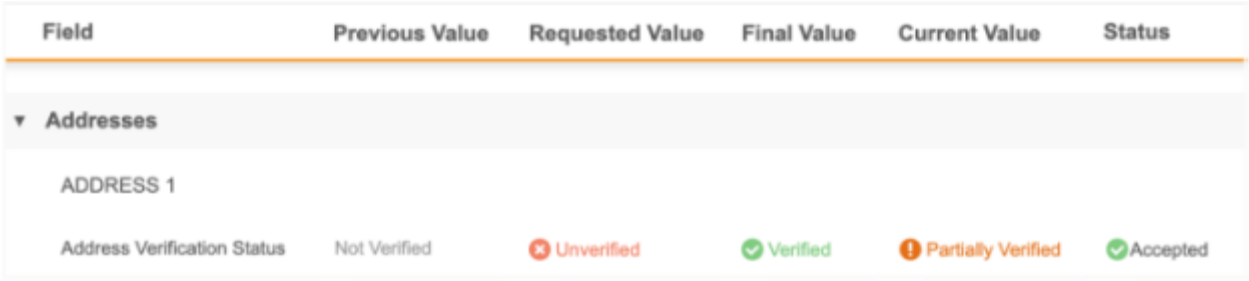
Possible values:

- **Synced** - Address is synced or copied from a parent address.
- **Unsynced** - Address is unsynced from the copied parent address
- **Disqualified** - Copied parent address is disqualified.



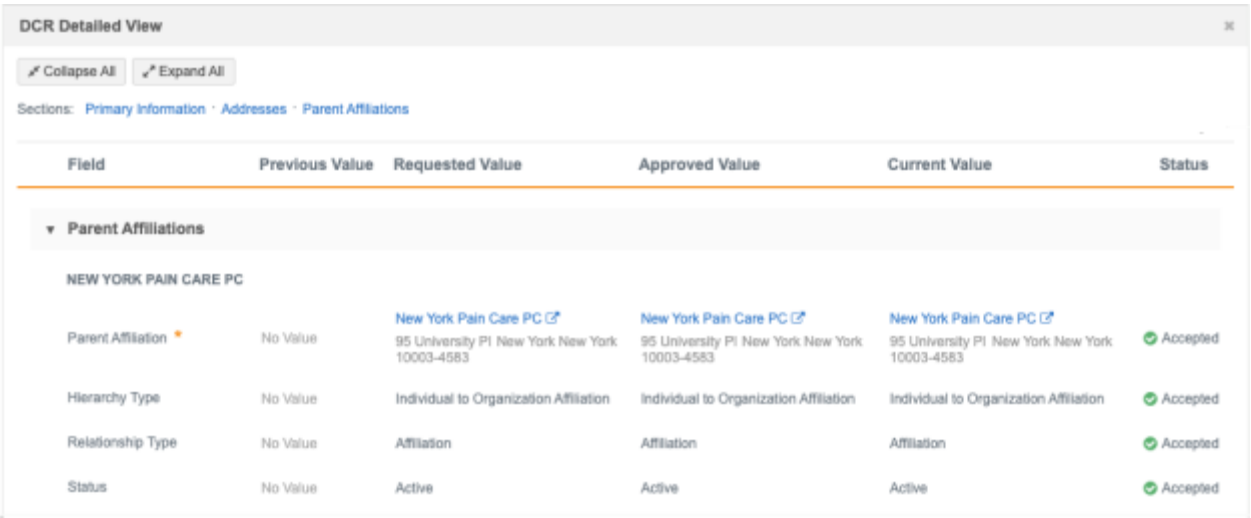
Address verification

Address verification changes also display on the view.



Parent affiliations

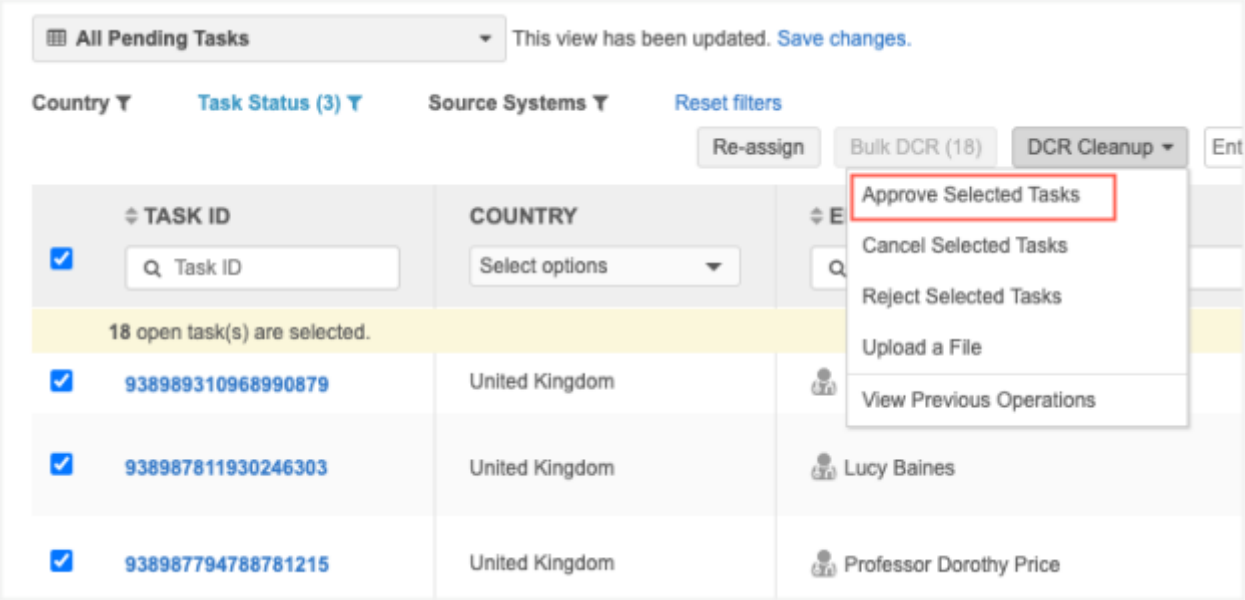
A link to the parent HCO displays in the detailed view. Click the link to open the parent HCO record in a new browser window.



APPROVE TASKS IN BULK

22R2.1

The **DCR Cleanup** button in the inbox was introduced in version 22R1.0 so Data Stewards can cancel and reject tasks in bulk. In this release, the ability to approve tasks in bulk is added.



This enhancement is added to the **DCR Cleanup** option by default in your Network instance.

The **DCR Cleanup** option is available only to users that have access to it through permission sets. Administrators must create permission sets and provide access to users.

For more information, see the Permission Sets topic in the *Veeva Network Online Help*.

Bulk approve options

Tasks can be approved in bulk using one of these options in the **DCR Cleanup** list:

- **Approve Selected Tasks** - Select the tasks to be approved in bulk. A limit of 500 tasks can be approved in each operation.

  When tasks are approved, a resolution note must be applied.

- **Upload a File** - Instead of selecting each task in the Inbox, you can bulk approve tasks by uploading a file that contains a single column: **task ID**. A limit of 500 tasks can be uploaded in each file.

  This option gives you more flexibility for approving tasks because it does not depend on access to the tasks. Your file can include tasks for any country and main object, even if you don't have access to the tasks through your inbox task groups.

Supported tasks

You can bulk approve the following tasks:

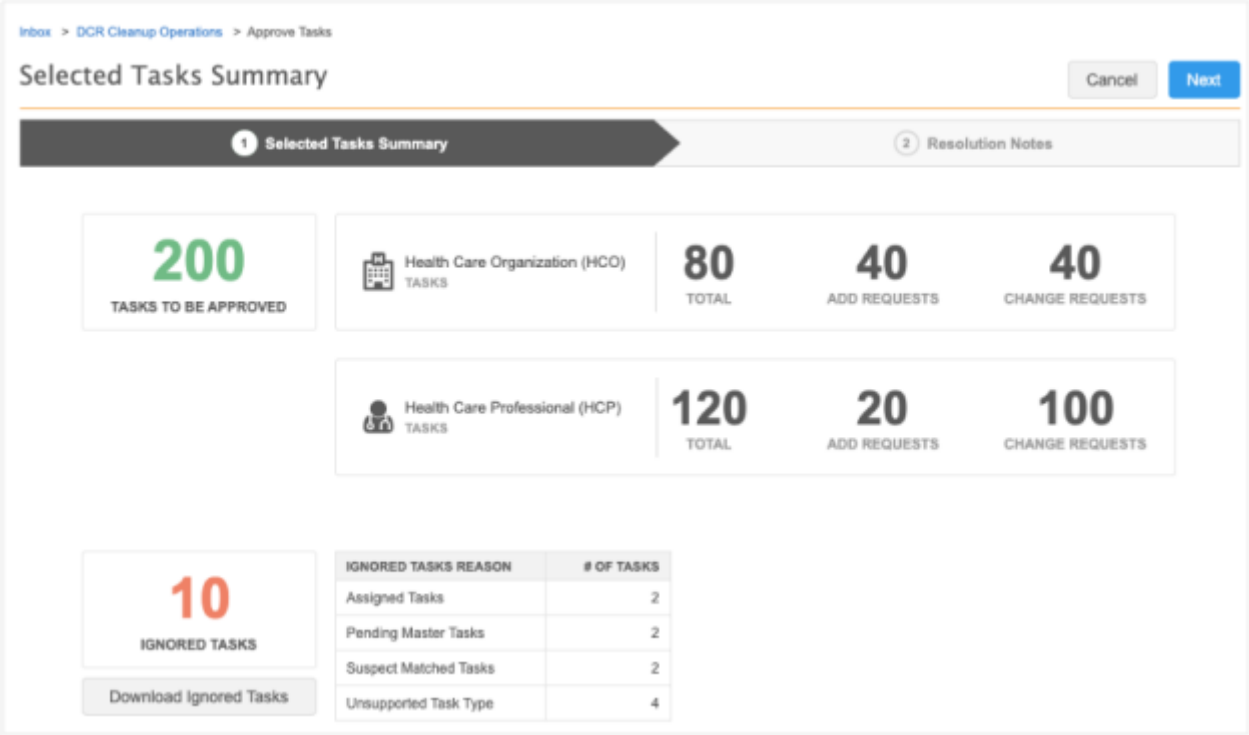
- add requests
- change requests

If you select tasks in the inbox, the tasks must be unassigned or assigned to the user running the operation. If you upload a file, assigned tasks can be included.

Tasks that are not supported

The following tasks will be ignored if they are included in the operation:

- Assigned tasks - Tasks that are assigned to other users.
  This applies to the **Approve Selected Tasks** operation only. It does not display if you have uploaded a file.
- Pending master tasks - Tasks that are pending review by Veeva OpenData.
- Suspect match tasks - These tasks must be approved individually.
- Unsupported task types - Job warnings and failed jobs.
- Duplicate Task IDs - Tasks are listed more than once in the file.
- Tasks with Invalid ID - Tasks that do not have a valid task ID.



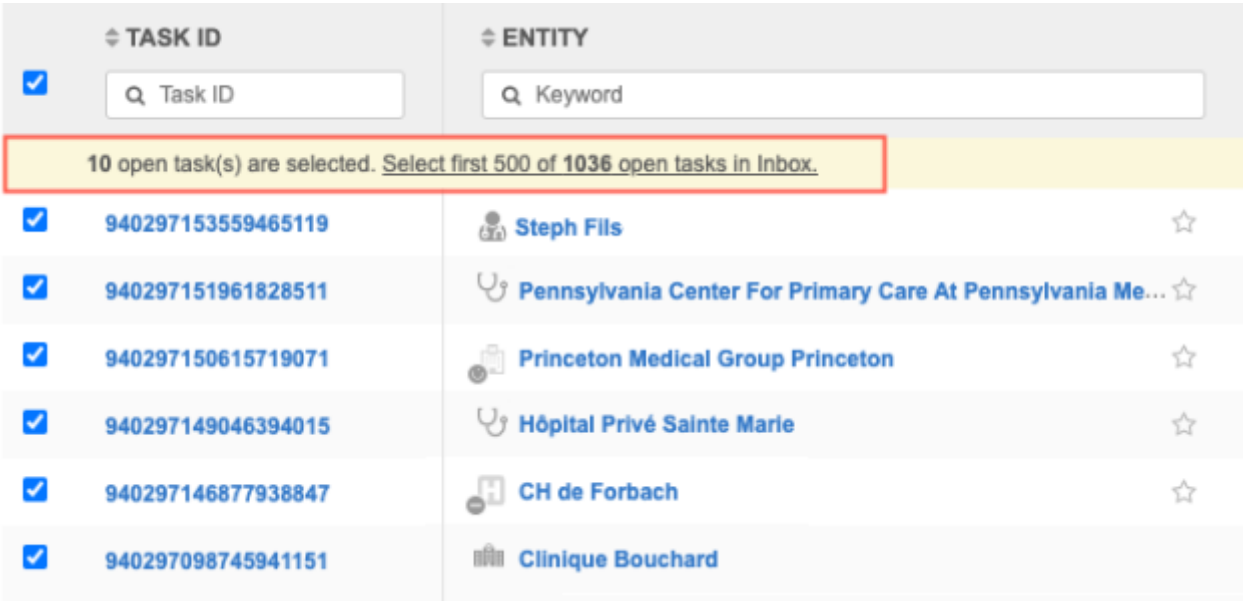
Approve selected tasks

To approve tasks in bulk:

1. In the Inbox, select the tasks to approve and click **DCR Cleanup > Approve Selected Tasks**.

   If you select the checkbox in the column header to select all tasks, a message displays a count of the selected tasks and an option to select the first 500 open tasks in the Inbox. Click the link to select those tasks. A maximum of 500 tasks can be selected for each operation.

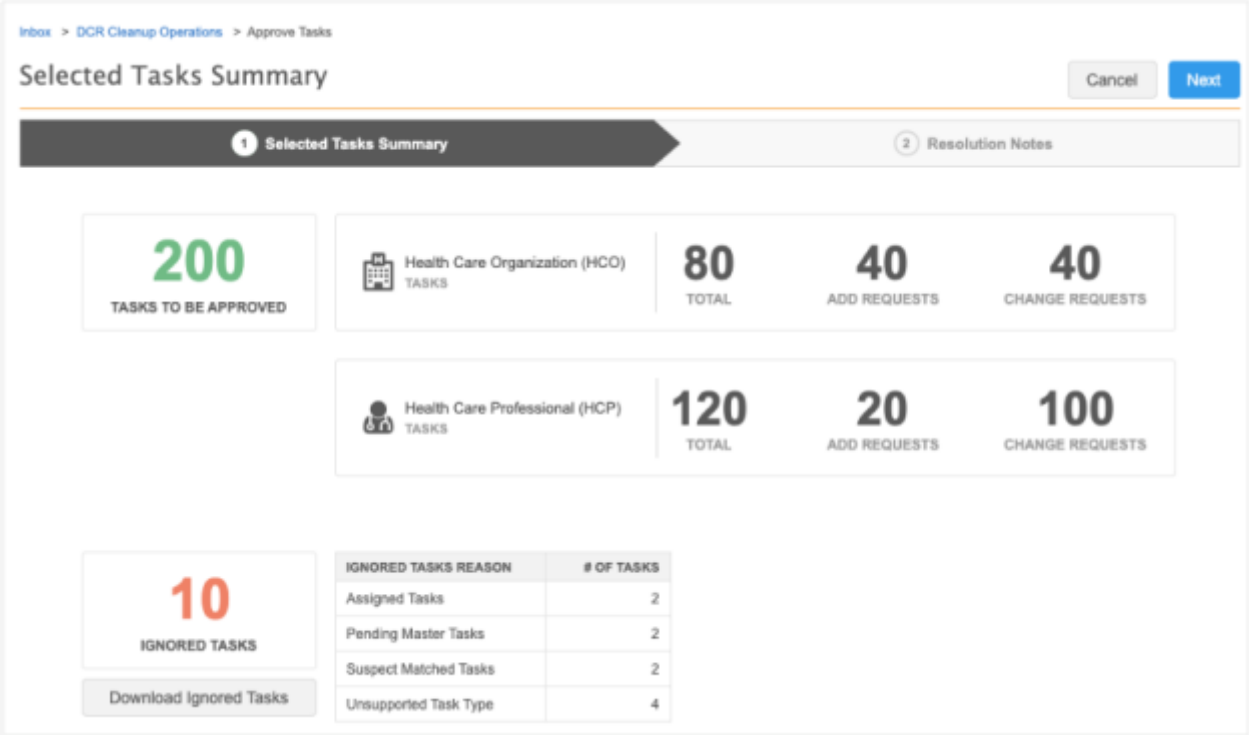
   Example



   The count at the bottom of the list is updated to display the number of selected records.

   Tip: Include tasks that are being approved for the same reason; one resolution note will be applied to all the tasks in the operation.

2. The summary page opens. It provides a count of add requests and change requests for each selected object and a total count of records that will be approved in the operation.



Ignored tasks

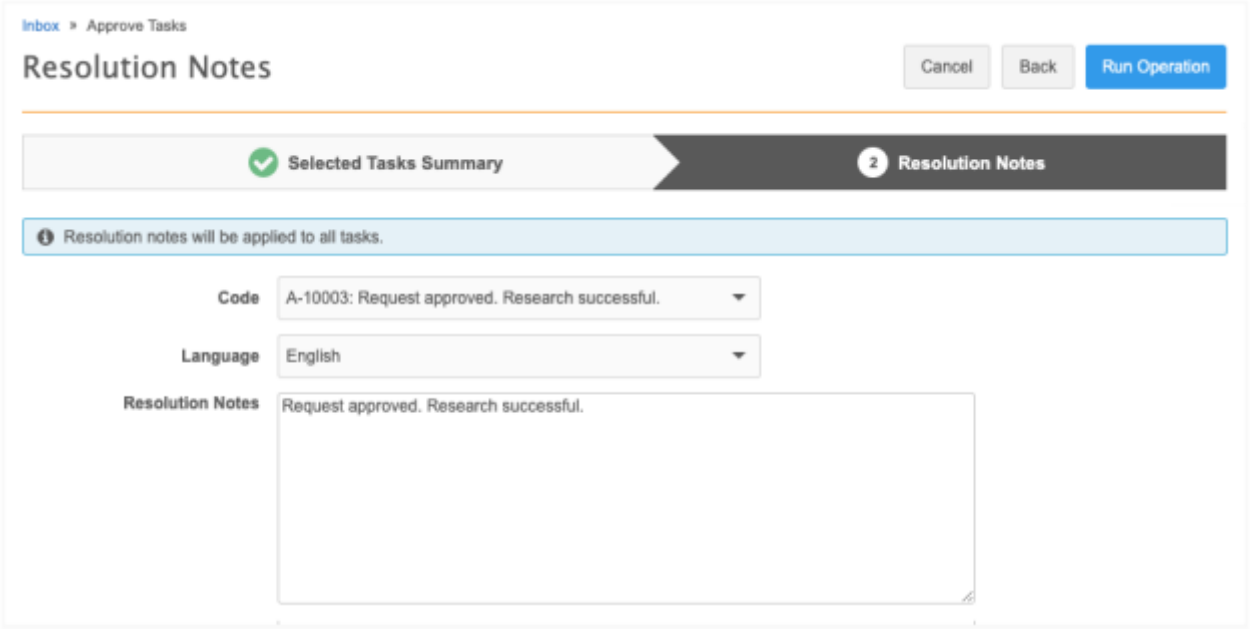
A count displays in this box if any of the tasks will be ignored because they cannot be approved for the following reasons:

- **Assigned tasks** - The task is assigned to a data steward.
- **Pending Master Tasks** - The task is pending review by Veeva OpenData.
- **Suspect Match Tasks** - The task is a suspect match. These tasks must be approved individually.
- **Unsupported Tasks Type** - Tasks that are Job Warnings or Failed Jobs.
- **Duplicate Task IDs** - Tasks that are listed more than once in the file.
- **Tasks with Invalid ID** - Tasks that do not contain a valid task ID.

Click **Next**.

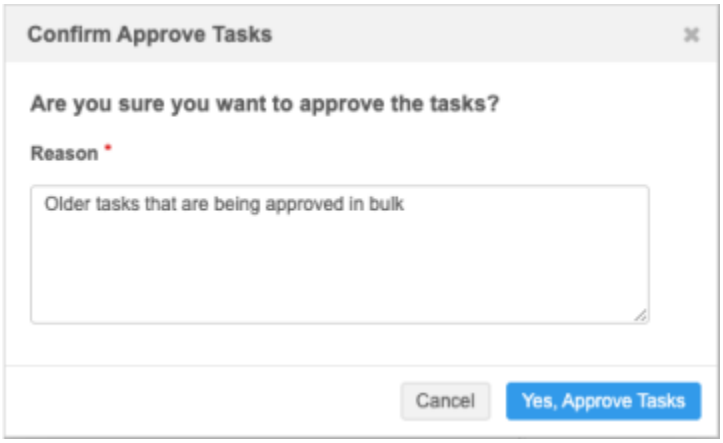
3. On the **Resolution Notes** step, define the resolution note that will be applied to all of the selected tasks. Only resolution notes that apply to all countries display.
   - **Code** - The reason for approving the tasks.
   - **Language** - The language the resolution note will display in.

     The localized message will display in the **Resolution Notes** field.

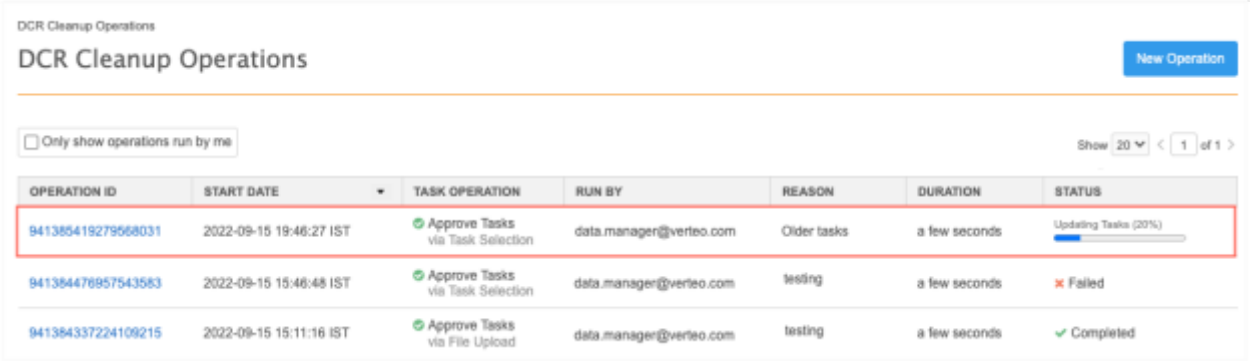


To continue, click **Run Operation**

4. In the **Confirm Approve Tasks** dialog, provide a reason and then click **Yes, Approve Tasks**.

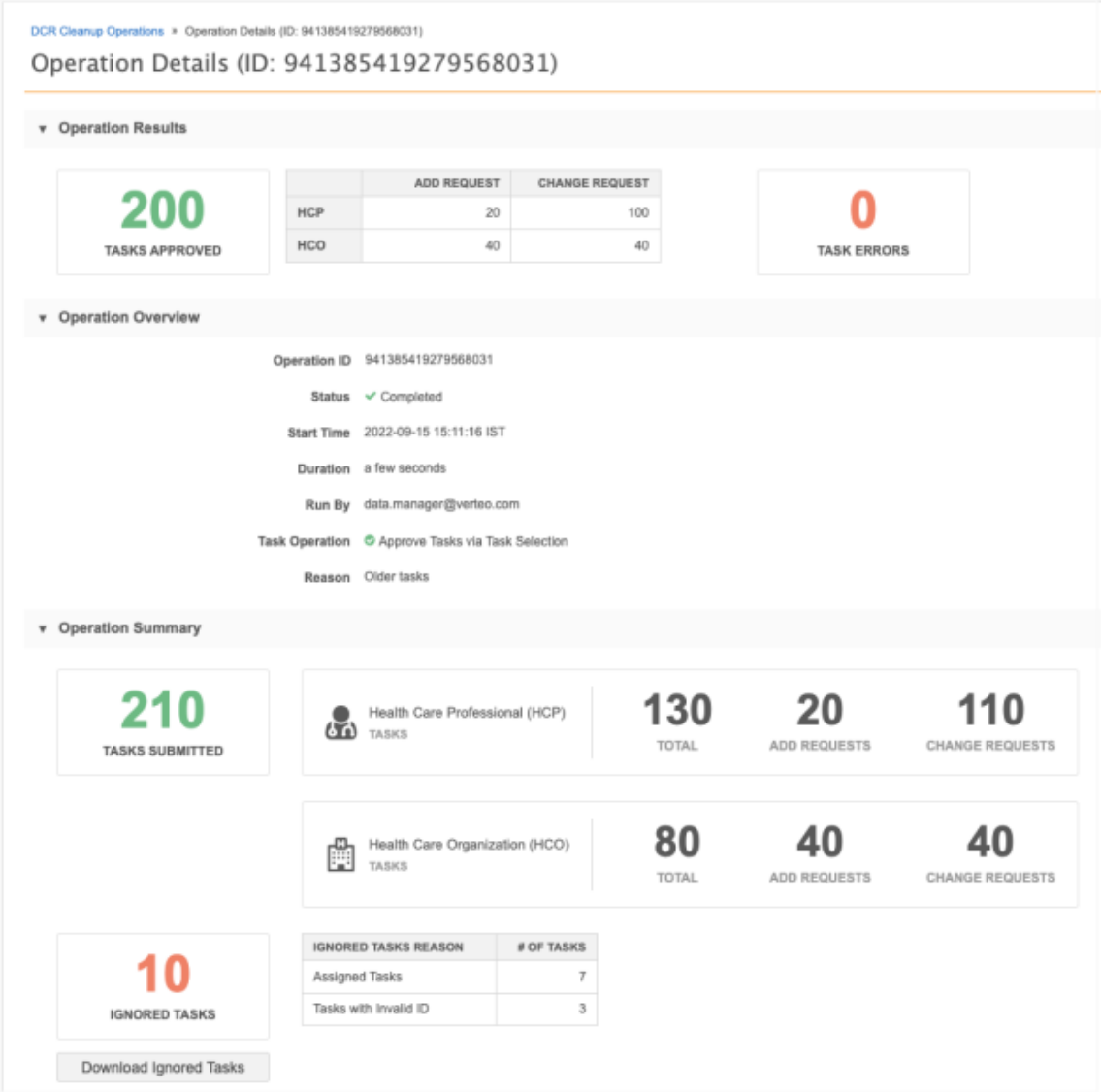


The DCR Cleanup Operations page opens and you can see from the message that the operation to approve the tasks has started.



5. When the operation completes, click the **Operation ID** to review the details.

   The Operation Details page displays a summary of the tasks that were submitted and approved.

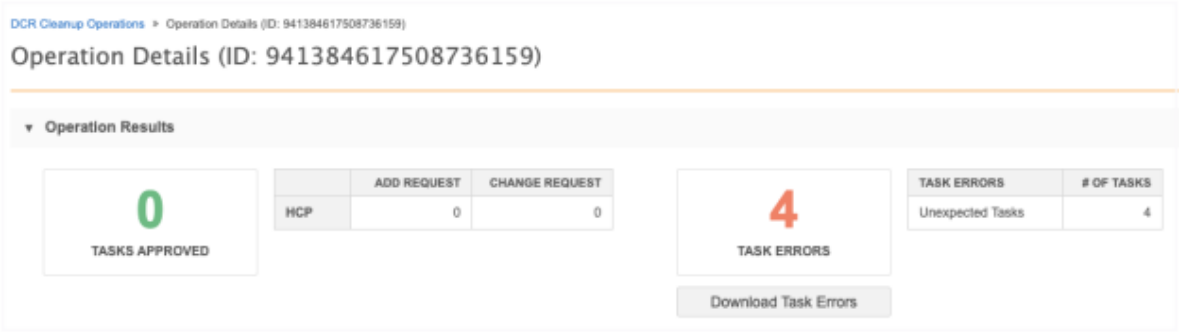


Ignored tasks

If the operation contains ignored tasks, a count and summary of the reasons display. Click **Download Ignored Tasks** to export a .csv file. The downloaded file identifies the task ID with the error (reason) so you can investigate further.

Task errors

If the approve operation contains errors, a count and summary of the errors display. Click **Download Task Errors** to export a .csv file that contains the task ID for each error.



Upload a file

Uploading a file gives you more flexibility for approving tasks in bulk. The file can contain tasks that are assigned and tasks for countries that you don't have access to through your inbox task groups.

File requirements

- **Format** - Comma separated value (.csv) and Microsoft® Excel® (.xlsx) files are supported.
- **Contents** - Must be a single column (**task_id**) containing the task IDs of the records that you want to approve.
- **Task limit** - A maximum of 500 tasks can be uploaded in each operation.
- **File Size** - Files can be up to 30MB.
- **Reason for approval** - Include tasks that are being approved for the same reason; one resolution note will be applied to all the tasks approved in the operation.

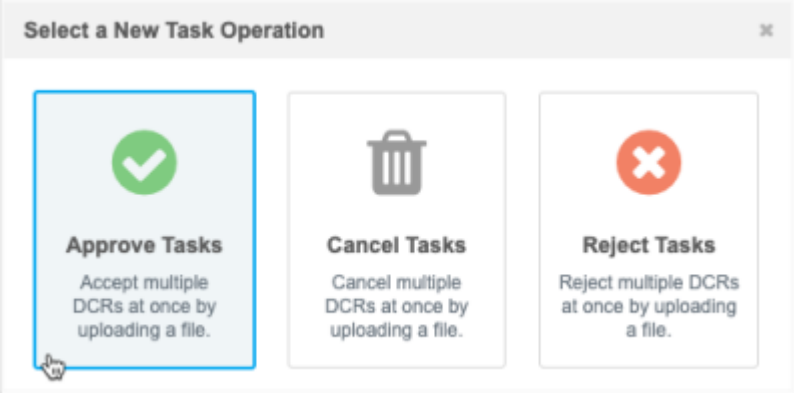
Example file

task_id
940297216797445279
940297214642949279
940297214103391391
940297213022178463

Tip: To retrieve the task IDs, export the Inbox and remove all the columns except the **task_id** column. Ensure that only the task IDs for the records that you want to approve are listed in the file. You can export the Inbox if you have permission through your assigned Inbox Task Group.

To upload a file:

1. In the Inbox, click **DCR Cleanup > Upload a File**.



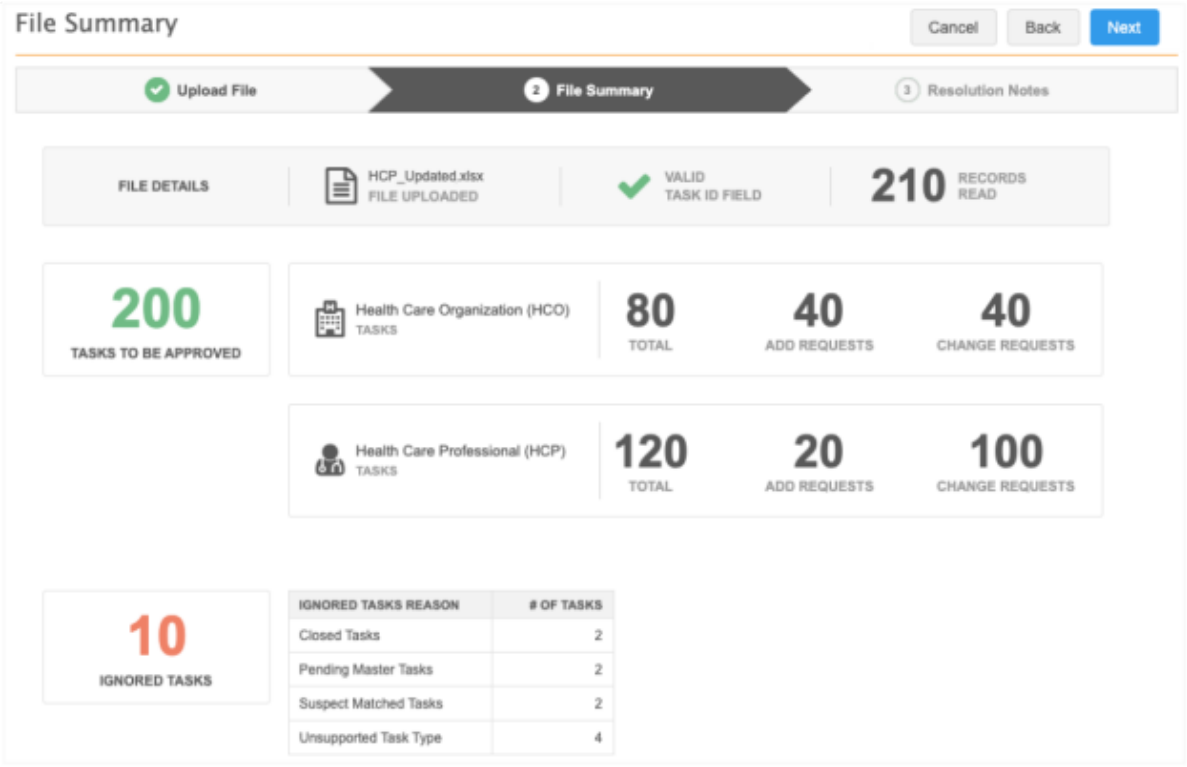
2. In the **Select a New Task Operation** dialog, choose **Approve Tasks**.

   The task options that are available depend on your assigned permission sets.

3. On Step 1, **Approve Tasks**, click **Upload File** to browse for a file or drag the file to the box.

   The file will be validated to ensure that it is the expected format and size and that it contains only the **task_id** column.

4. On Step 2, **File Summary**, review the details of the file that was uploaded and the records that will be approved. A total count of the tasks for each object and counts for each task type display.



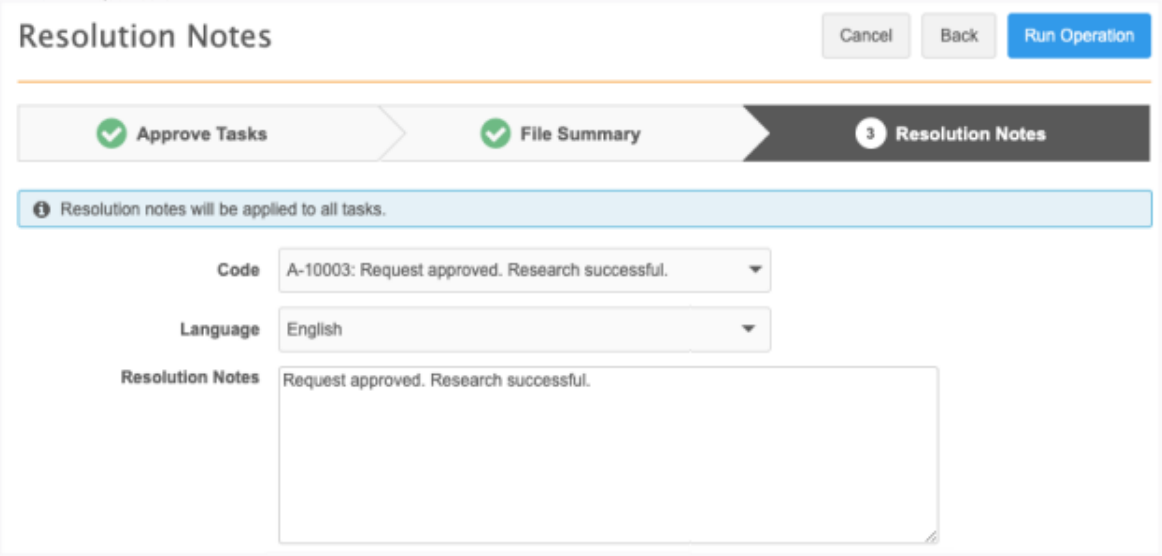
Ignored tasks

A count displays in this box if any of the tasks will not be approved for the following reasons:

- **Closed Tasks** - The task has already been closed.
- **Duplicate Task IDs** - The task is ignored because it is a duplicate.
- **Invalid Task IDs** - The task is not a DCR ID.
- **Pending Master Tasks** - The task is pending review by OpenData.
- **Suspect Match Tasks** - The task is a suspect match.
- **Unsupported Tasks Type** - Tasks that are Job Warnings or Failed Jobs.

5. Click **Next**.
6. On Step 3, **Resolution Notes**, define the resolution note that will be applied to all of the approved tasks.
   - **Code** - The reason for approving the tasks.
   - **Language** - The language the resolution note will display in.

     The localized message will display in the **Resolution Notes** field.



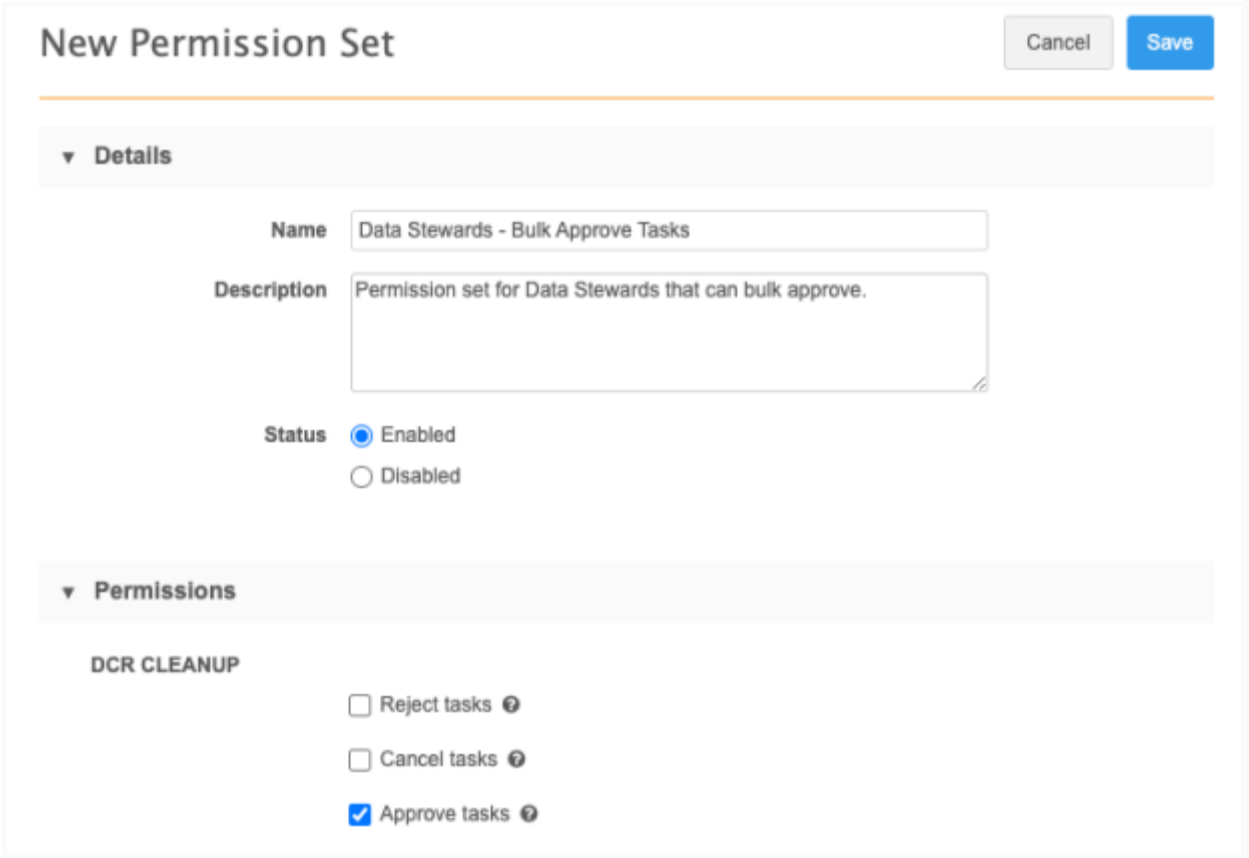
7. Click **Run Operation**.
8. In the **Confirm Approve Tasks** dialog, type a reason and click **Yes, Approve Tasks**.

   The DCR Cleanup Operations page opens so you can view the progress of the job. When the job completes, click the **Operation ID** to view the details of the job.

Permission sets

To support the ability to approve tasks in bulk, a new option is available for **DCR Cleanup** permissions (**Users & Permissions > Permission Sets**).

Administrators can assign the **Approve tasks** option to individual users or to user groups through the permission set.



For more information, see Permission Sets in the *Veeva Network Online Help*.

REJECT SUSPECT MATCH TASKS

22R2.1

Suspect match tasks are now supported for bulk reject operations. Previously, suspect match tasks that were included in bulk reject operations were ignored. Including suspect matches helps users clean up their inbox.

This enhancement is enabled by default in your Network instance.

Add request considerations

When suspect matches created from add requests are rejected in a bulk operation, the suspect match switches back to an add request. The add request could be automatically approved or could be sent to the Inbox for stewardship, depending on your workflow settings.

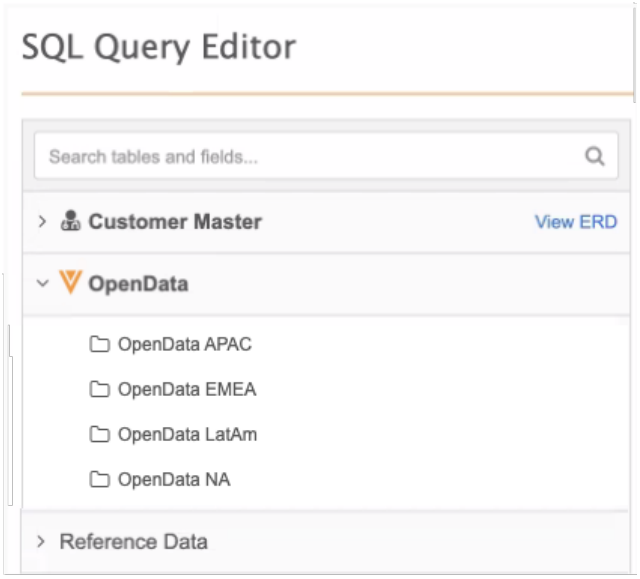
Reporting

REPORTING ON OPENDATA

22R3

Advanced reporting users can now report on country data within OpenData instances.

New reporting tables for OpenData are available in the SQL Query Editor. Users with access to Network Reports and the data can view results directly from the OpenData instance.



Enable the feature

This feature is not enabled by default; it will be deployed to Network instances in stages.

If you are interested in having the feature enabled soon, contact your Network representative.

Supported country subscriptions

OpenData reporting tables are available for countries where you subscribe to all records. They are not available for pay-per-record country subscriptions.

Using OpenData tables

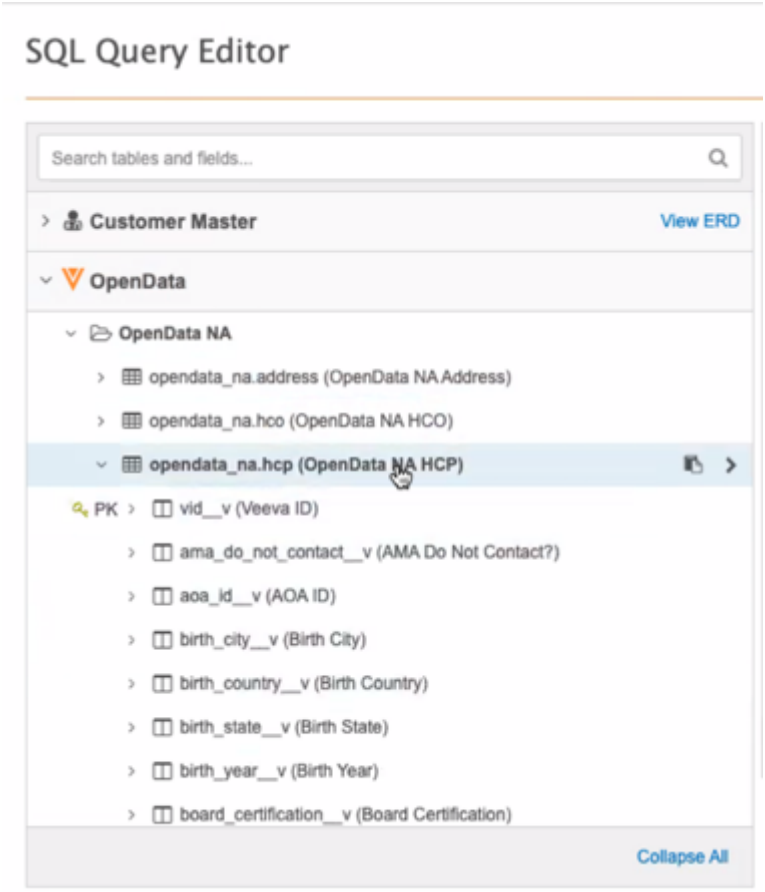
OpenData tables are unique because they report on data that may not be in your Network instance. They can, however, be used in the same way that other reporting tables can be used.

Example use cases:

- Join OpenData tables with Network tables or custom tables.
- Create inbound or outbound data transformation queries.
- Create custom tables with the query results.
- Download report results.
- Save queries as Saved Reports.

Access the reporting tables

The OpenData tables are available in the SQL Query Editor (**Reports**). The **OpenData** category displays below the data domains in the tree view.



- Expand the **OpenData** category to view folders for each OpenData instance that you have access to.

  If your Network instance is connected to an OpenData instance because you subscribe to all records for one or more countries, that instance displays.

  Example

  If you subscribe to all OpenData records for the United States (US), the **OpenData NA** instance displays in the list. If your subscription does not include all records, or you do not subscribe to the US or Canada at all, the **OpenData NA** instance does not display.

- Expand each instance to see the OpenData reporting tables.

Available tables

All Veeva object and sub-object tables:

- HCP
- HCO
- Address
- License
- ParentHCO

Tables that are not included

Any table that is not an entity table is not included:

- Custom key
- Reference Data
- Revision History
- Data Loading
- Data Stewardship
- Lookup tables
- flat_hierarchy tables

Table data

Country considerations

The tables contain data for all countries in that instance where you subscribe to all records. For example, if you subscribe to all records for Canada and the US, the tables in the **OpenData NA** instance returns results for both countries.

Tip: If you want to return results for a specific country, remember to specify the country in your query.

If you subscribe to all records for France but your subscription for Italy is pay-per-record, the **OpenData EMEA** reporting tables will only return results for France. Data for Italy will not be included in the tables.

Supported records

The following records and fields are available to report on in the OpenData instance:

- Records with Valid and Merged_Into record states

  Note: Record state applies to the HCOs and HCPs only. Sub-objects of any record state will be returned. For example, any invalid addresses on a valid HCP will be included in the tables.

- All record statuses
- All Veeva standard fields (__v)

  Not all Veeva standard fields are used in every country.

  Note: The fields must be enabled in your Network instance to be available for OpenData reporting.

- All Veeva objects and sub-objects
- OpenData subscription fields that you subscribe to (HIN, CIP, Geo Subdivision, NCPDP, and so on)
- Unsubscribed records

Excluded records

The following records and fields are not included in OpenData reporting results:

- Records with Invalid and Deleted record states
- Opted out records
- Candidate records
- Custom keys
- Custom fields

Instance-level access

This feature is available only if your Network instance is configured for the following:

- **OpenData country subscriptions**
  - You subscribe to all records for a country; it is not available for pay-per-record subscriptions.

    Note: (US only) This applies to the OpenData Email subscriptions also. Emails are only available in reporting if all emails are included in the subscription.

  - The country subscription is enabled and configured in your Network instance (**System Interfaces > Veeva OpenData Subscriptions**)
- **Network features** - The following features must be enabled in **Settings > General Settings**:
  - **Search and Query OpenData** (previously called **Search OpenData**) - This setting enables you to view records in the OpenData instance that have not been downloaded to your Network instance.
  - **Reporting View** - This setting enables the reporting feature in your Network instance.

User-level access

Administrators must set the following permissions on individual user pages and on data visibility profiles to give users access to OpenData data in Network reports. Field restrictions are also considered for data returned in the report results.

Required Permissions	Required Permission Value	Description	Impacted Users
User page			
Reports	**Display Tab**	Allow users to see the Reports tab in the Network menu bar.	All users
SQL Query Editor	**Allow**	Allow users access to the SQL Query Editor feature in the Reports menu.	Standard users and Data Managers
Report Results	**Restricted - Limited by user's data permissions**	Query results observe the user's data permissions (data visibility profiles, inbox task groups)	Administrators, Data Managers, System and Data Admins
	Unrestricted	Query results have no restrictions applied.	

Required Permissions	Required Permission Value	Description	Impacted Users
Data visibility Profiles (country specific)			
Can search and query OpenData instance	**True**	Users with this DVP can access OpenData records for this country.	All users
Health Care Professional Visibility	**All**, or **Include** (for specific HCPs)	**All** - User can view all HCP records for the country in the query results **Include** - User can see only the HCP records for the country that they have visibility to.	All users
Health Care Organization Visibility	**All**, or **Include** (for specific HCOs)	**All** - User can view all HCO records for the country in the query results **Include** - User can see only the HCO records for the country that they have visibility to.	All users
Can download/sync records from OpenData Instance	**True** or **False**	Does not restrict users from reporting on OpenData records. **True** - Users can download records from OpenData instance. **False** - Users cannot download records. The download icon is not active.	All users
Field restrictions			
OpenData __v fields	No restrictions	User has access to all fields in the query results.	All users
	Restricted field	Queries run on OpenData tables for that field will not return results. - If the field is used in the *where* clause, no results are returned at all. - If the field is simply listed in the query, the query will run, but no data displays for that field in the column.	All users

Sample queries

OpenData tables can be used to query data in the OpenData instance, or you can JOIN the tables with other Network reporting tables.

Sample query 1 - Count of records to be downloaded (filter subscription)

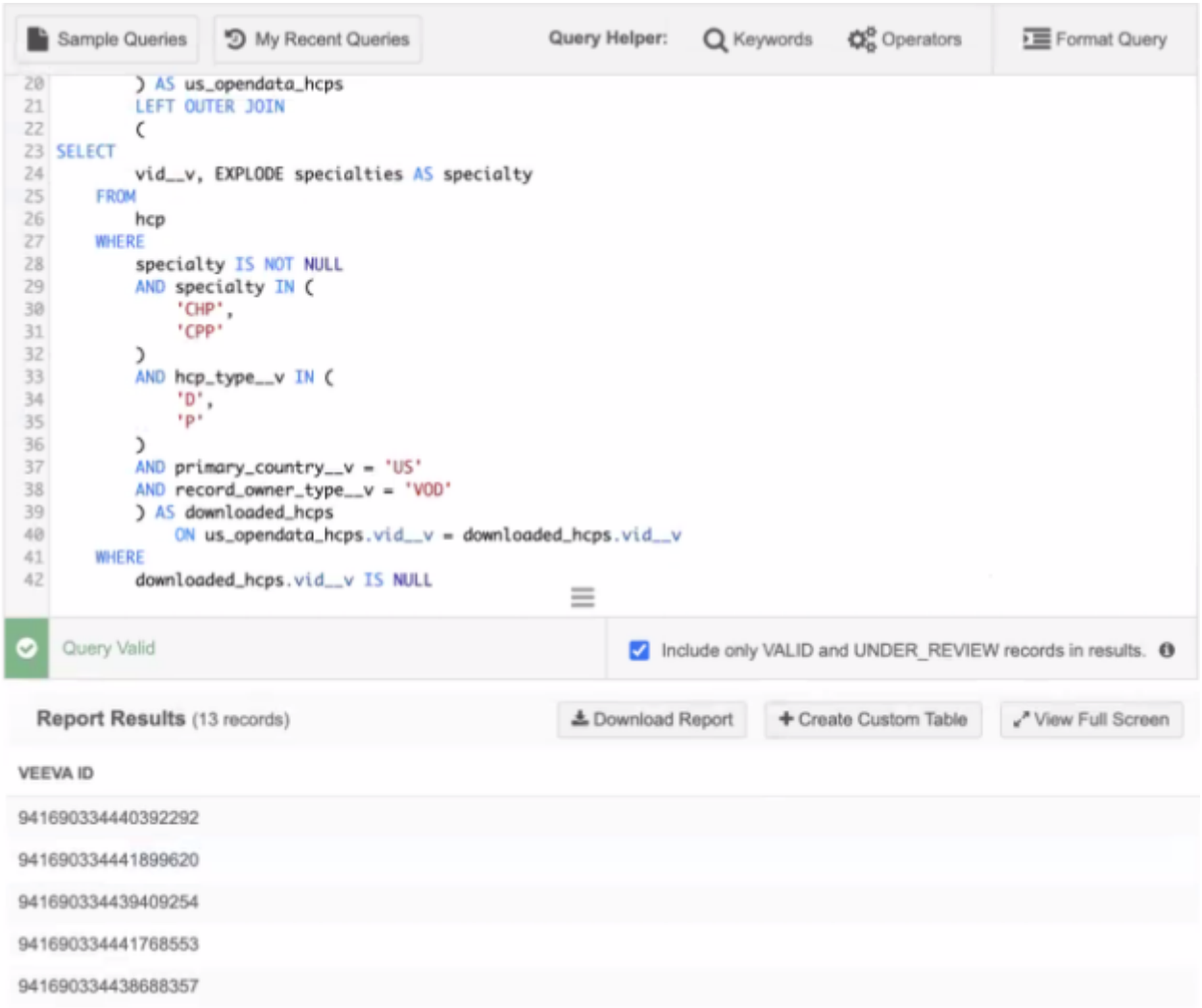
If you add Specialty or Type filters in the OpenData country subscription, you can report on how many new records will be downloaded to your Network instance.

Query

This query uses two values for Specialty fields and two values for the HCP Type field.

```
SELECT
        us_opendata_hcps.vid__v
    FROM
        (
            SELECT
        vid__v, EXPLODE specialties AS specialty
    FROM
        opendata_na.hcp
    WHERE
        specialty IS NOT NULL
        AND specialty IN (
            'CHP',
            'CPP'
        )
        AND hcp_type__v IN (
            'D',
            'P'
        )
        AND primary_country__v = 'US'
        ) AS us_opendata_hcps
        LEFT OUTER JOIN
        (
 SELECT
        vid__v, EXPLODE specialties AS specialty
    FROM
        hcp
    WHERE
        specialty IS NOT NULL
        AND specialty IN (
            'CHP',
            'CPP'
        )
        AND hcp_type__v IN (
            'D',
            'P'
        )
        AND primary_country__v = 'US'
        AND record_owner_type__v = 'VOD'
        ) AS downloaded_hcps
            ON us_opendata_hcps.vid__v = downloaded_hcps.vid__v
    WHERE
        downloaded_hcps.vid__v IS NULL
```

Sample results



Sample query 2 - Count of prescribers in a country

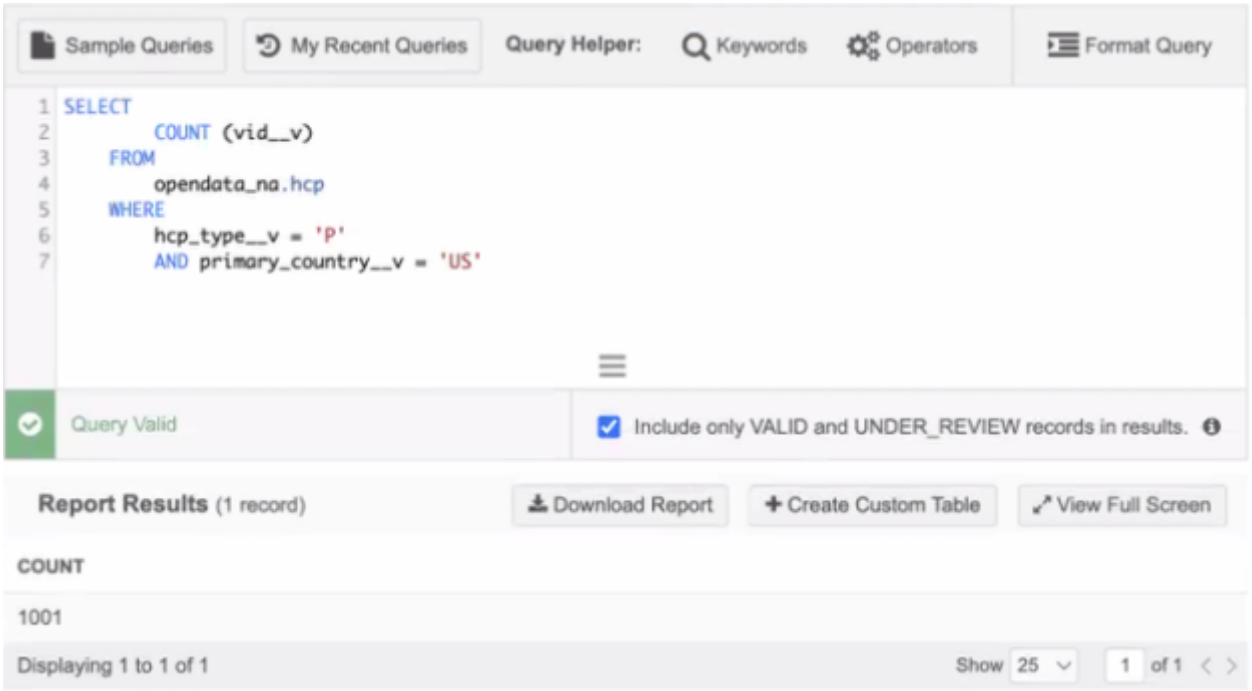
Find the count of all HCPs that are prescribers (HCP type = Prescriber) for a country in an OpenData instance.

Query

This query returns a count for prescribers in the US for the OpenData NA instance

```
SELECT
          COUNT (vid__v)
     FROM
          opendata_na.hcp
     WHERE
          hcp_type__v = 'P'
          AND primary_country__v = 'US'
```

Sample results



Sample query 3 - List of unsubscribed HCPs

See a list of HCPs that have been unsubscribed from OpenData for your Network instance for a specific country.

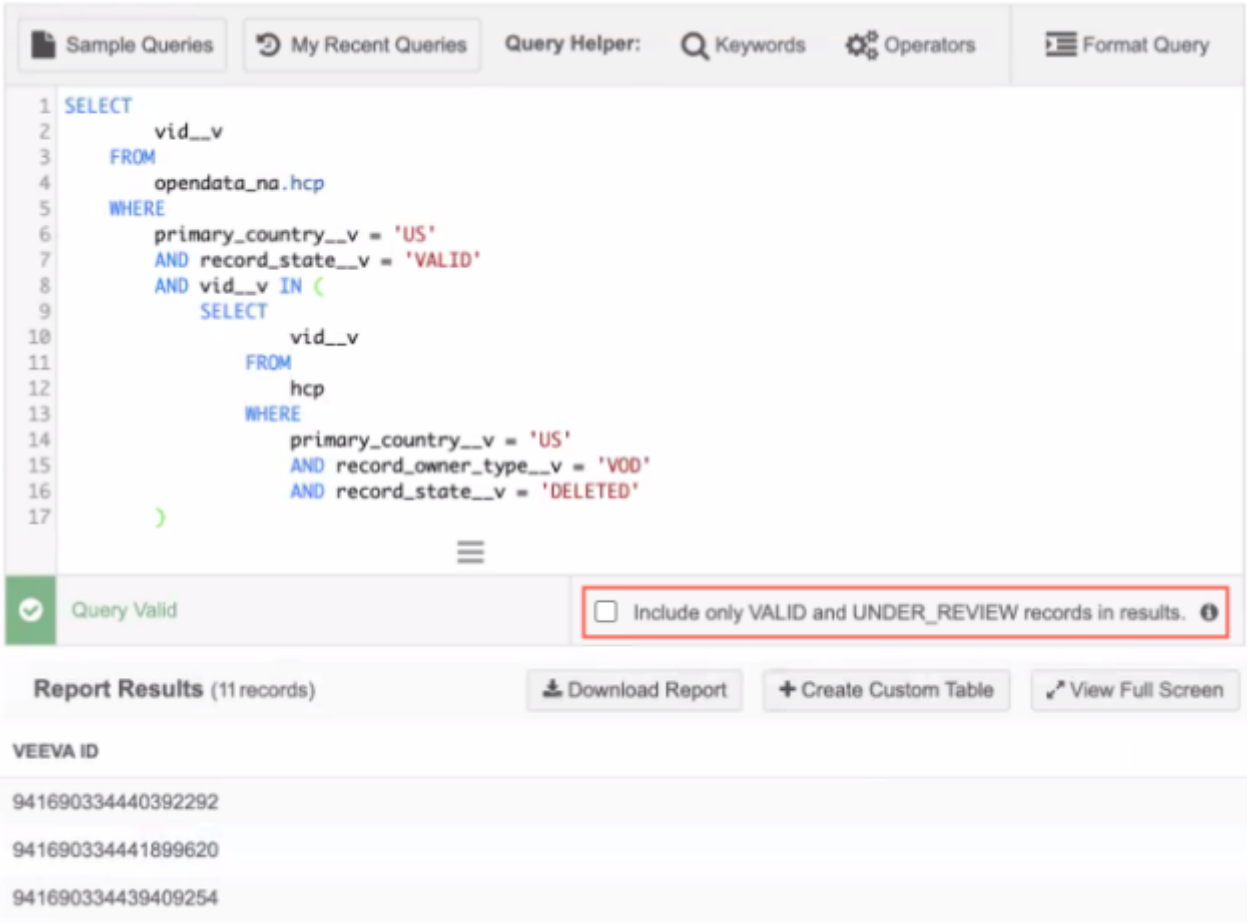
Note: The **Include only Valid and Under_Review** checkbox must be cleared for this report; otherwise, no records will be returned in the results.

Query

This query specifies HCPs in the US.

```
SELECT
        vid__v
    FROM
        opendata_na.hcp
    WHERE
        primary_country__v = 'US'
        AND record_state__v = 'VALID'
        AND vid__v IN (
            SELECT
                    vid__v
                FROM
                    hcp
                WHERE
                    primary_country__v = 'US'
                    AND record_owner_type__v = 'VOD'
                    AND record_state__v = 'DELETED'
        )
```

Results



Sample query 4 - List of HCOs related to already downloaded HCPs or HCOs

This query finds not-yet-downloaded HCOs (one level up) that are related to already downloaded active HCPs or active HCOs. The relationship to the HCO must also be active. This helps you to find missing parents in your hierarchy.

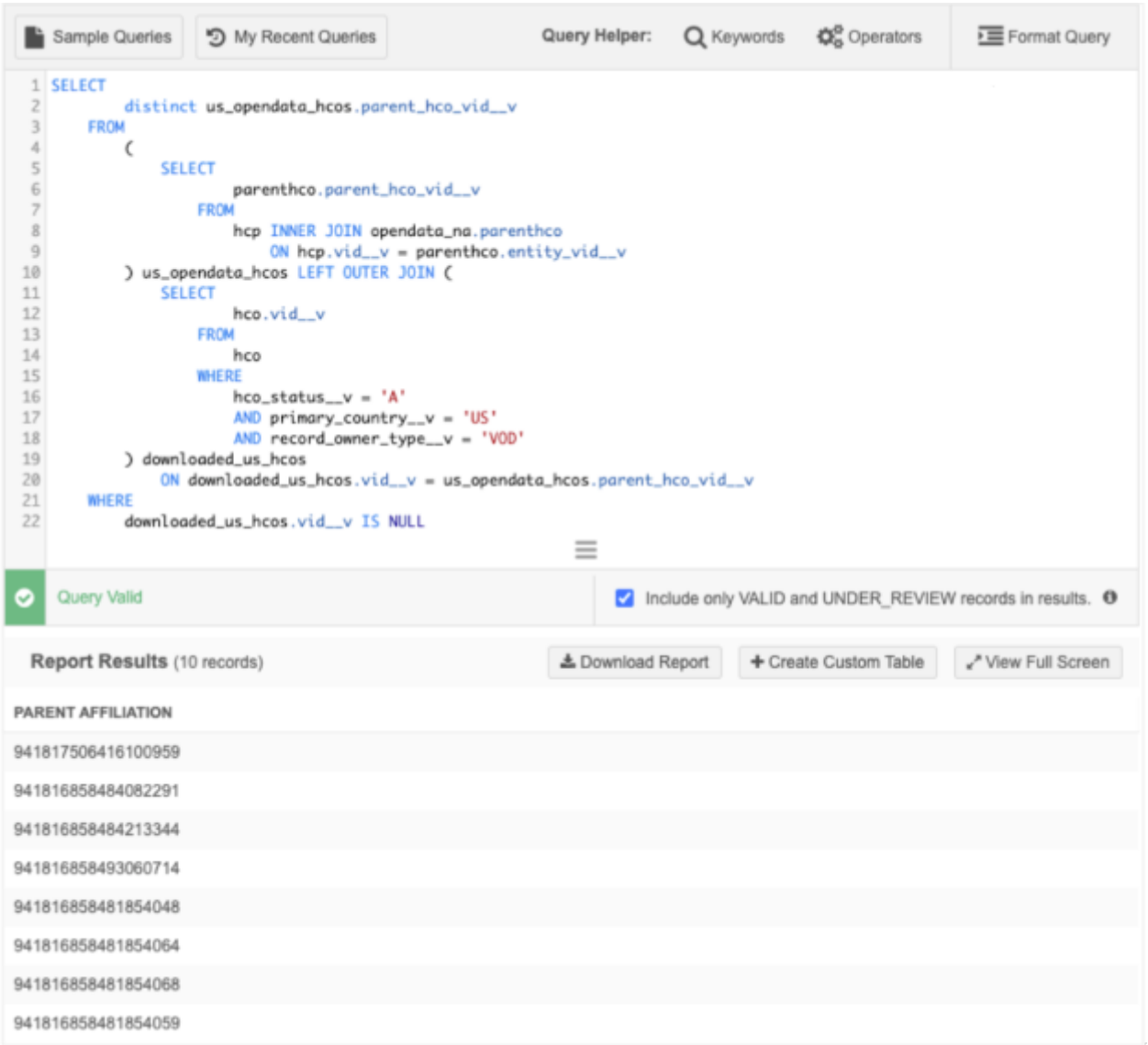
Query

This query returns a list HCO Veeva IDs (VIDs) for the US.

```
SELECT
        distinct us_opendata_hcos.parent_hco_vid__v
    FROM
        (
            SELECT
                    parenthco.parent_hco_vid__v
                FROM
                    hcp INNER JOIN opendata_na.parenthco
                        ON hcp.vid__v = parenthco.entity_vid__v
        ) us_opendata_hcos LEFT OUTER JOIN (
            SELECT
```

```
                    hco.vid__v
                FROM
                    hco
                WHERE
                    hco_status__v = 'A'
                    AND primary_country__v = 'US'
                    AND record_owner_type__v = 'VOD'
        ) downloaded_us_hcos
            ON downloaded_us_hcos.vid__v =
us_opendata_hcos.parent_hco_vid__v
    WHERE
        downloaded_us_hcos.vid__v IS NULL
```

Results



Data transformation queries

OpenData reporting tables can be used in queries for inbound and outbound data transformations.

Sandbox considerations

The OpenData data results in your Sandbox inbox might be different from the data in your Production instance for the following reasons:

- Sandbox instances are not updated daily.
- Veeva OpenData subscriptions are often set for all records for the country in Sandboxes. If you do not subscribe to all records for a country, you might have access to the feature for that country in your Sandbox, but not in your Production instance.

SAMPLE QUERIES

22R2.1

The following queries have been added as **Sample Queries** in the SQL Query Editor. These queries were previously available as Saved Reports but they have been discontinued. Use these sample queries to report on merged HCOs or HCPs.

These queries are available by default if Reporting is enabled in your Network instance.

Merged HCO Report

Entity: HCO

Country: All

Description: Report of HCOs merged starting from a given date.

Query

```
SELECT
           hco_surviving.vid__v AS "Veeva ID (Surviving)",
           hco_non_surviving.vid__v AS "Veeva ID (Non-Surviving)",
           hco_revision.created_at AS "Timestamp"

     FROM
         hco_revision
           INNER JOIN hco AS hco_non_surviving ON hco_revision.vid__v =
hco_non_surviving.vid__v
           INNER JOIN hco AS hco_surviving ON
hco_non_surviving.record_merged_vid__v = hco_surviving.vid__v
     WHERE
         hco_revision.record_state__v = 'MERGED_INTO'
         and hco_revision.created_at >= 'INSERT_DATE_HERE' -- i.e. '2022-
01-01'
```

Merged HCP Report

Entity: HCP

Country: All

Description: Report of HCPs merged starting from a given date.

Query

```
SELECT
          hcp_surviving.vid__v AS "Veeva ID (Surviving)",
          hcp_non_surviving.vid__v AS "Veeva ID (Non-Surviving)",
         hcp_revision.created_at AS "Timestamp"

     FROM
         hcp_revision
          INNER JOIN hcp AS hcp_non_surviving ON hcp_revision.vid__v =
hcp_non_surviving.vid__v
          INNER JOIN hcp AS hcp_surviving ON
hcp_non_surviving.record_merged_vid__v = hcp_surviving.vid__v
     WHERE
         hcp_revision.record_state__v = 'MERGED_INTO'
         and hcp_revision.created_at >= 'INSERT_DATE_HERE' -- i.e. '2022-
01-01'
```

Use a sample query

To report on merged HCOs and HCPs:

1. Select **Reports > SQL Query Editor** and click **Sample Queries**.
2. In the **Sample Queries** dialog, use the search bar to find the query or find the query in the HCO or HCP entity section.
3. Select the query and click **Insert Selected Query**.
4. In the query editor box, replace the `INSERT_DATE_HERE` placeholder with a date. The report will display all of the merges of that object from the date that you specify.
5. Click **Run Query** to view the results.

File Explorer

SMART TABLES

22R2.1

Use smart tables to open, view, and augment .csv files directly from File Explorer. In this release, enhancements have been made to improve the usability and performance of smart tables.

The following improvements have been made:

- **Sort columns** - Click anywhere on the header to sort the column. Previously, the sort function was available only by clicking on the **Sort** icon in the header. By default, the column is sorted in ascending order.
- **Resize columns** - Click and drag a cell border to manually resize the column. The column is resized when you release the border in the desired place.

If the values are truncated in the column, hover to display the full value in a tooltip.

- **Performance** - Smart table data now loads more quickly when you open the file and as you scroll through the rows and columns.

These enhancements are enabled by default in your Network instance.

Hierarchies

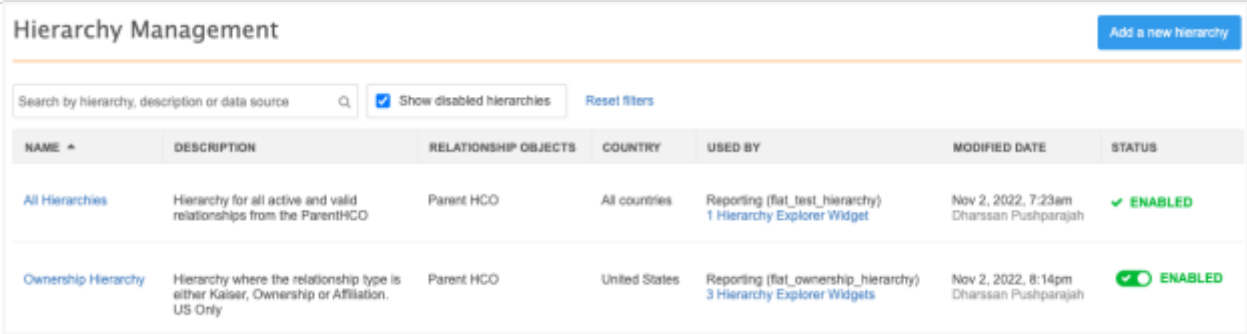
HIERARCHY MANAGEMENT

22R3

Administrators can define hierarchies in Network that can be used in the Hierarchy Explorer widget and Network Reporting.

Previously, custom hierarchies could be added to your Network instance by request, but they were available only for the Hierarchy Explorer widget. Similarly, Network provided a flat hierarchy reporting table but it could be customized with fields for the ParentHCO object only. Reporting tables could not be created for your different use cases; for example, a flattened hierarchy table for All Hierarchies, an Ownership hierarchy, and for a Neurology hierarchy. Now, you have the flexibility to define, manage, and control your hierarchies in your Network instance.

This feature is enabled in your Network instance by default.



Hierarchy management benefits

General benefits

- Manage and create your own hierarchies. No longer need to create a Veeva Support ticket.
- Control hierarchies per country.

Hierarchy Explorer benefits

- Flexibility to view and filter data in Hierarchy Explorer
- Choose which hierarchies are available on your Hierarchy Explorer widgets for your different teams.
  Example
  You can create two widgets and apply specific hierarchies to each widget:
  - Neurology Hierarchy Explorer widget: Display the All Hierarchies and Neurology Hierarchy
  - Oncology Hierarchy Explorer Widget: Display the All Hierarchies and Oncology Hierarchy

Flat hierarchy report table

- Minimize the number of SQL joins required for queries with new fields on the flat hierarchy table.
- Add fields to the table (for example, HCO Type or Major Class of Trade).
- Easier to report on custom objects; for example, Product Master.
- Manage the schedule to update the flat hierarchy table.

Default hierarchies

Network provides the following predefined hierarchies:

- **All hierarchies** - Includes all active and valid HCPs and HCOs for the ParentHCO relationship object.
- **Ownership** - (US only) Includes HCPs and HCOs for the ParentHCO relationship object that have the relationship type Kaiser, Ownership, or Affiliation.

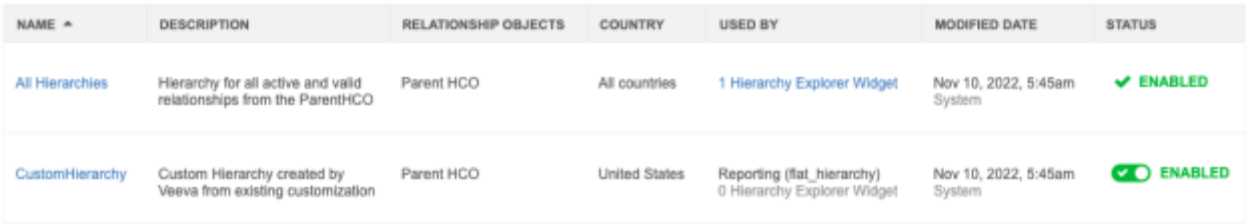
You can make updates to these hierarchy configurations.

Existing custom hierarchies for Hierarchy Explorer

Some customers are using custom hierarchies created by Network. Those hierarchies are preserved and are available to be managed from the Hierarchy Management page.

Existing customizations for the flat hierarchy reporting table

Network's existing `flat_hierarchy` reporting table is now the table for the All Hierarchies hierarchy. If customizations were made to that table before this feature is released, a new hierarchy called Custom Hierarchy will be created in your Network instance. It will contain your customized `flat_hierarchy` table and the **Flattened Hierarchy Reporting** table option will be disabled in the All Hierarchies hierarchy configuration.



NAME	DESCRIPTION	RELATIONSHIP OBJECTS	COUNTRY	USED BY	MODIFIED DATE	STATUS
All Hierarchies	Hierarchy for all active and valid relationships from the ParentHCO	Parent HCO	All countries	1 Hierarchy Explorer Widget	Nov 10, 2022, 5:45am System	ENABLED
CustomHierarchy	Custom Hierarchy created by Veeva from existing customization	Parent HCO	United States	Reporting (flat_hierarchy) 0 Hierarchy Explorer Widget	Nov 10, 2022, 5:45am System	ENABLED

Add a hierarchy

Add a hierarchy to your Network instance so you can standardize it across reporting and your Hierarchy Explorer widgets.

Supported objects: Hierarchies support Veeva standard objects and custom objects.

To add a hierarchy:

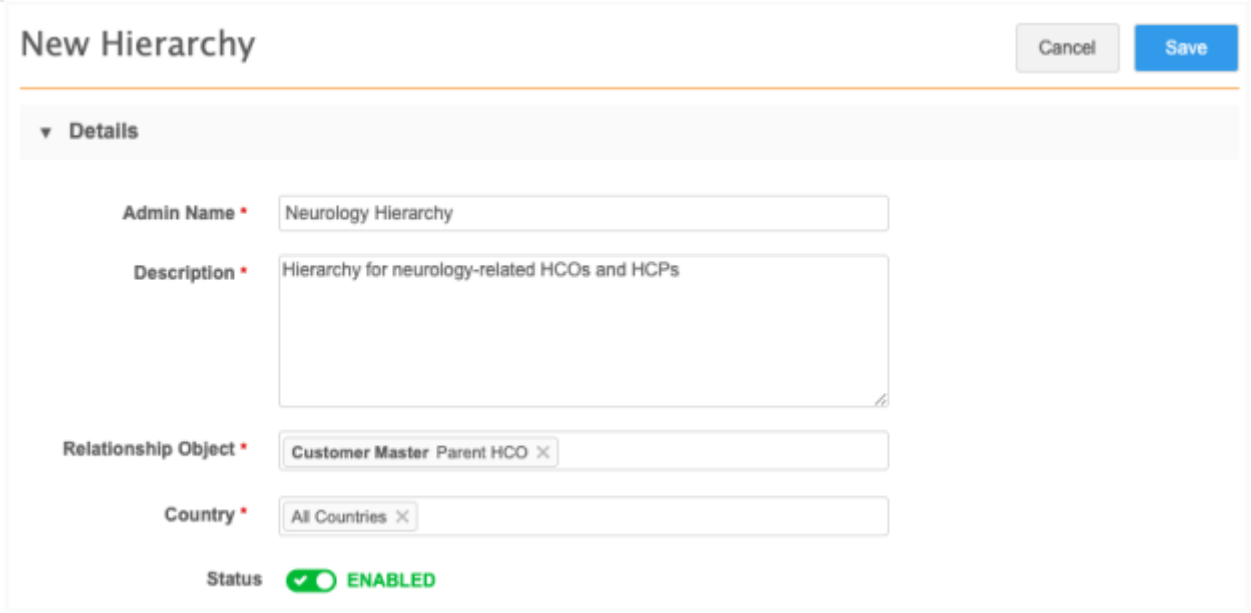
1. On the Hierarchy Management page, click **Add Hierarchy**.

   The **New Hierarchy** page displays.

2. **Details** section, define the following information:
   - **Name** and **Description**
   - **Relationship Object** - Identify the relationship objects that will define this hierarchy. All active relationship objects in your Network display.

     Relationship objects are listed by data domain in the list.

   - **Country** - Choose the countries that the hierarchy will be applied to.
     The countries that are available have a data visibility profile configured in your Network instance.



3. **Hierarchy Definition** section - Create conditions on the relationship object to define the hierarchy. If no conditions are created, the hierarchy will include all active and valid relationships by default.

   To create a condition, click **Add Condition**.

   For each condition, define the following:

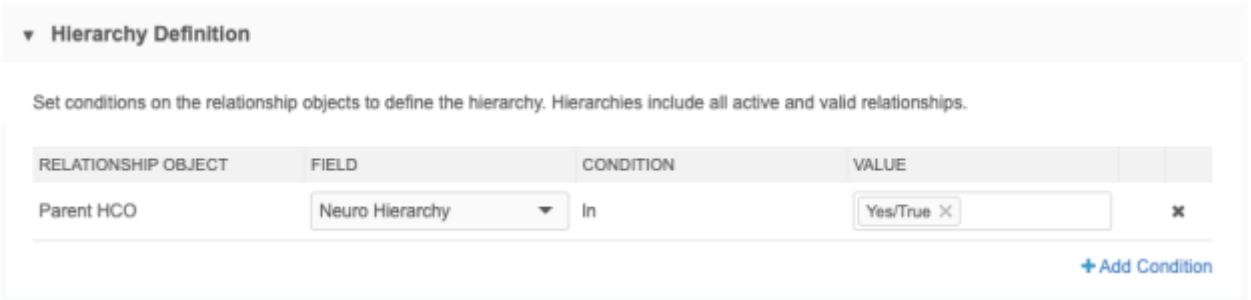
   - **Field** - The field that determines the objects that will display in the hierarchy.

     Checkbox, reference type, and primary fields on the relationship object display in the list.

     Note: If you choose a custom field as a condition for Hierarchy Explorer, it must be included in the Hierarchy Explorer index. To add the field to the index, contact Veeva Support.

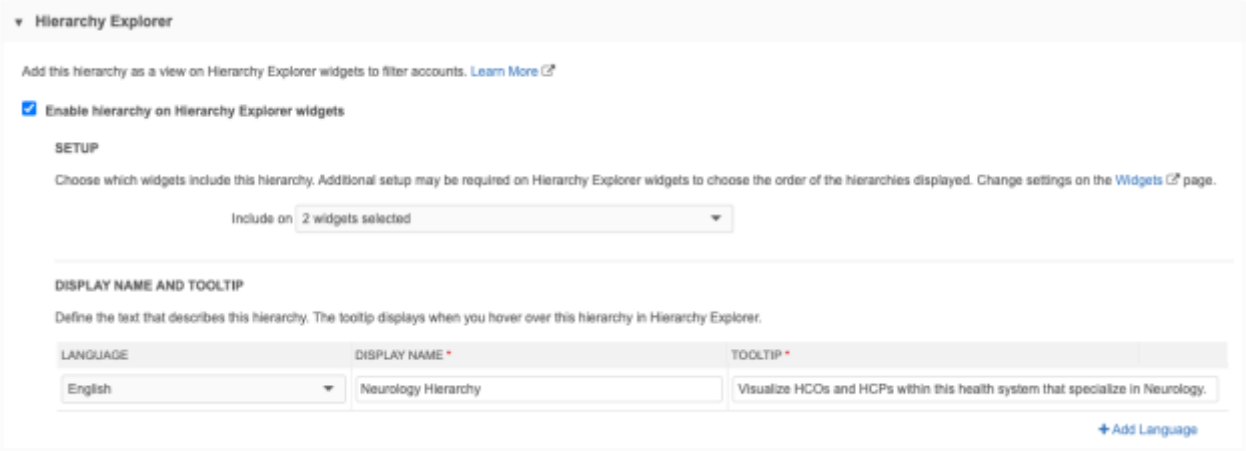
   - **Condition** - The condition is always **In**.
   - **Value** - Choose the field value.

   Example: For a neurology-related hierarchy, you might have a custom field on the ParentHCO object to flag HCOs that specialize in neurology. Add this custom field as the condition so the hierarchy displays only those HCOs and HCPs that roll-up to the parent HCOs in that health system that are flagged as *Yes/True*.



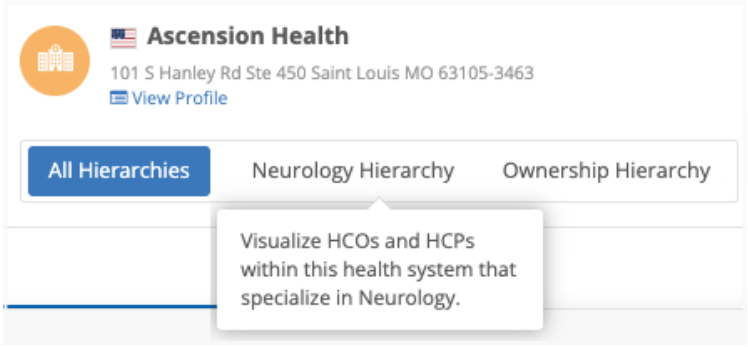
4. **Hierarchy Explorer** section - Include this hierarchy on your Hierarchy Explorer widgets.
    - **Enable hierarchy view on Hierarchy Explorer widgets** - Select this option to add this hierarchy to your widgets.

      Note: This option is available only for hierarchies that use parent HCO relationships. Custom relationship objects are not supported for the Hierarchy Explorer widget.



    - **Setup** - Expand the **Show on** list to select the widgets to add the hierarchy to. All active and inactive Hierarchy Explorer widgets display.
    - **Display Name and Tooltip** - Define the name and tooltip that will display in the Hierarchy Explorer widget.
        - **Language** - Choose the language for this name and tooltip.
        - **Display Name** - The name that will display in the view tab.
        - **Tooltip** - A description of the hierarchy that will display when users hover over the view.

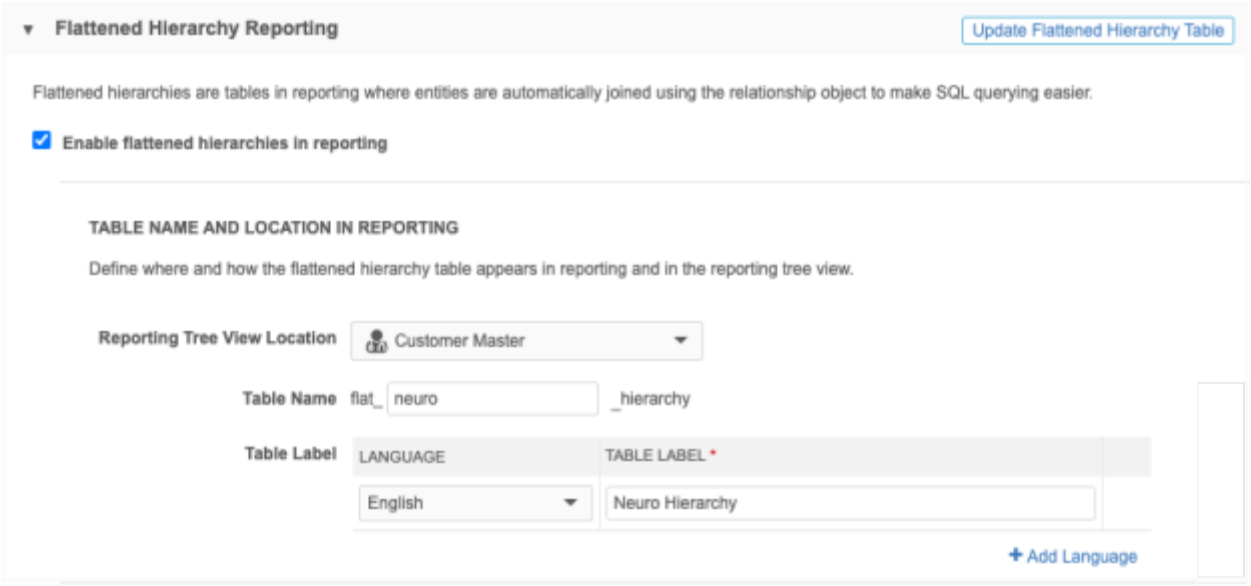
      Example



      To add multiple languages, click **Add Language**.

Note: If you add a relationship object to the hierarchy after this section is configured, a warning displays.
Hierarchy Explorer is supported only for hierarchies that use the ParentHCO object. If another relationship object is added, the hierarchy does not display on the widget.

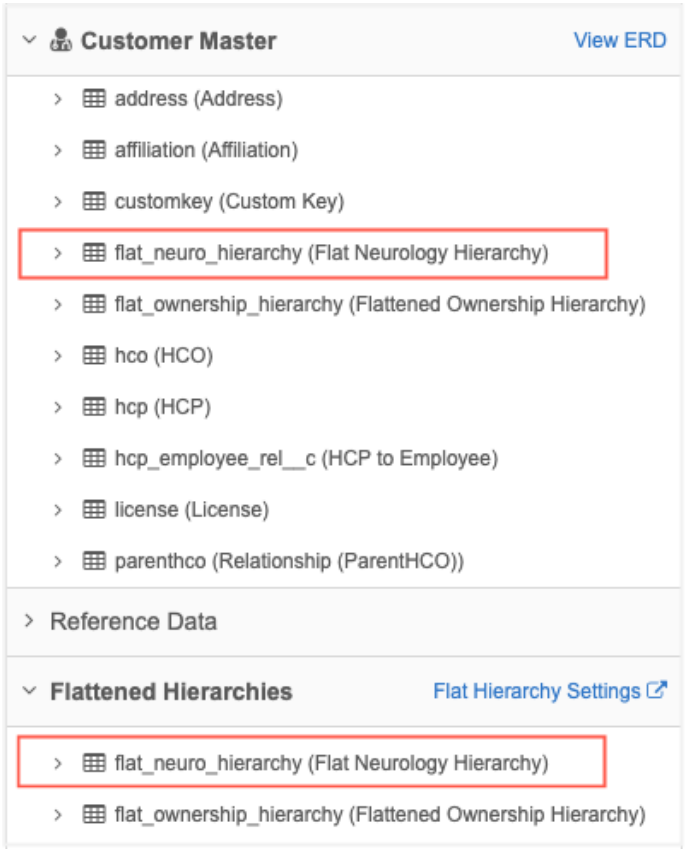
5. **Flattened Hierarchy Reporting** section - Include this hierarchy as a reporting table to help users more easily report on different levels of the hierarchy.
   Typically, reporting on these details is difficult because it requires joining several tables in your SQL query.



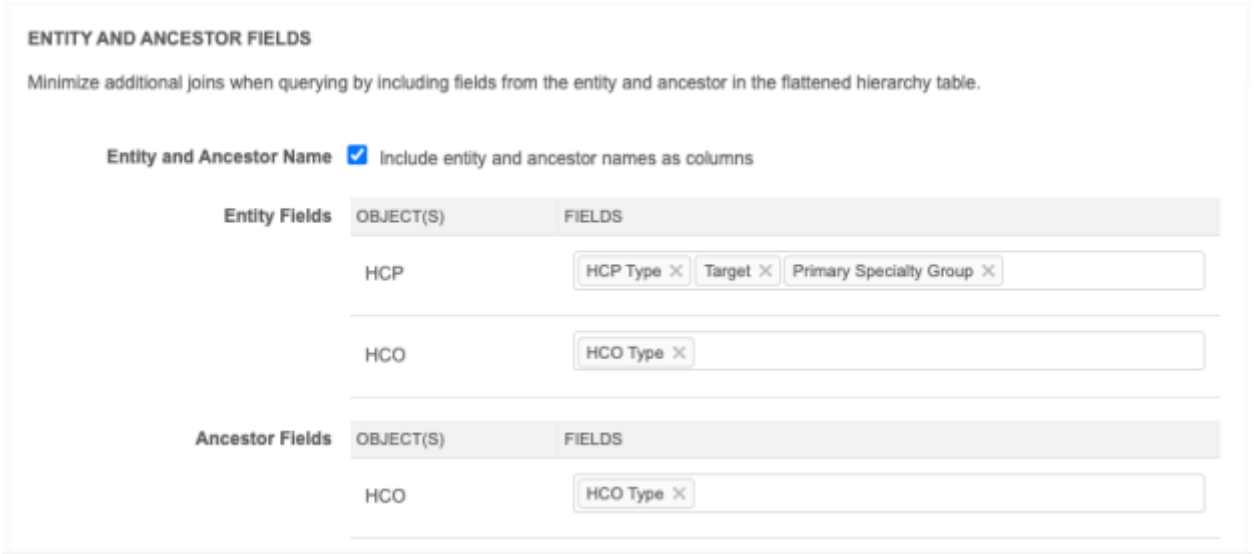
- **Enable flattened hierarchies in reporting** - Select this option to add this hierarchy as a reporting table in the SQL Query Editor.
- **Table name and location in reporting** - Define the table name and its placement in the reporting tree view.
  - **Reporting tree view location** - Select the data domain that the table will be added to in the tree view. The domains of the relationship object display in the list.
  - **Table name** - Define the name of the table. All flattened hierarchy tables have the `flat_` prefix and the `_hierarchy` suffix.
    The table name must be unique in each Network instance.
  - **Table label** - Choose the language and type a label for the table. To add labels in multiple languages, click **Add Language**.

  When the hierarchy is saved, it will display in the data domain section and in the **Flattened Hierarchies** section of the tree view.

Example



- **Entity and Ancestor Fields** - Add fields to the reporting table to minimize other SQL joins that might be required for queries.

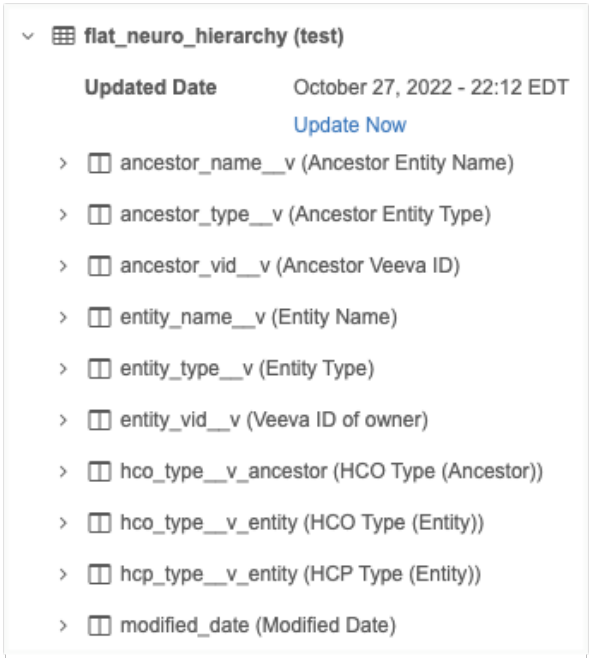


- **Entity and Ancestor Name** - Select this option to define additional fields to include in the reporting table.
- **Entity Fields** - Add fields for the owner object of each relationship object.
- **Ancestor Fields** - Add fields for the non-owner object of the relationship object.

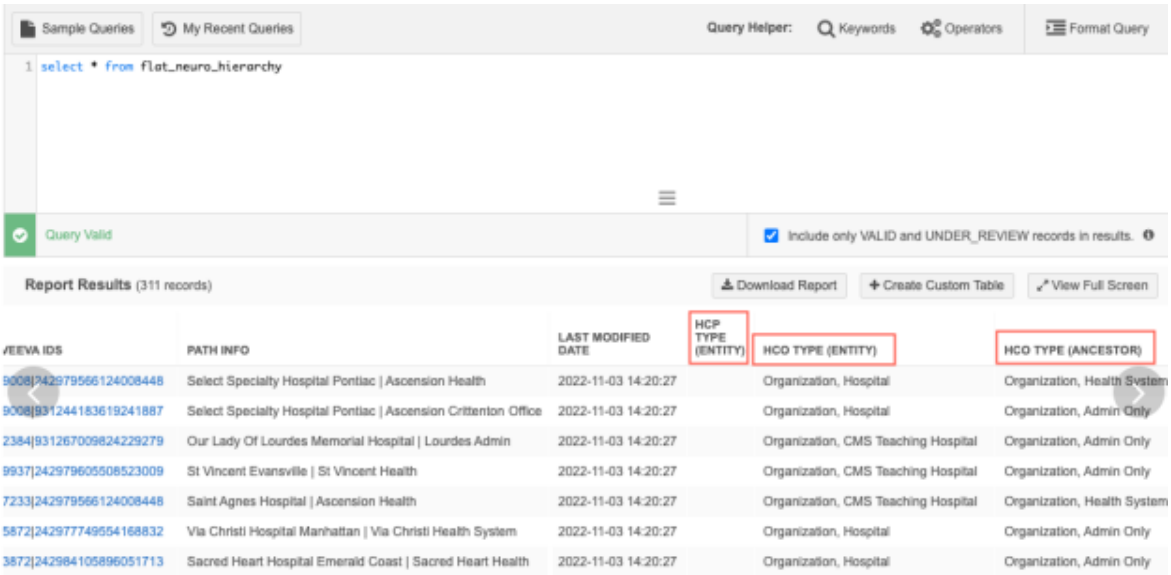
  Network automatically adds the Veeva ID fields for the entity (`entity_vid__v`) and ancestor (`ancestor_vid__v`) for each relationship object in the hierarchy.

  Fields that you define are appended with either `_ancestor` or `_entity` in the flattened hierarchy table.

  Example



  In the report results, the column headings identify the objects as **Entity** or **Ancestor**.



If you select the same field for more than one object, it is added to the reporting table for one object only. For example, if you define the `speciality_1__v` field for both the HCP and HCO objects, it is added to the reporting table as `speciality_1__v_entity`.

- **Update Flattened Hierarchy Table** - Click to manually update the reporting table.

  The button disappears when an update is in progress and is dimmed when the hierarchy configuration has pending changes (changes must be saved before an update can occur).

  Refresh the page to see the update progress.

6. **Schedule** section - Choose to update the flattened hierarchy reporting table on a schedule or manually.
   - **Scheduled** - If you choose to schedule the updates, multiple updates can be scheduled. Schedules display in your local timezone.
   - **Manual** - If you choose to update the table manually, after you save the hierarchy, use the **Update Flattened Hierarchy Table** button to start an update.

Note: If you had previously enabled the flat_hierarchy table and set a schedule for data updates, that schedule is preserved in the **All Hierarchies** hierarchy configuration.

7. **Flattened hierarchy update history** - This section displays after the hierarchy is saved and the flattened hierarchy table data is updated for the first time. It identifies the date and time, the user that triggered the update and the total rows of data in the table. Any errors that occur will also display.
   - **Update Flattened Hierarchy Table** - Click to manually update the table.

8. **Save your changes.**

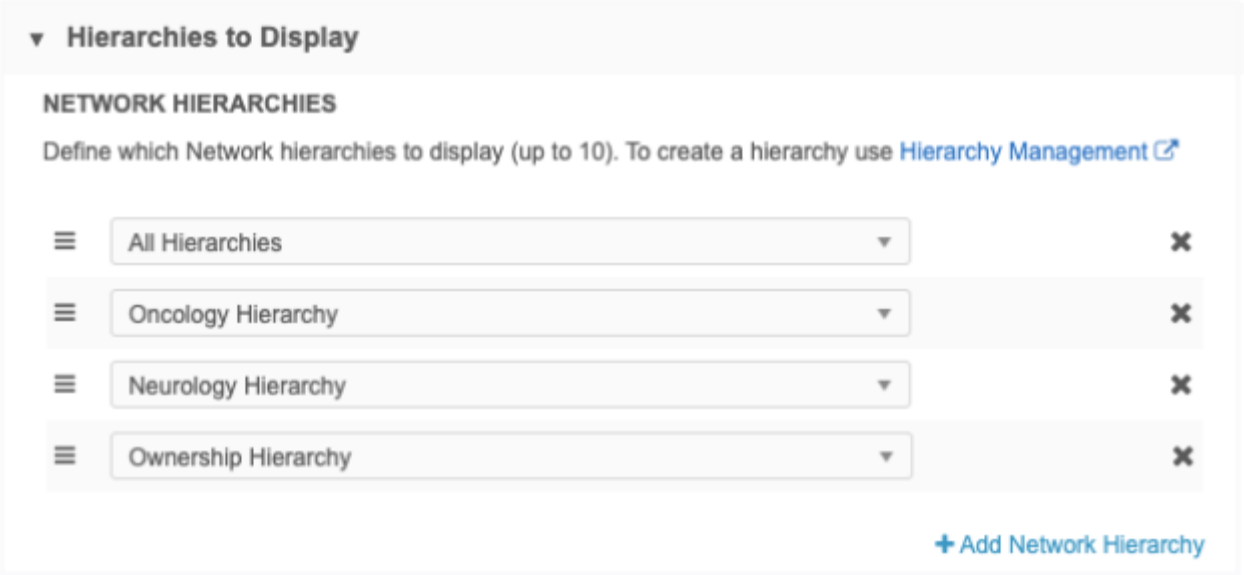
The hierarchy is now available in Network Reporting and the Hierarchy Explorer widget (if you applied it to the widget).

Hierarchy Explorer widget configuration

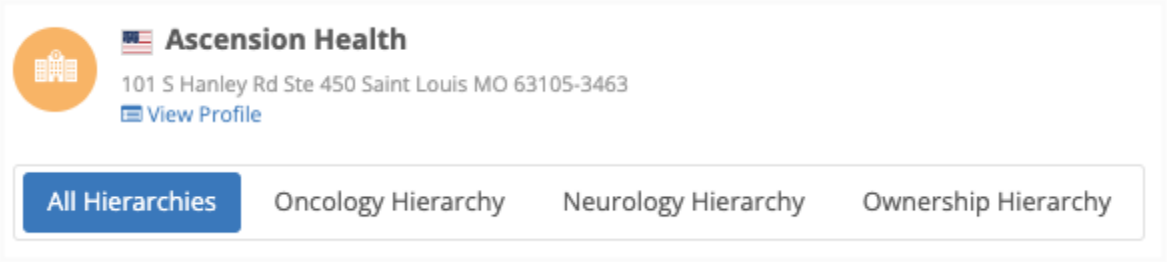
A new section, **Hierarchies to Display**, is added to the widget configuration page so you can manage the hierarchy views that display.

The list contains the hierarchies that you have applied to the widget. Hierarchies are listed in order that they were added.

- **Add** - To include additional hierarchies, click **Add Network Hierarchy**.
- **Re-order** - Use the **Handle** to change the display order for the hierarchies in the widget.



For example, the hierarchy views in this configuration will display in the following order:

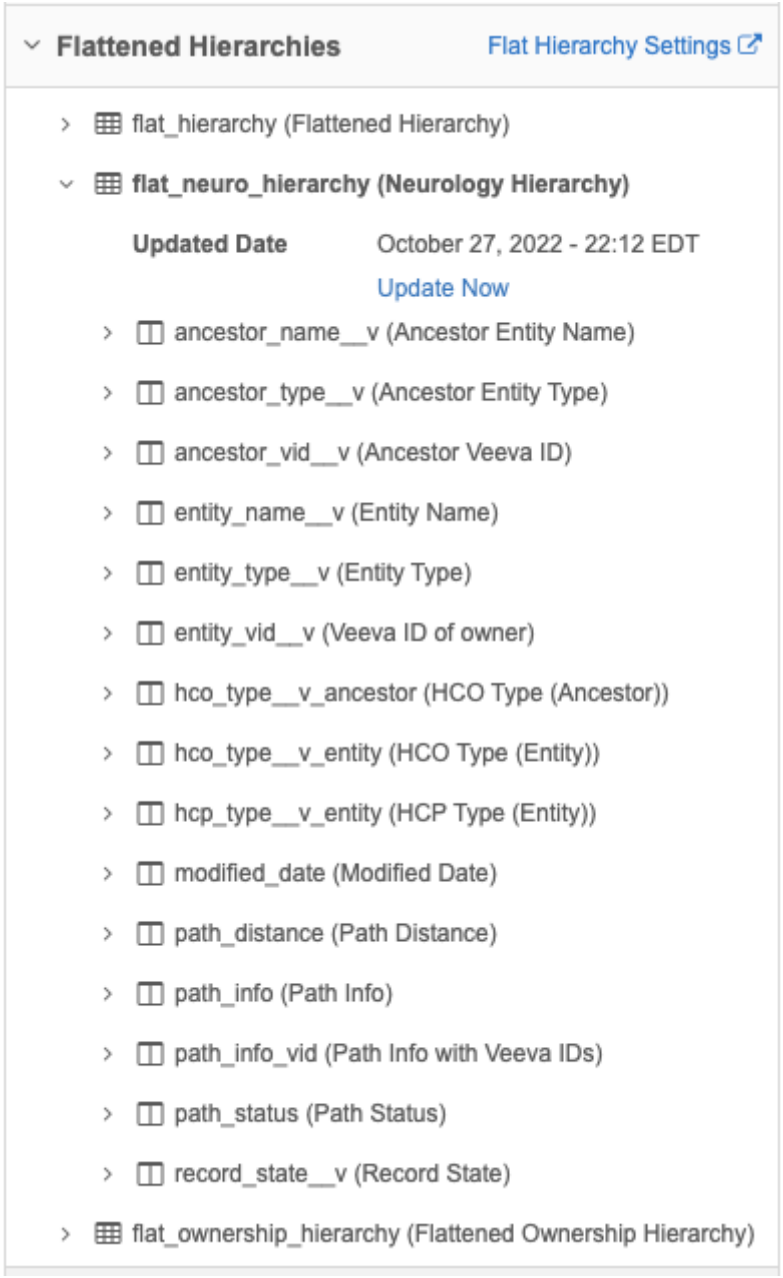


Country considerations

Hierarchy views display if the country defined in the configuration applies to the primary country of the root HCO. For example, the Ownership Hierarchy view applies to the US only, so it does not display for a health system in Canada.

Flattened hierarchy reporting

Navigate to **Reports > SQL Query Editor** to see the flattened table for the hierarchy. The table displays in the data domain and the **Flattened Hierarchies** categories.



In the **Flattened Hierarchies** category, you can click **Flat Hierarchy Settings** to navigate to the Hierarchy Management page.

Expand the table to view the hierarchy details and fields.

Hierarchy updates

The **Updated Date** displays the last time the hierarchy was updated. Data Managers and Admin can click **Update Now** to start an update.

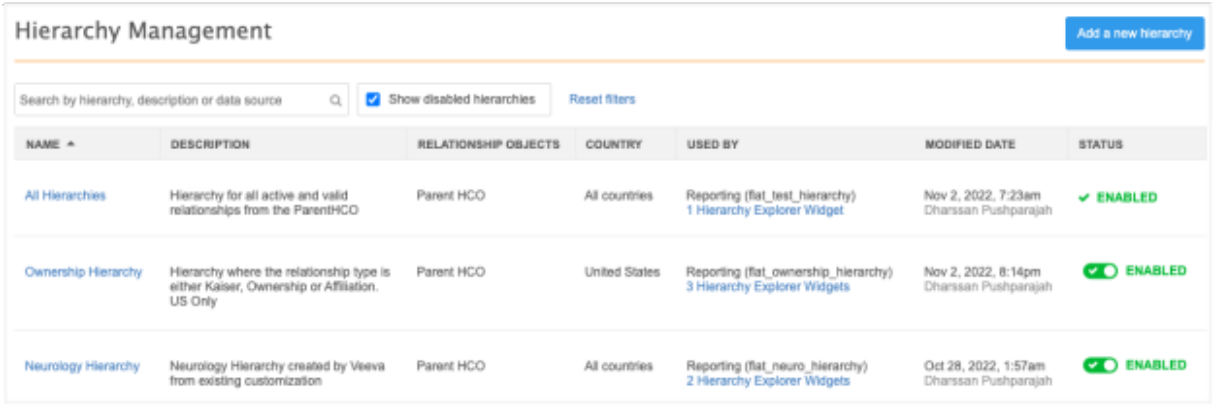
Note: The **Update Now** option does not display if the table has been updated in the last hour. To do an update, go to the Hierarchy Management page.

More reporting details

To learn about the supported relationships and paths and example queries, see Reporting on hierarchies in the *Veeva Network Online Help*.

Hierarchy management page

The Hierarchy Management page lists the hierarchies that have been configured in your Network instance.



The following summary information is available:

- Name and description - The hierarchies are listed alphabetical by name.
- Relationship objects - An alphabetical lists of relationship objects that apply to the hierarchy.
- Country - The countries that the hierarchy applies to.
- Used By - Indicates if the hierarchy is used in the following features. The features display if they are enabled in your Network instance.
    - Network Reporting - The name of the flattened hierarchy table.
    - Hierarchy Explorer widgets - A count of widgets that use the hierarchy. Click the link to view a list of the widgets.

- Modified Data - The date that the hierarchy was last modified and the user that made the change. Any hierarchies that were created by the Network team, will display *System* until a Network user makes changes.
- Status - Indicates if the hierarchy is enabled or disabled.
  - Enabled - The hierarchy was created by Network and cannot be disabled.
  - Enabled - The hierarchy is enabled.
  - Disabled - The hierarchy is not enabled.

Logs

Administrators can track the following changes to the hierarchies in the System Audit Log:

- hierarchy definition changes
- Hierarchy Explorer widget configuration changes
- hierarchy data updates

Managing configurations

Hierarchies can be created in your Sandbox instance for testing and then exported to your Production instance. When you export a hierarchy configuration, the fields in the hierarchy will be added to the export package automatically. The Hierarchy Explorer widget is not automatically added to the export package.

Reporting on custom objects

Querying hierarchies; for example, a Product hierarchy, can be complex. There are several relationships and levels involved, which can make it difficult to query, even for intermediate SQL users.

Example

This is a Product Master hierarchy for Cholecap with only half of the nodes displayed. There are many relationships between the Market Basket and Package level.

To traverse this Cholecap hierarchy through all the objects, we need to do the following:

- Traverse Market Baskets that roll up to the Cholesterol Reducer Market Basket
- Traverse another level of Market Baskets
- Traverse to the Brand level.
- Traverse to the Product level.
- Traverse through the Packages level.

Creating a query is complex because there are several relationships and entities in the hierarchy.

Leveraging the Hierarchy Management feature, you can create a Product hierarchy that will skip levels in the hierarchy. For example, you could go from the Product level to the Market Basket level.

Query example

We want to identify all of the packages under the Cholesterol Market Basket. Based on the example above, the query would need to contain at least five JOINs on the relationships and several more JOINs on each entity.

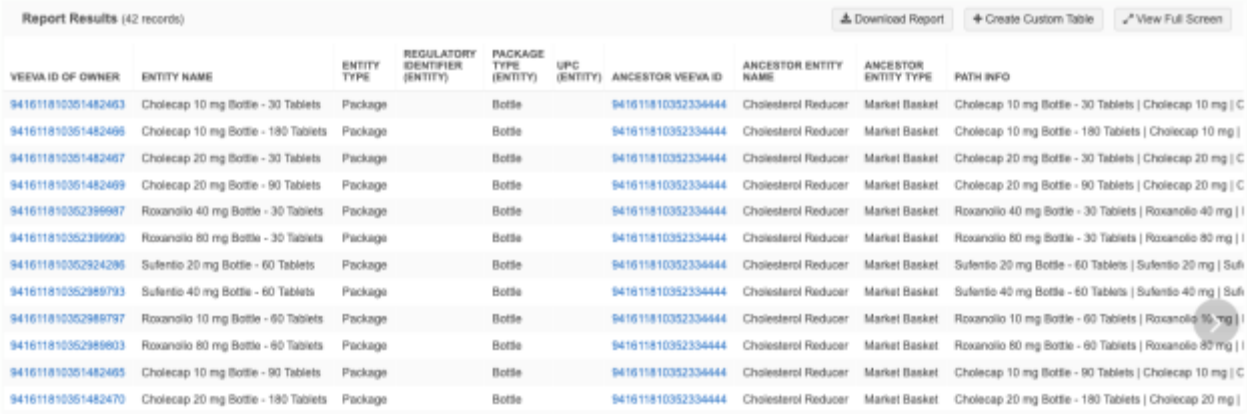
If you create a Product hierarchy reporting table, no JOINs are required in the SQL query to find this data.

```
SELECT
        entity_vid__v,
        entity_name__v,
        entity_type__v,
        package_v_regulatory_identifier__c_entity,
        package_v_type__c_entity,
        package_v_upc__c_entity,
        ancestor_vid__v,
```

```
        ancestor_name__v,
        ancestor_type__v,
        path_info,
        path_info_vid
    FROM
        flat_product_hierarchy
    WHERE
        ancestor_vid__v = 941611810352334444
        AND entity_type__v = 'PACKAGE_V__C'
```

Results

The packages that roll-up to the Cholesterol Reducer Market Basket display in the report.



VEEVA ID OF OWNER	ENTITY NAME	ENTITY TYPE	REGULATORY IDENTIFIER (ENTITY)	PACKAGE TYPE (ENTITY)	UPC (ENTITY)	ANCESTOR VEEVA ID	ANCESTOR ENTITY NAME	ANCESTOR ENTITY TYPE	PATH INFO
941611810351482463	Cholecap 10 mg Bottle - 30 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 10 mg Bottle - 30 Tablets | Cholecap 10 mg | C
941611810351482466	Cholecap 10 mg Bottle - 180 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 10 mg Bottle - 180 Tablets | Cholecap 10 mg |
941611810351482467	Cholecap 20 mg Bottle - 30 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 20 mg Bottle - 30 Tablets | Cholecap 20 mg | C
941611810351482469	Cholecap 20 mg Bottle - 90 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 20 mg Bottle - 90 Tablets | Cholecap 20 mg | C
941611810352399687	Roxanolio 40 mg Bottle - 30 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Roxanolio 40 mg Bottle - 30 Tablets | Roxanolio 40 mg |
941611810352399690	Roxanolio 80 mg Bottle - 30 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Roxanolio 80 mg Bottle - 30 Tablets | Roxanolio 80 mg |
941611810352924286	Sufentio 20 mg Bottle - 60 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Sufentio 20 mg Bottle - 60 Tablets | Sufentio 20 mg | Suf
941611810352989793	Sufentio 40 mg Bottle - 60 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Sufentio 40 mg Bottle - 60 Tablets | Sufentio 40 mg | Suf
941611810352989797	Roxanolio 10 mg Bottle - 60 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Roxanolio 10 mg Bottle - 60 Tablets | Roxanolio 10 mg |
941611810352989803	Roxanolio 80 mg Bottle - 60 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Roxanolio 80 mg Bottle - 60 Tablets | Roxanolio 80 mg |
941611810351482465	Cholecap 10 mg Bottle - 90 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 10 mg Bottle - 90 Tablets | Cholecap 10 mg | C
941611810351482470	Cholecap 20 mg Bottle - 180 Tablets	Package		Bottle		941611810352334444	Cholesterol Reducer	Market Basket	Cholecap 20 mg Bottle - 180 Tablets | Cholecap 20 mg |

Data model

NEW LANGUAGES

22R3

The following languages are now supported for data model fields and reference codes:

- Indonesian (ID)
- Filipino/Tagalog (TL)
- Malay (MS)
- Thai (TH)
- Vietnamese (VI)

These languages are not yet supported for the Network UI.

This enhancement is enabled in your Network instance by default. They will be available for the 22R3.0 Production release.

Data transformation queries

CUSTOM TABLE OUTPUT

22R3

Administrators and Data Managers can now create custom tables from transformation query output. Previously, transformation query output was available only as .csv files. Saving the query output to a custom table enables you to automatically load data into custom tables from source and target subscriptions.

This feature is enabled by default in your network instance

Benefits

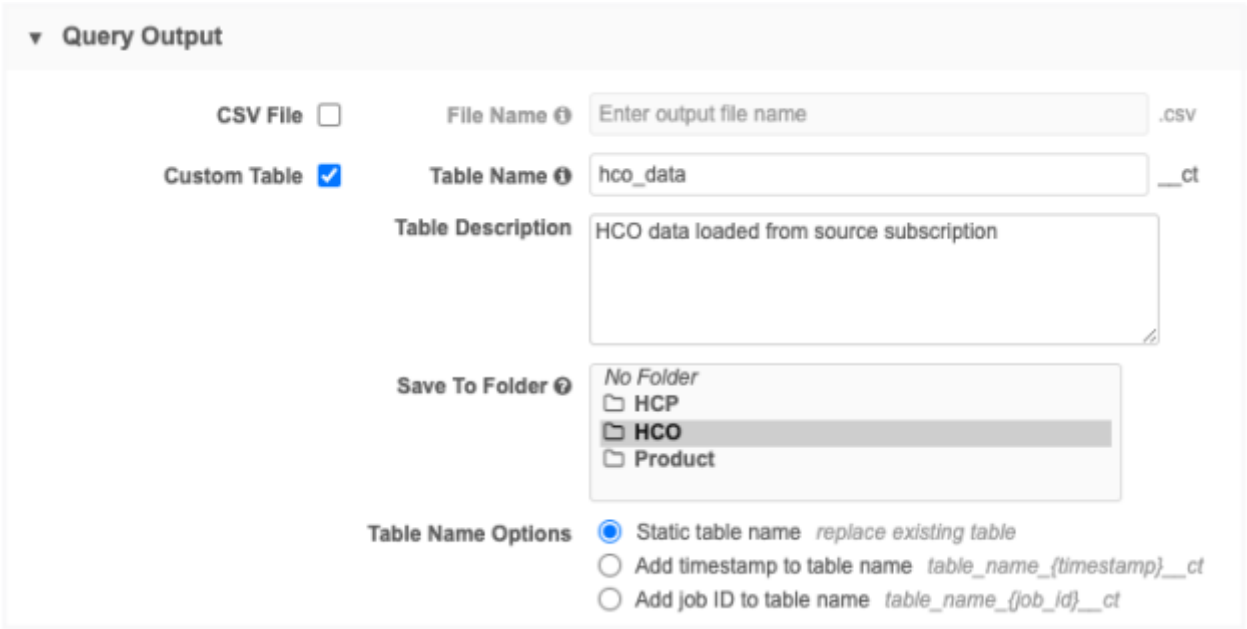
Using the custom table output option enables you to do, for example, the following activities:

- Create snapshots of current data in Network.

  This could be a snapshot of data for a data model object, a reporting table, a lookup table, or another custom table.
- Create a source subscription that loads data from a source file into a custom table.
- Prevent intermediate files in target subscription export packages.

Configure transformation query output as custom tables

Transformation query configurations now contain a **Query Output** section to support the option for creating custom tables.



To save the query output as a custom table, define the following settings:

1. In the **Query Output** section, select **Custom Table**.

   Tip: You can also save the output as both a custom table *and* a .csv file or .csv file only.

2. Define a **Table Name** and **Table Description**. The table name will automatically be appended with the `__ct` suffix.
3. Choose the folder where the table will be saved. If you have folders created in the **Shared Folders** category in the SQL Query Editor, they will display in this list.

   Transformation queries cannot be saved to personal folders (**My Custom Tables**) because the data is loaded through subscriptions, which are not applied to users.

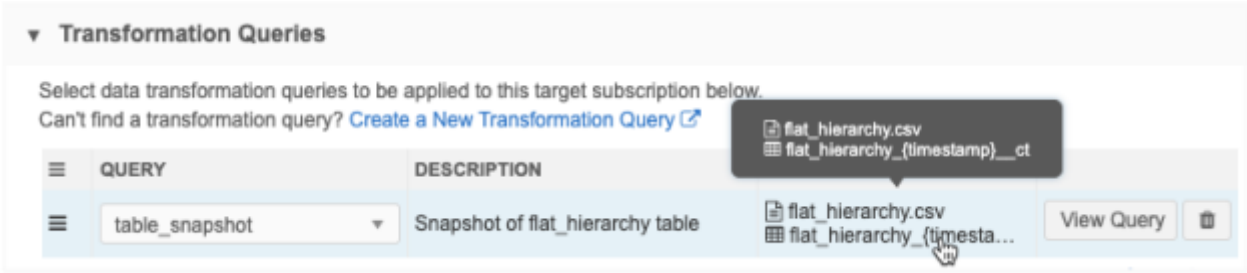
4. Choose **Table Name Options**.
   - **Static table name** - The table name is always the same, so it means any existing custom table with the same name is replaced each time the query runs. For example: `hco_table__ct`
   - **Add timestamp to table name** - Append a timestamp to the table name. For example: `hco_table_20221102t045341z__ct`.
   - **Add job ID to table name** - Append the subscription job ID to the table name. For example: `hco_table_15953__ct`

Subscription configuration updates

Source and target subscription configurations are updated to identify the type of output from the query.

Transformation Queries section

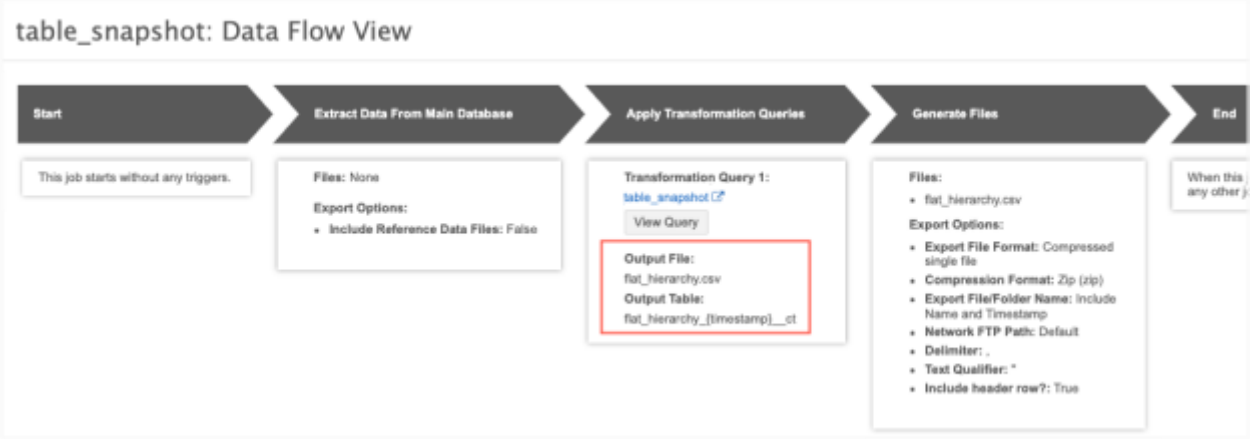
The **Query Output** column now lists the .csv file and/or custom table that will be created when the job runs. If the file name is truncated, hover over the column to see a tooltip with the complete file names.



Note: If the custom table name appends a timestamp or job ID, a placeholder is added to the filename until the job runs.

Data flow view

The **Apply Transformation Queries** stage of the **Data Flow View** displays all of the output types for the query.



Job details page

The **Transformation Queries** section displays the files and custom tables created by the job.

If the file name is truncated, hover over it to see the full filename in a tooltip.

The following examples highlight the key use cases for loading transformed data into custom tables.

Example 1 - Create snapshots of current data

Use a target subscription to export an object or a table so you can take a snapshot of the current data. The transformation query reads from the file export or table and persists the query output as a custom table.

For example, you might want to take snapshots of hierarchies so you can track any HCOs or HCPs that are dropped and added each quarter because it could affect compensation processes. You can do this by taking snapshots of Network's flattened hierarchy table using a transformation query.

Process

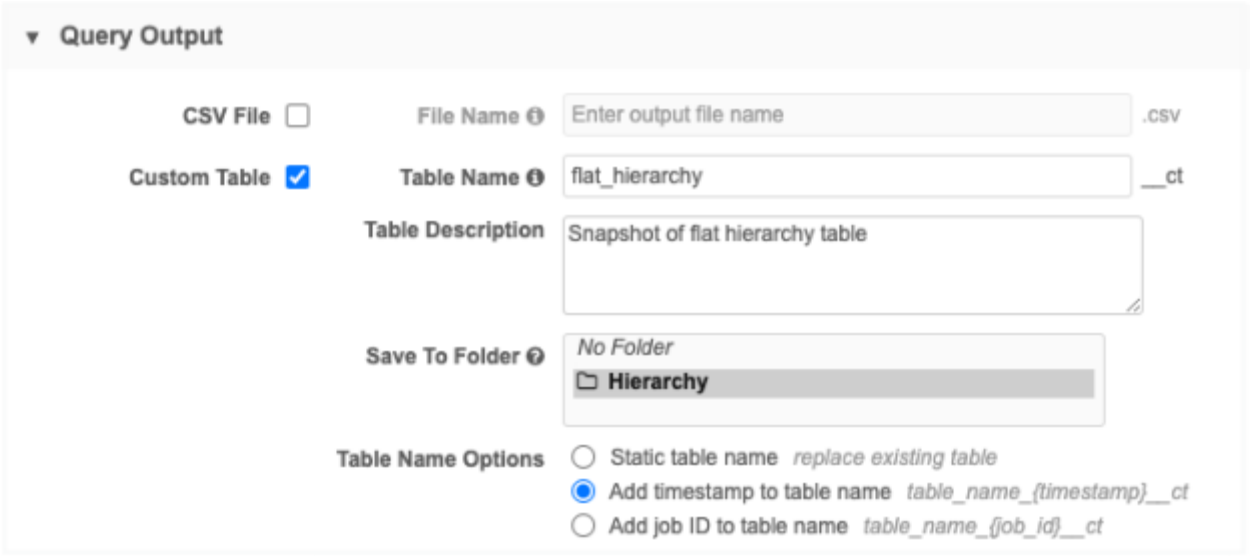
- Create a transformation query that queries the flat_hiearchy reporting table. Configure the transformation query to create a custom table which includes a timestamp in the table name.
- Apply the query to a target subscription.
- Run the target subscription monthly or quarterly to create a custom table so you can compare data.

Create the transformation query

Create an outbound transformation query so you can apply it to a target subscription.

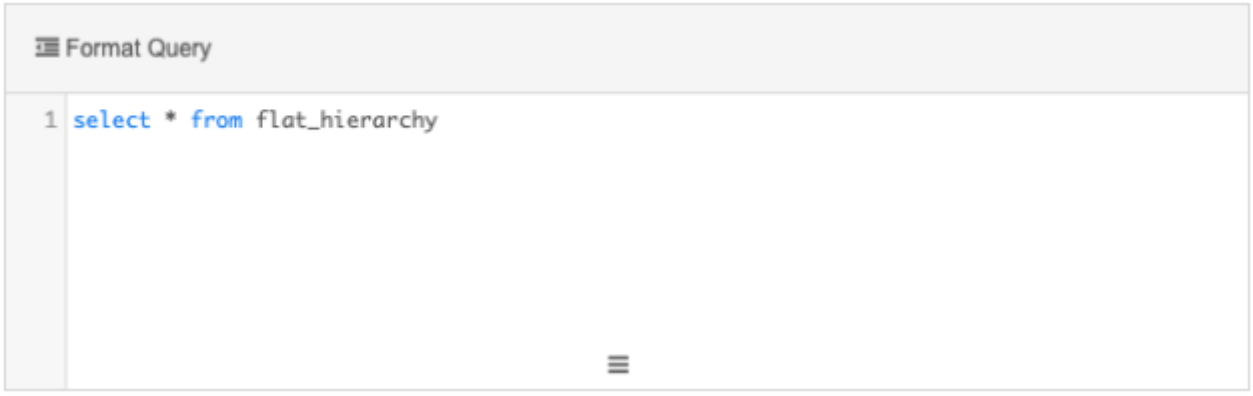
Key settings:

- **Query Output section**- Define the following settings:
  - Choose **Custom Table**.
  - Assign a name and description.
  - Save the custom table to a shared folder in the SQL Query Editor. If there are no folders in the list, it is saved to No Folder (top level of the Shared Folder).
  - In the **Table Name Options**, choose **Add timestamp to table name**. This ensures that you have the date of the snapshot as part of the filename.



- **Transformation Query section** - Add a simple query to return all of the data from the flat_hiearchy table.

```
select * from flat_hierarchy
```



Create a target subscription

Create a new target subscription and configure it so that no files are exported; only the custom table is created.

Key details:

- **General Export Options section** - Accept the default setting values in this section.
- **File & Field Selection section** - Choose the **Export None** export option. This sets all of the objects to **Do Not Export**.
- **Transformation Queries section** - Add the transformation query to the source subscription.

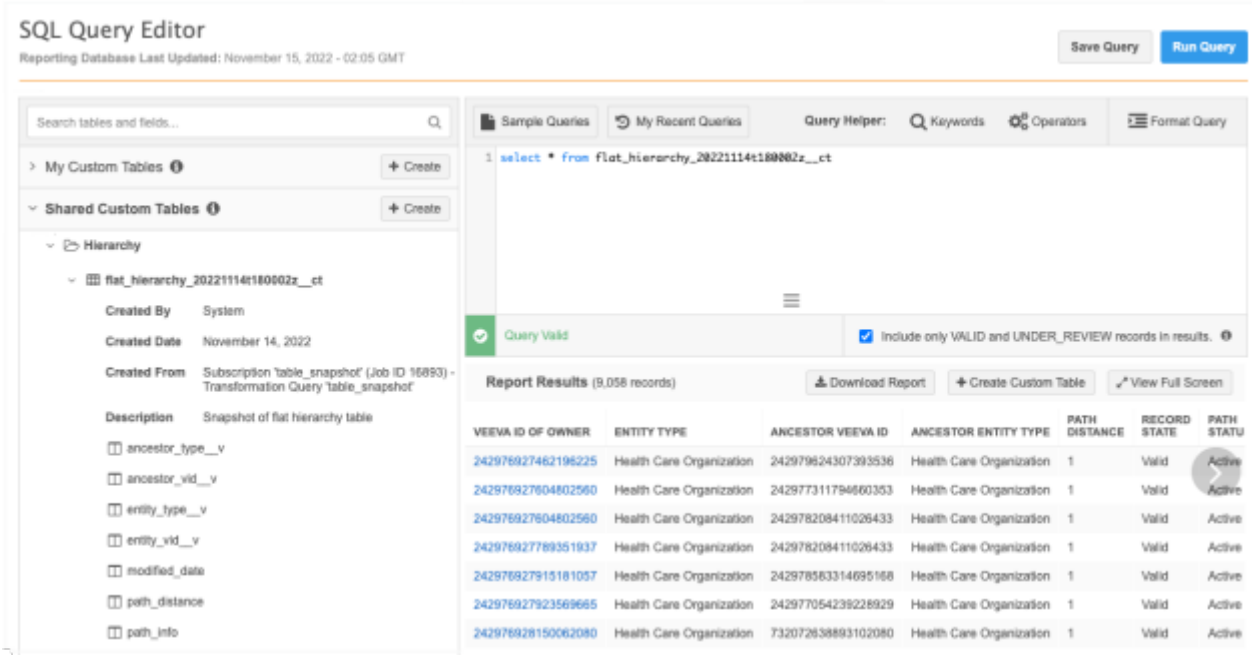
- **Job Schedule & Triggers section** - Schedule the job to capture snapshots of the flat_hierarchy reporting table. For example, schedule it to run quarterly or monthly.
- **Job Details** - After the job runs, the **Transformation Queries** section on the Job Details page displays the custom table and number of records that were processed.

Click **View Query** to open a dialog that contains the original transformation query.

Review the custom table in the SQL Query Editor

The **Shared Tables** section contains the custom table that was created by the job.

Expand the table to see the metadata; the subscription name and Job ID that created the table and the transformation query name.



You can add the table to a query to return the results from the flat_hierachy table for this date.

To review the original query, hover over the custom table and click the **Copy Source Query to Clipboard** icon. Paste the query to the SQL Query Editor box.

Result

Each time the target subscription runs, it will create a custom table with a timestamp. Use the custom tables to compare the data between different time periods.

Example 2 - Prevent intermediate files in subscription packages

Some target subscriptions might include multiple transformation queries that run in sequence. For example, the first query runs and produces the results that are read by a second query. Before this Network release, each time a query ran, a file was created and included in the export file package. This means that some files are exported unnecessarily.

To prevent these files from being exported to downstream systems, you can create custom tables as the output of any intermediary queries. This ensures that the data remains in Network as a custom table and unnecessary files are not exported.

Note: If you have existing transformation queries that are sequenced, the query output will remain a .csv file in the query configuration.

Process

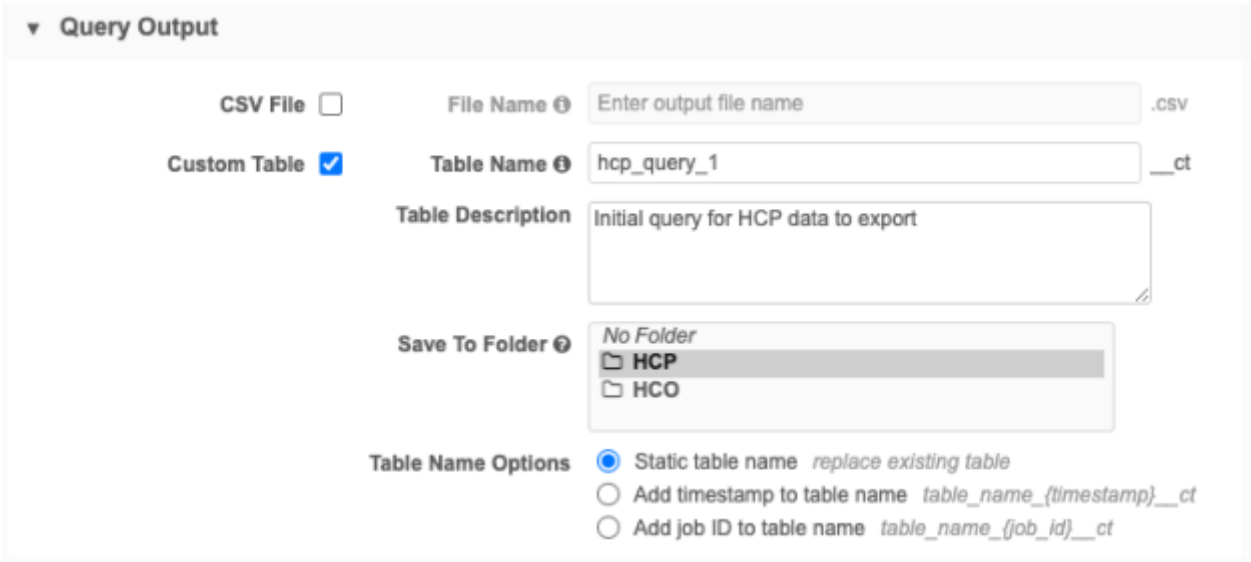
- Create a transformation query that is configured to create a custom table.
- Create another transformation query that will read the results of the first transformation query. Configure the query output as a .csv file that will be exported.
- Create a target subscription that will export the .csv file created by the second transformation query.

Create transformation queries

In this example, we'll create two transformation queries to export HCP data. The output of the first query will be read by the second query.

Query 1

- Create an outbound query and define the output as a **Custom Table**.
- Choose the **Static table name** option so the table is replaced each time the query runs.



- Add the query that will generate the results that will be read by Query 2.

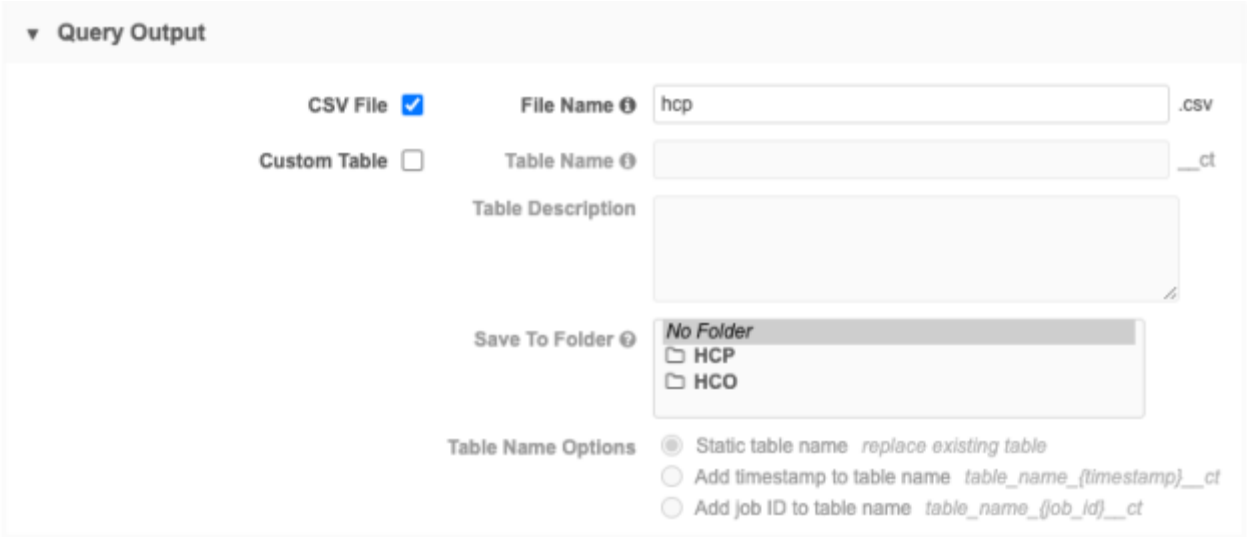
  Example query

  This query will return all HCPs that are doctors.

Query 2

This is the query that will return the results that we want to export.

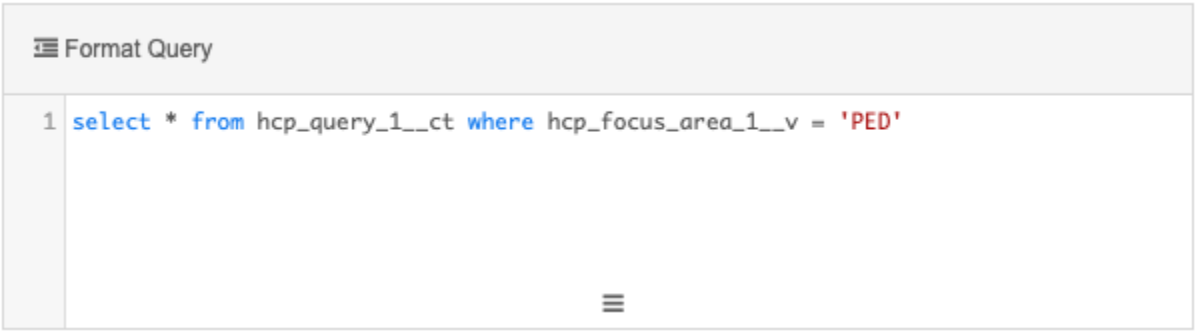
- Create an outbound query and choose **CSV File** as the output. Provide a file name.



- Add the query that will read the results from Query 1.

  Example query

  This query reads from the custom table output of Query 1 to return all HCPs that are doctors and whose focus area is pediatrics.



Create a target subscription

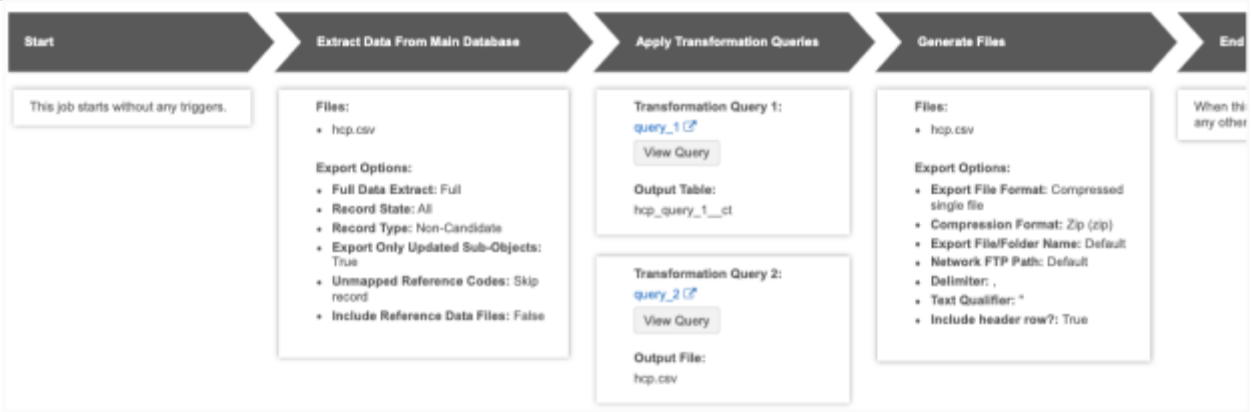
Create a subscription and configure it so only the HCP object and fields are exported.

Key details:

- **General Export Options** - Configure the settings as you would typically do for an HCP export.
- **File & Field Selection** - Choose the **Export None** export option to set all objects to **Do Not Export**. Then, choose **Select Which Objects and Fields to Export** and set the **Health Care Professional** object to **Export All Fields** or **Export Some Fields** depending on your data.
- **Transformation Queries** - Add both transformation queries to the target subscription.

- **Job Details** - After the job runs, both queries are listed in the **Transformation Queries** section on the Job Details page.

- **Data flow view** - The **Generate Files** section confirms that the only file that will be exported is the hcp.csv output file from the second query.

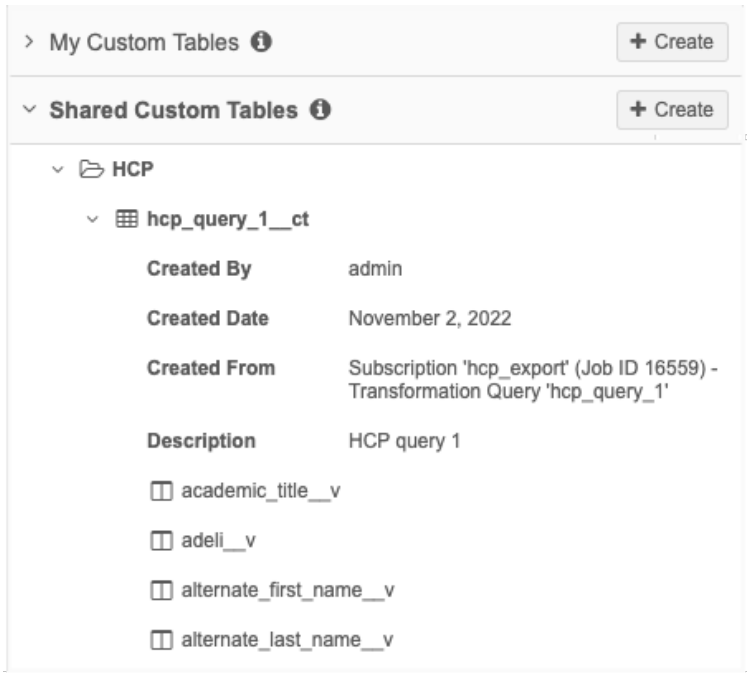


Review the custom table in the SQL Query Editor

The custom table created from the first query is saved to the **Shared Custom Tables** section.

Expand the table name to review the metadata.

This was created as a static table, so it will be replaced each time the target subscription runs.



Result

Using a custom table as the output of Query 1 ensures that the only file that is included in the export is the data intended for downstream systems.

Example 3 - Loading data directly from source subscriptions

Previously, custom tables could only be created manually, either by uploading a file or by creating a table from report results in the SQL Query Editor. Now, you can create custom tables automatically by loading data through subscription jobs.

In this example, we will configure a source subscription to process a file on our FTP server. The data won't be loaded into the HCP object; it will be loaded into a custom table so we can report on the data to review the potential updates.

Source subscription process

Transformation queries are the first thing that is run in a source subscription.

This is important to know for the following reasons:

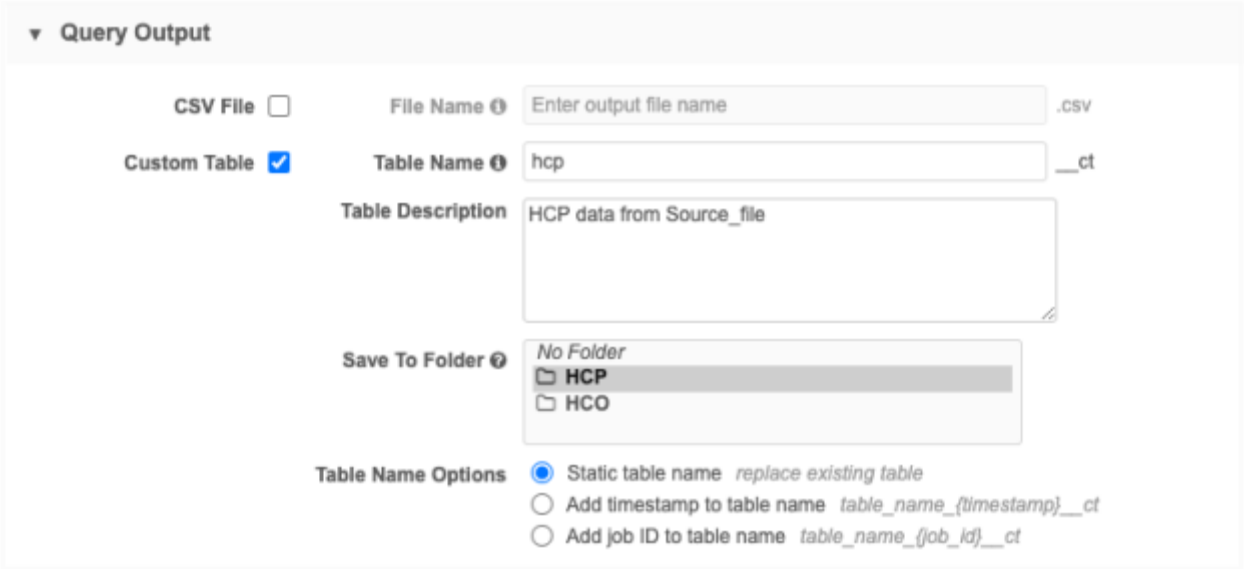
- The transformation query will always be run, even if the **Apply Updates & Merges** setting is disabled or if the job fails in a later stage. This means the data in the custom table will be updated or replaced.
- Since the transformation query runs first in the job, any updates potentially made by the source subscription are not applied yet when the custom table is created. This means that any data that you report on using the custom table does not contain the updates that are applied in later stages by the source subscription.

Create a transformation query

Create an inbound query to load data from a source file directly to a custom table.

Key details:

- **Query Output** - Define the following settings:
  - Choose **Custom Table**.
  - Assign a name and description.
  - Save the custom table to a shared folder in the SQL Query Editor. If there are no folders in the list, it is saved to No Folder (top level of the Shared Folder).
  - In the **Table Name Options**, you can choose any naming convention depending on your desired outcome. For this example, we will choose **Static table name** so the table will be replaced each time the source subscription runs.



- **Transformation Query section** - Add the query.

  Example

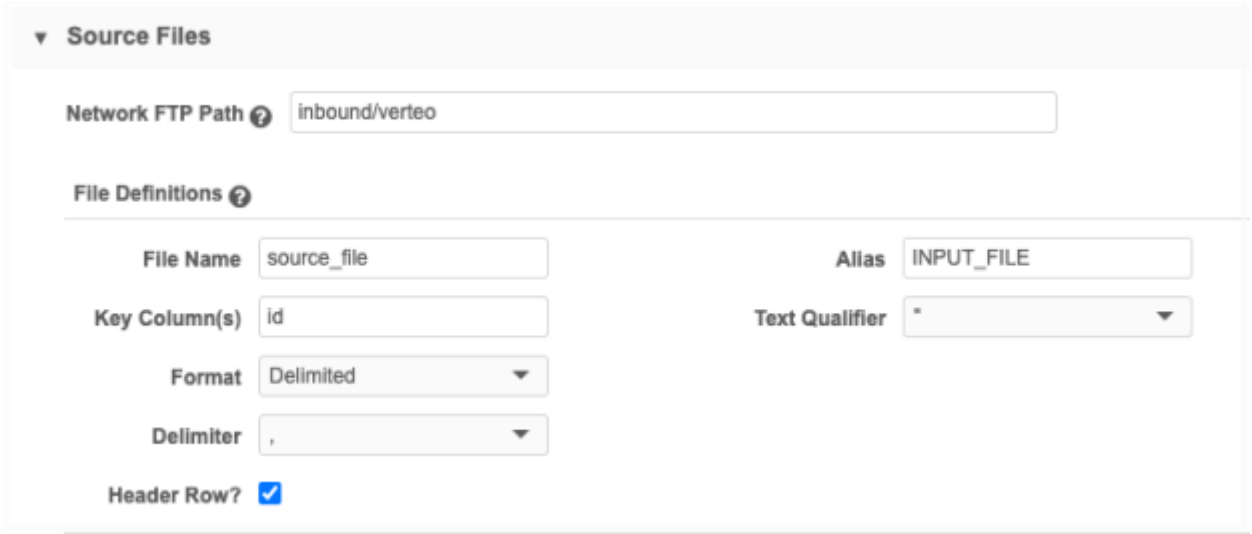
```
select * from source_file__csv
```

Create a source subscription

Using Classic Mode, configure a source subscription to load the data into a custom table.

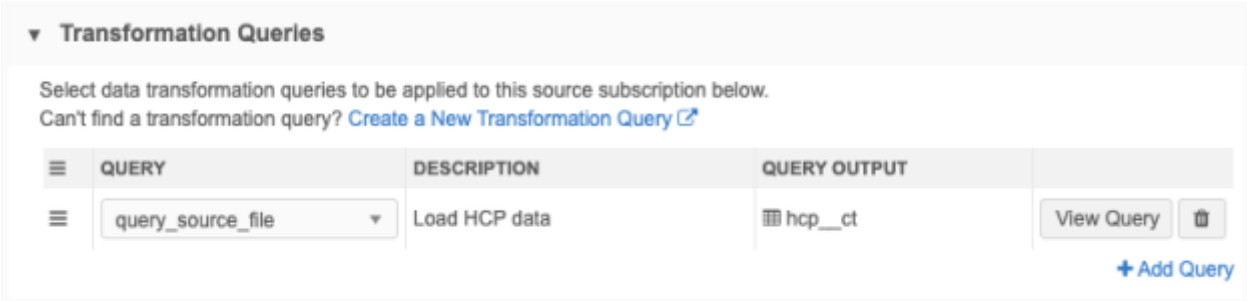
Key details:

- **Settings section** - Accept the default values. The source subscription will not be processing the data, it will be loading the data into the custom table only.
- **Source files section** - Files that are used by the transformation query must be defined here. Add the source file that contains the data that the query will read from.

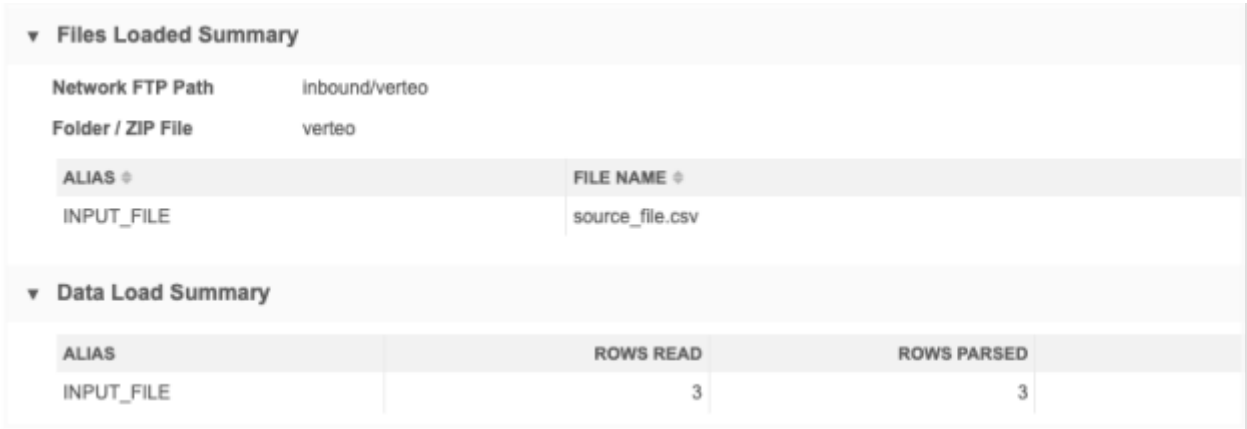


Note: The source subscription in this example does not process any data to be loaded into data model objects, so Field Normalizations, Model Map definitions, Network Expression Rules, and Match Configuration are not required.

- **Transformation queries section** - Add the transformation query to the source subscription.



- **Job Details** - After the job runs, the **Files Loaded Summary** and **Data Load Summary** sections identify the files that were loaded and the rows of data that were read and parsed.



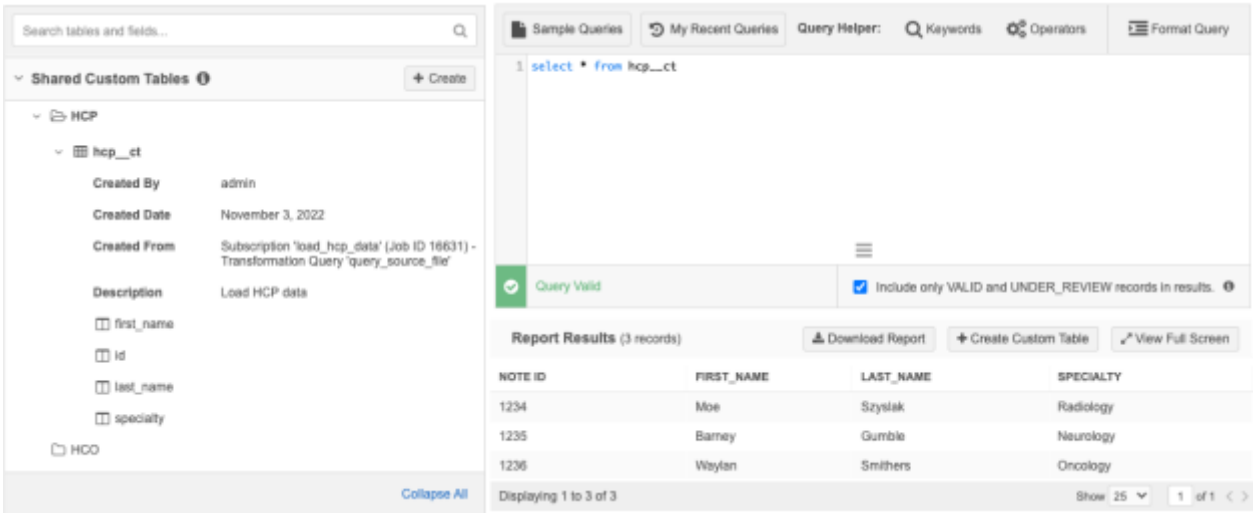
Note: There are no counts for objects listed in the **Processed Data Summary**, **Match Summary**, and **Job Result Summary** sections.

Transformation Queries section - This section identifies the query that ran, the custom table name for the output file and the number of records included in the table.

Review the custom table in the SQL Query Editor

The custom table created by the source subscription is available in the **Shared Custom Tables** section.

- Expand the table name to review the metadata.
- Add the table to a query to review the data that was loaded.



Result

There are three HCP records in the custom table.

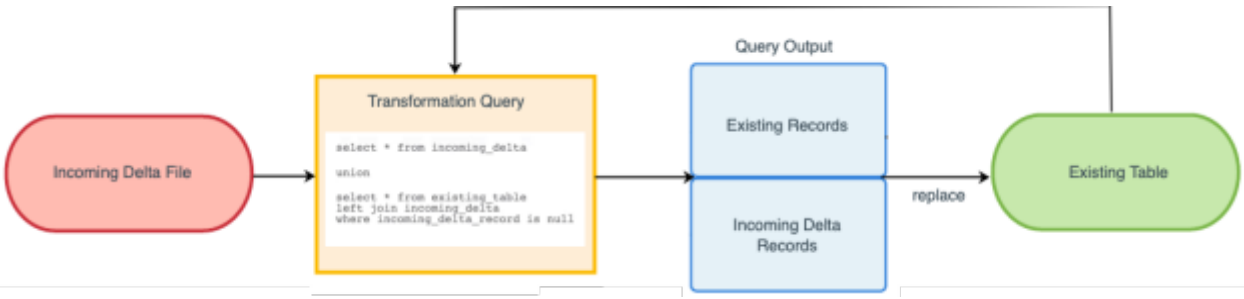
Upserting or appending delta uploads

The scenario above is for full data loads. Because we created a custom table with a static table name, the table will be replaced each time the subscription runs. You might want to update a custom table on scheduled basis. To upsert or append a delta upload to the existing table, we can write the logic into a transformation query.

We can create a transformation query for delta uploads using the same custom table name (hcp__ct) as we did for the previous query. The custom table will be replaced, but the transformation query that we create will union the two data sets.

Upsert example

To add new records and update changed records in the existing custom table, you can *upsert* a delta file. Create a transformation query that will union the incoming records from the delta file with the existing records in the custom table. Use a LEFT JOIN and a WHERE clause to remove any existing records in the custom table that match on the same ID in the incoming delta file.

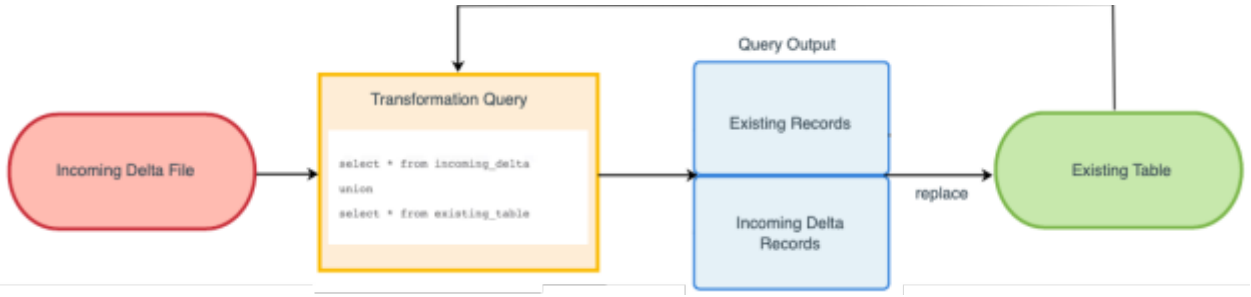


Example query

```
SELECT
          id,
          first_name,
          last_name,
          specialty
     FROM
          source_file_delta__csv
 UNION
 SELECT
          hcp__ct.id,
          hcp__ct.first_name,
          hcp__ct.last_name,
          hcp__ct.specialty
     FROM
          hcp__ct LEFT JOIN source_file_delta__csv
              ON hcp__ct.id = source_file_delta__csv.id
     WHERE
          source_file_delta__csv.id IS NULL
```

Append example

To append a delta file to a custom table, the transformation query should simply union the incoming records from the delta file with the existing records in the custom table. An *append* means that all records from the incoming file are added to the existing custom table. Ensure that the incoming delta file includes only new records and no changes to existing records: otherwise, the custom table will have duplicated records.



Example query

```
SELECT
          id,
          first_name,
          last_name,
          specialty
      FROM
          source_file_delta__csv
 UNION
 SELECT
         id,
         first_name,
         last_name,
         specialty
     FROM
         hcp__ct
```

Managing configurations

Transformation queries can be exported to a target environment.

If you export queries, Network will import the custom table into the same shared folder in the target environment if it is found. If the shared folder does not exist, the custom folder is saved to the root level of the Shared Folder.

Dependencies

When you export transformation queries, source subscriptions and target subscriptions are not automatically added to the export package. They must be manually added.

OpenData subscriptions

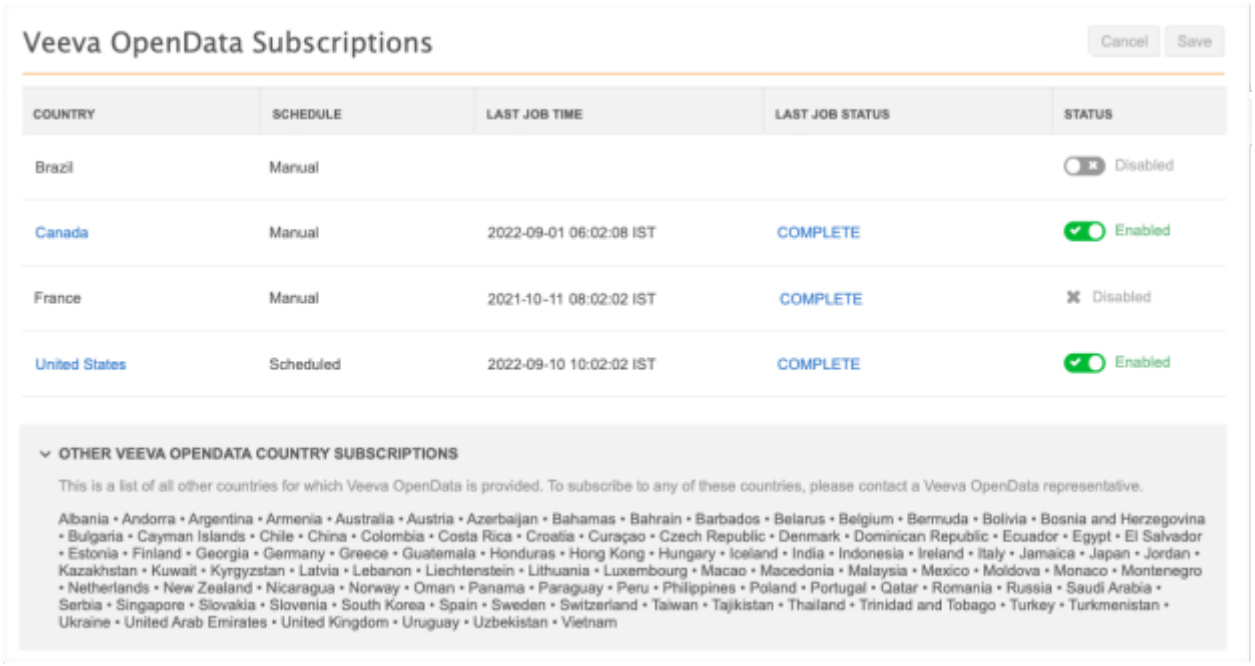
Enhancements have been made to the Veeva OpenData Subscriptions page and individual country configurations.

These enhancements are enabled by default in your Network instance.

VEEVA OPENDATA SUBSCRIPTIONS PAGE

22R2.1

The Veeva OpenData Subscriptions page is updated so that you can more easily access your subscribed countries.



Subscribed countries

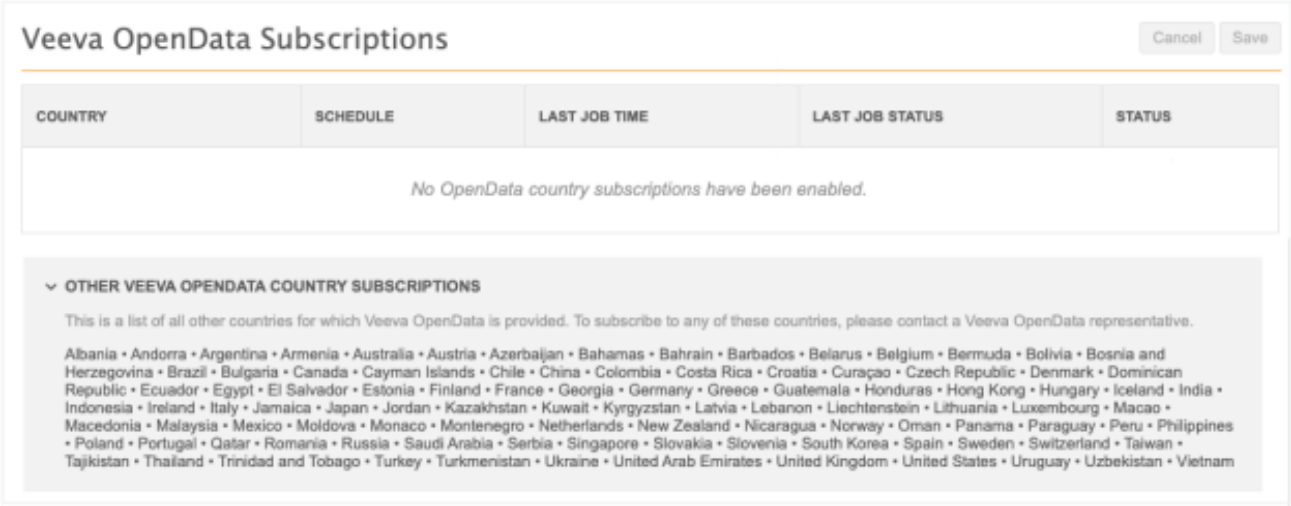
The active country subscriptions are listed at the top of the page. Country subscriptions that have been subscribed to but have not yet been configured, or that have previously been active are also listed.

The list includes details about each country in the following columns:

- **Country** - The country that you have subscribed to. If the country is enabled, the country name is a link. Click the country name to open the subscription configuration.
  By default, the countries are listed in alphabetical order (ascending).
- **Schedule** - Indicates if the country subscription is scheduled to run or is run manually.
- **Last Job Time** - The last time that the subscription job ran.
- **Last Job Status** - The status of the last subscription job that ran. Click the status to open the Job Details page for the last job.

- **Status** - Indicates if the country subscription is enabled or disabled.
  - Enabled - The subscription is configured. The country name is a link to navigate to the subscription.
  - Disabled - The subscription has not been configured or it has previously been active and is no longer used. The country configuration cannot be opened until it is enabled.
  - Disabled - The subscription has previously been enabled and at least one job has run, but you no longer subscribe to this country. It cannot be enabled on this page.

If no country subscriptions have been enabled in your Network instance, the Veeva OpenData Subscriptions page contains only the list of available countries.



Other Veeva OpenData country subscriptions

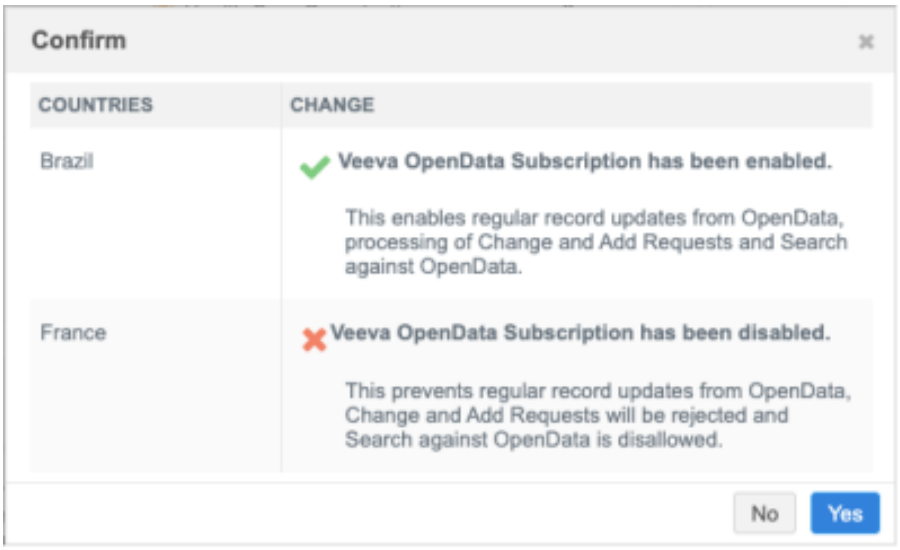
Countries that have not been subscribed to are listed in this section at the bottom of the page.

Sort the table

Sort the table by clicking a column header. Your sort order is retained when you revisit this page in future sessions.

Save subscription changes

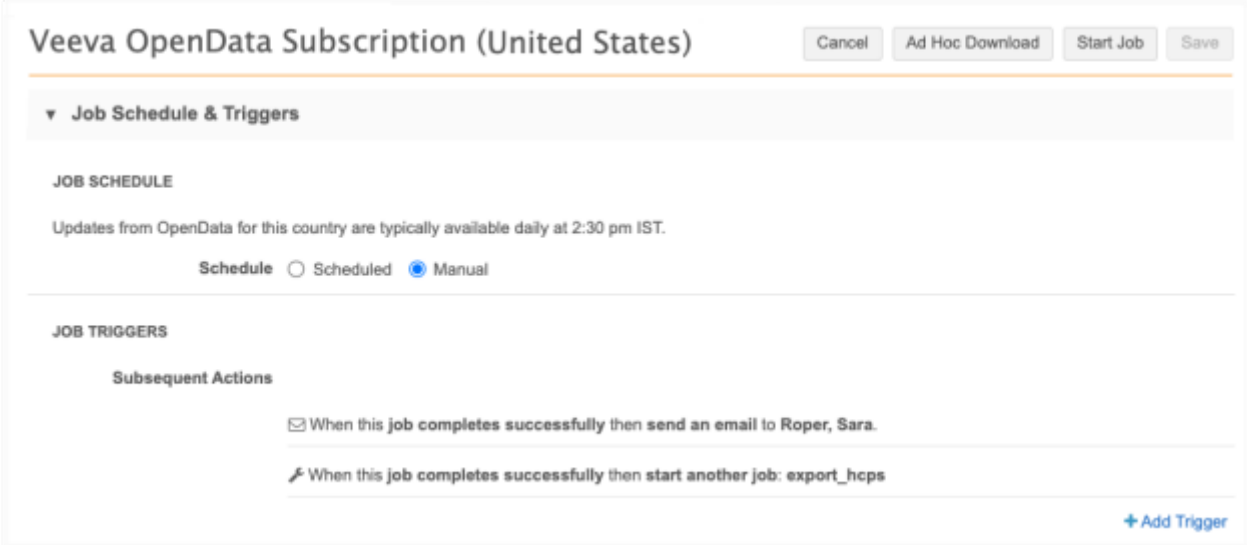
After you enable or disable a subscription on this page and click **Save**, a confirmation message displays with a summary of your changes. Review the details in the message.



COUNTRY SUBSCRIPTION CONFIGURATIONS

22R2.1

Country subscriptions are updated to include additional information about the downloaded entities and the files that will be processed the next time the subscription runs. The page also identifies the OpenData instance that your Network instance is connected to.



Job Schedule & Triggers

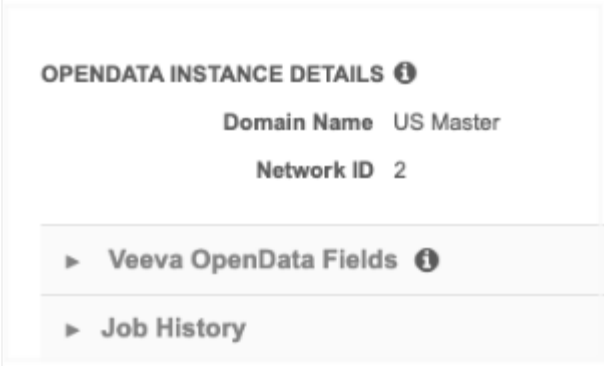
This section (previously call *Job Trigger Configuration*) is relocated near the top of the page and provides the following new information:

- **Updates from OpenData** - The time of day that updates are available using the timezone of the user viewing the page. If a schedule is not set for an OpenData instance, administrators will see the following message: *OpenData provides updates for records for this country at their discretion*.

Veeva OpenData Subscription Details

This section contains a new heading called **OpenData Instance Details**.

- **Domain Name** - The OpenData instance name that your Network instance is connected to for this country subscription.
- **Network ID** - The OpenData instance ID.



Source subscriptions

MERGING DUPLICATE ADDRESSES

22R2.1

Source subscriptions can now be used to merge addresses in bulk. Administrators and Data Managers can create source files to merge two addresses on an HCO or HCP. When two addresses are merged on an entity, the custom keys of the losing address are added to the winning address.

This feature is not enabled by default. To enable it for your Network instance, contact Veeva Support.

Addresses supported for bulk merge

Bulk merges are supported for the following types of addresses:

- Customer-managed into customer-managed
- Customer-managed into Veeva OpenData managed
- Customer-managed into third party managed

Merging Veeva OpenData or third party owned addresses into customer-managed addresses is not supported. OpenData and third party addresses always win when they are merged with customer-managed addresses.

Source file requirements

To bulk merge addresses, an entity file and an address file must be loaded into the source subscription.

Entity file (HCO, HCP)

Tip: You can include an HCP file and an HCO file in the same bulk merge job.

The file must be a single column containing the following data:

- ID or key of the HCP or HCO

Examples

HCP file

vid__v
243242421553464326

HCO file

vid__v
243242421553464375

Address file

The address file identifies the entity and the two addresses that are being merged.

Include the following data in the file:

- Veeva ID (entity_vid__v) of the HCP or HCO
- VID (vid__v) of the losing address
- VID (merge_survivor_vid) of the winning address

Example

entity_vid__v	vid__v	merge_survivor_vid
243242421553464326	43324242155346479	54454242155346434
243242421553464375	33324242155795746	57654565495231456

Source subscription properties

To bulk merge addresses, the following property must be added to the **Advanced Properties** in the source subscription configuration.

- **"job.merge.allowSourceMerge": "true",**

The bulk merge job adds the custom keys from the losing address to the winning address. If you do not want the keys moved to the winning address, include this property:

- **"job.merge.mergeInstruction.ADDRESS": "NoKeysMerge",**

Important: If custom keys remain on the losing address, any updates from sources using custom keys will update the losing address.

Job issues

When the job runs, the data is validated. Addresses that do not meet the requirements will be skipped so the job can continue.

Addresses are not merged for the following reasons:

- The losing or winning addresses are not sub-objects of the main entity.
- The entity does not exist.
- The address does not exist.
- The losing address is owned by Veeva OpenData or a third party source.
- The record state is Under_Review for the winning or losing address.
- The winning or losing address is copied to the entity from a parent affiliation through Network Address Inheritance.

On the Job Details page, the **Job Error Log** section displays a message if any of these issues occur.

Example

Network address inheritance considerations

Inherited addresses will be resynced during the next Network address inheritance Refresh job if the parent address is merged into another address. However, merging between inherited addresses on an entity is restricted.

Primary address considerations

Primary addresses are retained during the bulk merge job. If either of the addresses were defined as a primary address before the merge, the winning address will be set to primary during the bulk merge job.

Network calculated primary addresses

If the winning address is inactive or invalid, the primary address will be recalculated to find a new primary address on the entity.

Unique checkbox primary addresses

The options that you have selected in the unique checkbox configuration determines if the primary address should be recalculated.

License considerations

If the losing address is linked to any license on the entity, the license will be updated with the winning address.

Data change requests

Change requests submitted for the losing address will be automatically rejected. For In-Queue and associated tasks, the task will be closed automatically if the change requests applies only to the losing address. If the change request contains other changes, the change for the losing address is rejected and Data Stewards can process the remaining changes.

US Compliance subscriptions

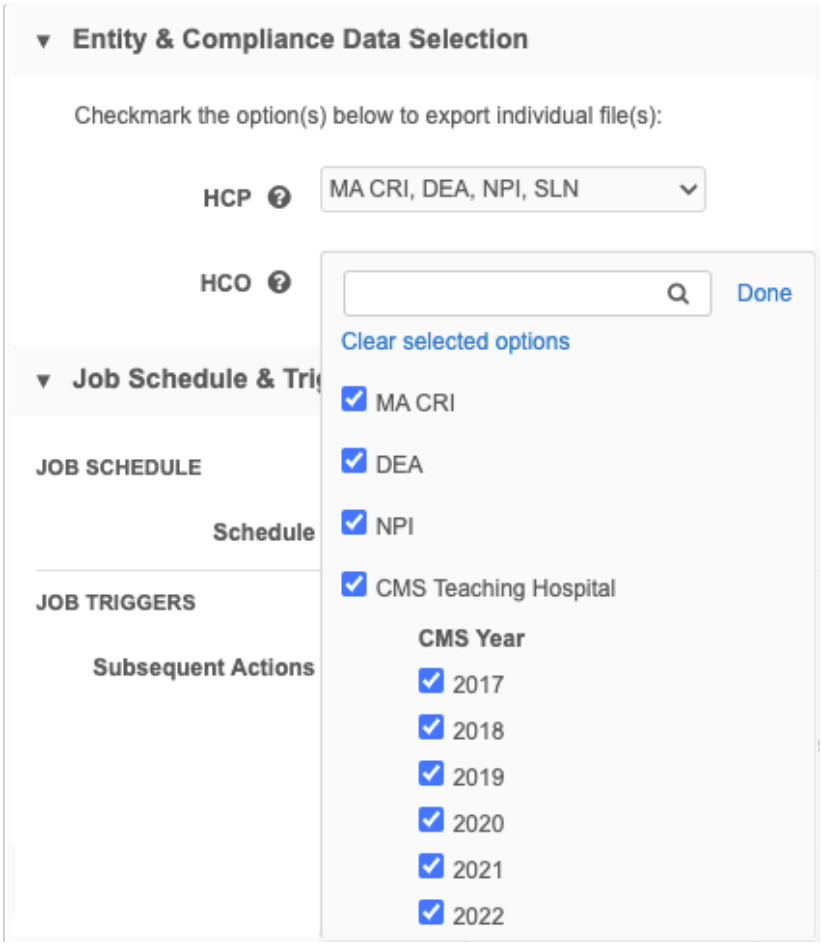
The following enhancements have been made to US Compliance target subscriptions in this release.

These enhancements are enabled by default in your Network instance if you receive US Compliance data.

CMS Teaching Hospital - Years

22R3

Administrators can now export CMS Teaching Hospital data for all existing and future years by default. Selecting the **CMS Teaching Hospital** data now ensures that data for a new year is automatically exported when it becomes available. Previously, administrators had to update the subscription to choose the new year.



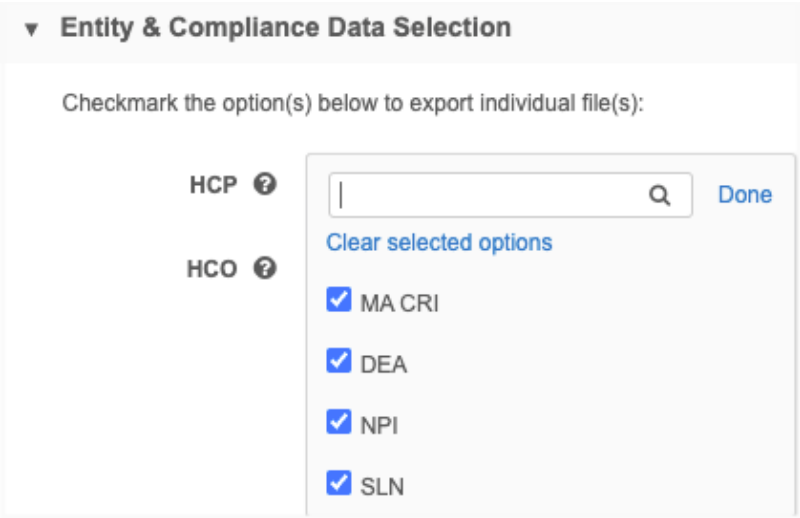
Existing US Compliance target subscriptions are not changed; however, if you only have some years selected, the **CMS Teaching Hospital** checkbox will display as partially selected. Previously, it was not selected if only some years were selected. If all years are selected, the **CMS Teaching Hospital** checkbox is fully selected.

For new customers, the **CMS Teaching Hospital** is selected by default.

EXPORTING ALL DATA

22R3

New Network instances will now have all available compliance data for HCPs and HCOs selected by default in US Compliance Target Subscriptions.



The following data is selected by default:

HCPs

- Massachusetts (MA) CRI
- DEA
- NPI
- SLN data

HCOs

- Massachusetts (MA) CRI
- DEA
- NPI
- CMS Teaching Hospital (all years)

Clear any selected compliance data source that you want to exclude from the download.

CMS TEACHING HOSPITAL - CCN ID

22R3

CMS Teaching Hospital compliance data now contains the CCN ID.

The following updates support the new data:

- The **CCN_ID** field and data displays in the Compliance section on US HCO record profiles.
- Target subscription exports include the CCN_ID column.

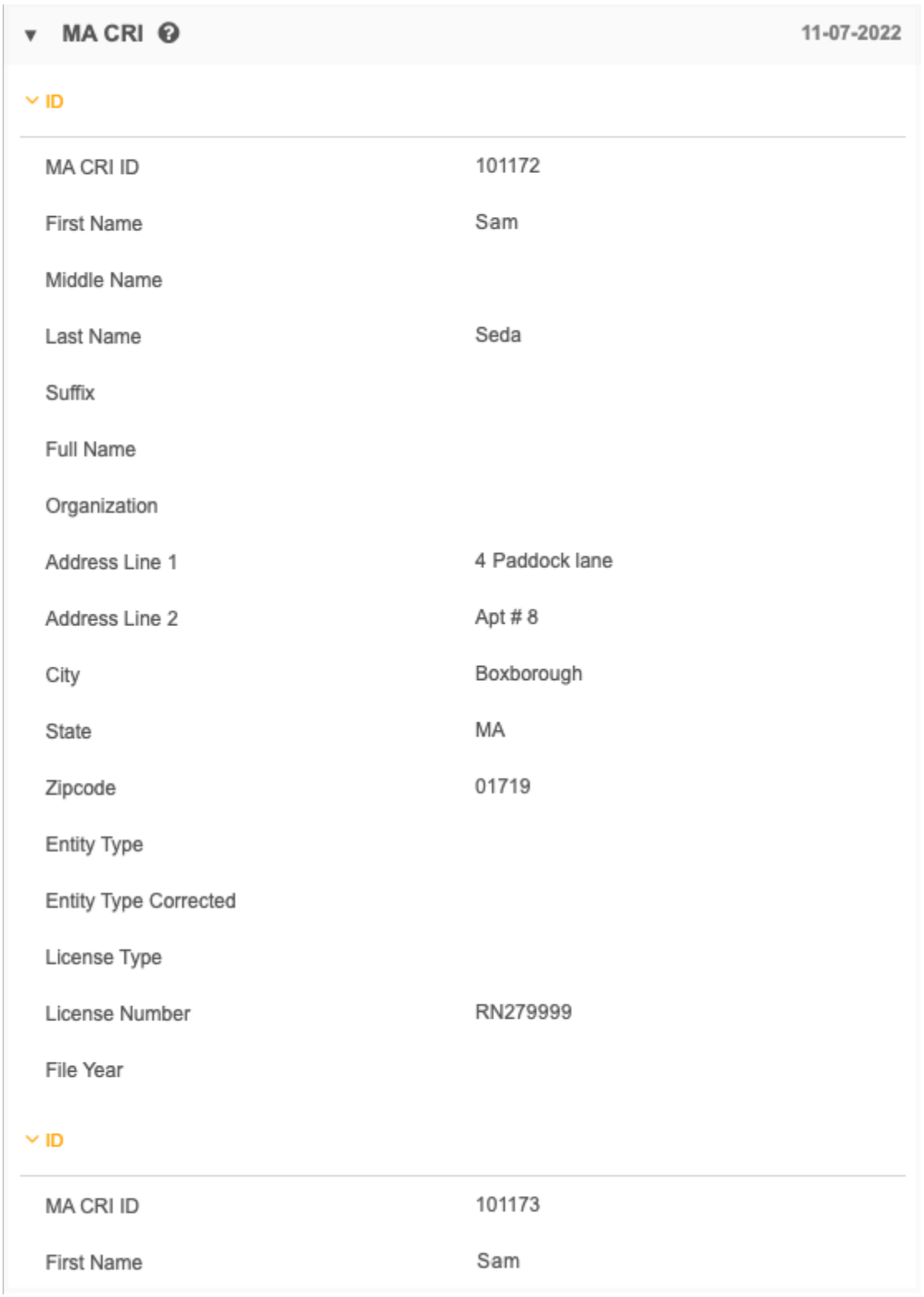
TIN	940382330
Pecos Legal Business Name	Children'S Hospital & Research Center At Oakland
Hospital Name	CHILDRENS HOSP & RES CNTR OAKLAND
Street Address 1	747 52ND STREET
PO Box	
City	Oakland
State	CA
Zip-Code	94609
Street Address 1	747 52nd St
Street Address 2	
City	Oakland
State	CA
Zip-Code	94609
CMS_YEAR	2017
CCN_ID	053301

MA CRI ID

22R3

All available Massachusetts (MA) CRI IDs are now included on record profiles. US Compliance subscriptions can contain several IDS but, previously, only one ID displayed in the **Compliance** section on the Profile page.

The **MA CRI** section has been expanded to display multiple IDs in the **Compliance** section on US record profiles. Expand the section to see all available IDs for that record.



▼ MA CRI 11-07-2022

ID

MA CRI ID	101172
First Name	Sam
Middle Name	
Last Name	Seda
Suffix	
Full Name	
Organization	
Address Line 1	4 Paddock lane
Address Line 2	Apt # 8
City	Boxborough
State	MA
Zipcode	01719
Entity Type	
Entity Type Corrected	
License Type	
License Number	RN279999
File Year	

ID

MA CRI ID	101173
First Name	Sam

Integrations

NETWORK BRIDGE - LICENSE FIELDS

22R3

The Network Bridge includes additional State license fields from Veeva OpenData to help you determine sample eligibility and prescriptive authority in Veeva CRM. These license fields apply to US data only and must be enabled in the Network data model.

The following fields are now available to process through the Network Bridge data subscription process:

- **Collaborative Agreement Required** - Indicates whether a collaborative agreement (CA) is required for the HCP.
- **Comprehensive Prescriptive Authority** - Indicates if the HCP has any of the assessed conditions on their prescribing authorities.
- **Comprehensive Sample Eligibility** - Indicates if the HCP has any of the assessed conditions on their sample eligibility.
- **Controlled Substances Prescriptive Authority** - Indicates whether HCP is authorized to write controlled substances.
- **Controlled Substances Sample Eligibility** - Indicates if the HCP is authorized to receive controlled substance samples.
- **Grace Expiry** - License Expiration Date that includes the state grace period.
- **License Status Condition** - Additional information about the license status.

The field values are based on data in Veeva OpenData. These fields will be automatically mapped to Veeva CRM fields so field users can use them in the CRM application. These fields are read-only; they cannot be changed through data change requests.

Note: These license fields are not imported through Network Account Search for this release.

Mapping details

The license fields are mapped from the Network License object to the CRM Address_vod__c object.

Network (License object)		Veeva CRM (Address_vod__c object)	
Field Name	**Label**	**API Name**	**Label**
ctrl_substance_sample__v	Controlled Substances Sample Eligibility	Network_Ctrl_Sub_ Sample_Eligibility_vod__c	Network Ctrl Sub Sample Eligibility
ctrl_substance_ prescriptive__v	Controlled Substances Prescriptive Authority	Network_Ctrl_Sub_ Prescriptive_vod__c	Network Ctrl Sub Prescriptive Authority
comprehensive_sample_ eligibility__v	Comprehensive Sample Eligibility	Network_Comp_Sample_ Eligibility_vod__c	Network Comp Sample Eligibility
comprehensive_ prescriptive_authority__v	Comprehensive Prescriptive Authority	Network_Comp_ Prescriptive_Authority_ vod__c	Network Comp Prescriptive Authority
collab_agree_required__v	Collaborative Agreement Required	Network_Collab_ Agree_Required_vod__c	Network Collaborative Agreement Required

Network (License object)		Veeva CRM (Address_vod__c object)	
Field Name	**Label**	**API Name**	**Label**
grace_period__v	Grace Expiry	Network_License_Grace_Expiry_vod__c	Network License Grace Expiry
license_status_condition__v	License Status Condition	Network_License_Status_Condition_vod__c	Network License Status Condition

Supported records

The state license data for these fields will be populated in Veeva CRM when the Network Bridge runs. If the state license record state is not valid and the license is associated to an address record that exists in CRM, the field values are not available in CRM.

CRM configuration

In Veeva CRM, grant Network integration users FLS edit permission and all other users FLS read permission to the new fields on the Address_vod object.

Network configuration

Enable the license fields and run a full Bridge job to backfill the license information for existing HCPs in Veeva CRM.

Data model

Enable the fields on the License object in the Customer Master data domain.

Profile Layouts

The new fields must be added to the profile layout that you use for the US so the fields display on Network's Profile page.

Target subscription

Configure the target subscription that you use for the US Network Bridge to export all existing HCP IDs.

- In the **General Export Settings** - Set the **Full data extract** setting to **Full**.

Network Bridge

- Run the Network Bridge.

All existing HCPs will be exported and processed. The additional license information will be populated on the records in CRM.

Network Hashtags in Veeva CRM

22R3

Network hashtags are now available in the following areas in Network Account Search:

- **DCR Import** - New accounts imported from Network include hashtags.
- **Parent HCO Import** - When adding Parent HCOs to a territory, hashtags display on accounts to ensure that you add the correct HCO.

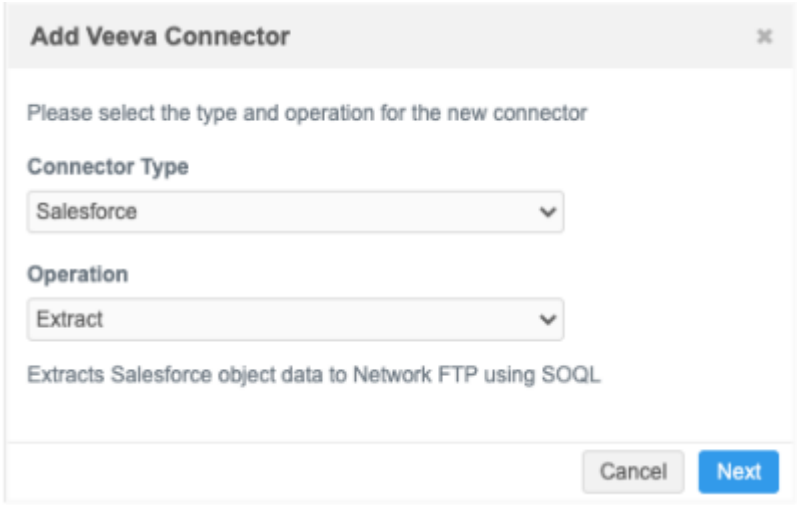
For more details about configuring hashtags for CRM, see the *Veeva CRM 22R3.0 Release Notes*.

Veeva CRM Connector

22R2.1

The **CRM** connector type has been renamed to **Salesforce**. This reflects the different applications where you can use the connector; for example, Veeva CRM, Salesforce®, Service Cloud®, and so on.

Previous Name	New Name
CRM Extract Connector	Salesforce Extract Connector
CRM Upsert Connector	Salesforce Upsert Connector



This enhancement is enabled by default in your Network instance.

EXTRACT CONNECTORS

22R2.1

The Salesforce (previously called *CRM*) and Vault Extract connectors can now compress .csv files into a single .zip file. This is helpful when you use extracted files in a source subscription because multiple files must be loaded from a compressed single file or a unique sub-folder.

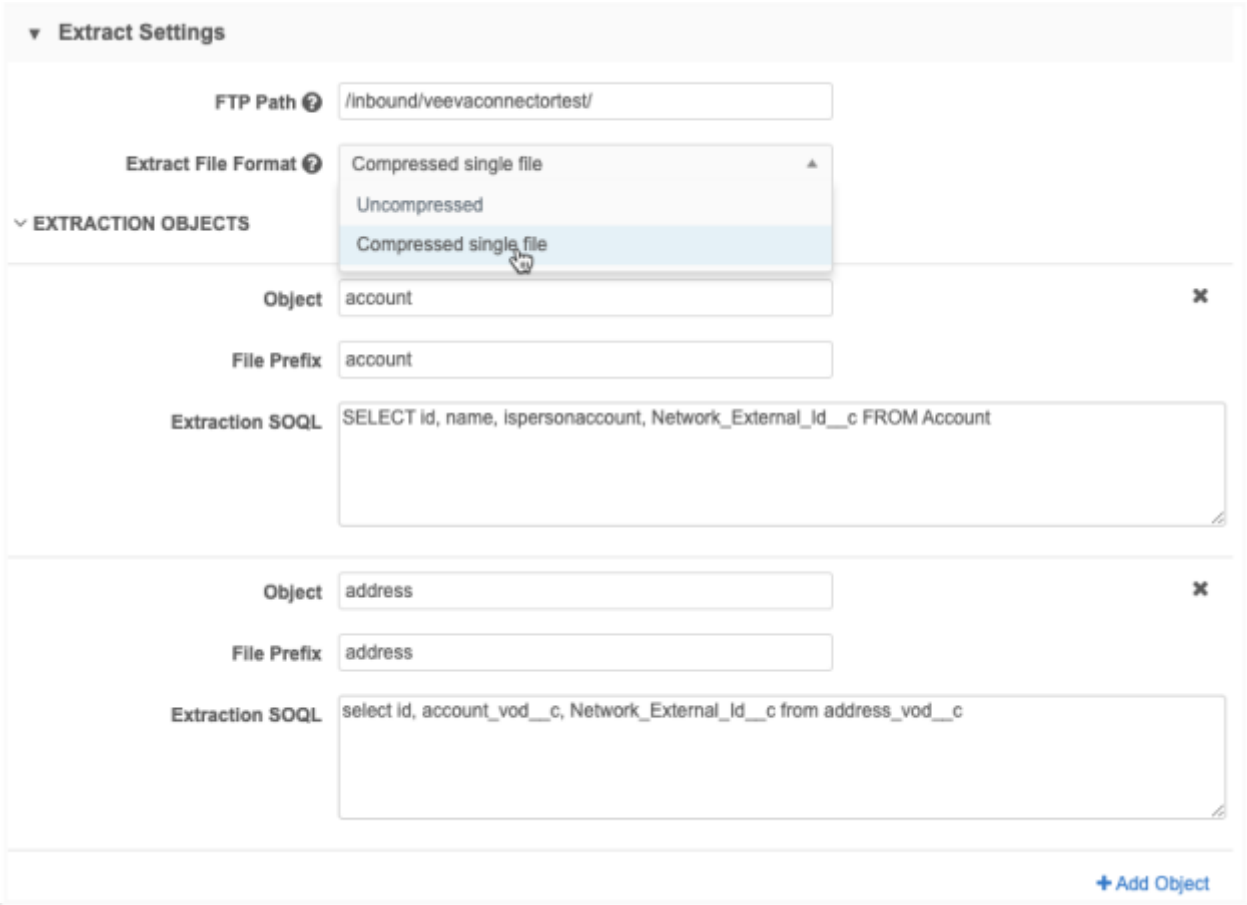
This enhancement is enabled by default in your Network instance.

Compress files

To extract files into a single compressed file, a new setting called **Extract File Format** has been added to Extract connector configurations.

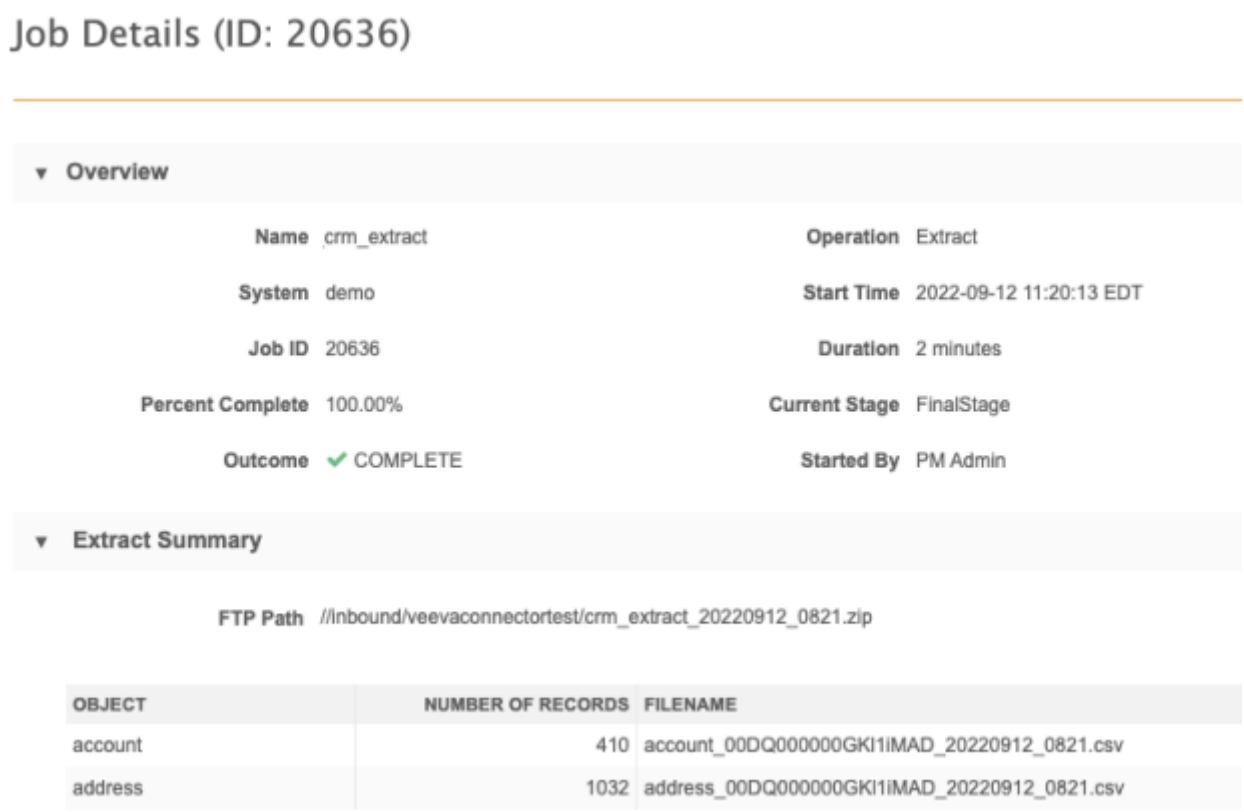
The **Extract File Format** setting contains two options:

- **Uncompressed** - Extract each object in individual .csv files. This is the default option.
- **Compressed Single File** - Compress the extracted files into a compressed (.zip) file.



After the Extract connector runs, the compressed file is saved to the FTP path with the following name format: <*veeva_connector_name*>_<*date_and_time*>`.zip`.

On the Job Details page, the **Extract Summary** section displays the compressed file name and the individual .csv file names.



UPSERT CONNECTORS

22R2.1

The Salesforce and Vault Upsert connectors will now skip loading a file if it is empty. Target subscriptions can generate empty .csv files when they are set to delta. Previously, the Upsert connector job immediately failed if a .csv file did not have data. Now, the file will be skipped and the Upsert job can complete.

The **Upsert Summary** section on the Job Details page displays any files that were skipped. The **Records Processed** and **Records Failed** columns display a zero (0) count.

This enhancement is enabled by default in your Network instance.

Security

SSL CERTIFICATE UPDATE

22R3

The current SSL certificate for `veevanetwork.com` expires on January 1, 2023. The new certificates are listed below.

Only customers who explicitly download and install certificates on any site caches or proxy servers must update their certificates.

The certificates will be updated during the Network 22R3.0 Production release on December 16, 2022. If you use the current SSL certificates in your downstream systems, you will need to update them after that release.

veevanetwork.com certificate

Installing this certificate covers all Sandbox and Production Network instances and `login.veevanetwork.com`.

```
-----BEGIN CERTIFICATE-----
MIIG0DCCBbigAwIBAgIQDO8TmCGY/4wVaERF+UFjxjANBgkqhkiG9w0BAQsFADBP
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMSkwJwYDVQQDEyBE
aWdpQ2VydCBUTFMgUlNBIFNIQTI1NiAyMDIwIENBMTAeFw0yMjExMjEwMDAwMDBa
Fw0yMzEyMjIyMzU5NTlaMHExCzAJBgNVBAYTAlVTMRMwEQYDVQQIEwpDYWxpZm9y
bmlhMRMwEQYDVQQHEwpQbGVhc2FudG9uMRswGQYDVQQKExJWZWV2YSBTeXN0ZW1z
IEluYy4xGzAZBgNVBAMMEioudmVldmFuZXR3b3JrLmNvbTCCASIwDQYJKoZIhvcN
AQEBBQADggEPADCCAQoCggEBAMF1I5P0hEJze6QLaFLAord1jFJY3+HuARpzju7o
TIwfxYR6ryJJ5q+AhTfM2FneBFYmS4uz7T7qESs/HGZZct/deb1xRknkG6l5uKnM
DWbM1vHurJfsWYxuFrJjRcj79+ADnHTcbsyh8mn1tWFLcx+6/hM/xO63DpejeJUa
L0M4UJkokC5pQkA9FMlCmqfQR9dxz+yL5mB8mh9qQ+iYQtqnbQpL5alPyCfoOyXP
MlsvIaHt2jjVd4CQxnnOqLFaqnoaOCw+xunJ0ZA2e/KVlB/hcuM+vGdd5HFtXH8c
QD2oWUvCoMRxzwCS0T753vLQ42+fIZHXzsVMyoygntVJK2sCAwEAAaOCA4QwggOA
MB8GA1UdIwQYMBaAFLdrouqoqoSMeeq02g+YssWVdrn0MB0GA1UdDgQWBBTpd6Ev
O5GtweZ2/fZfqfRixp3cIDAvBgNVHREEKDAmghIqLnZlZXZhbmV0d29yay5jb22C
EHZlZXZhbmV0d29yay5jb20wDgYDVR0PAQH/BAQDAgWgMB0GA1UdJQQWMBQGCCsG
AQUFBwMBBggrBgEFBQcDAjCBjwYDVR0fBIGHMIGEMECgPqA8hjpodHRwOi8vY3Js
My5kaWdpY2VydC5jb20vRGlnaUNlcnRUTFNSU0FTSEEyNTYyMDIwQ0ExLTQuY3Js
MECgPqA8hjpodHRwOi8vY3JsNC5kaWdpY2VydC5jb20vRGlnaUNlcnRUTFNSU0FT
SEEyNTYyMDIwQ0ExLTQuY3JsMD4GA1UdIAQ3MDUwMwYGZ4EMAQICMCkwJwYIKwYB
BQUHAgEWG2h0dHA6Ly93d3cuZGlnaWNlcnQuY29tL0NQUzB/BggrBgEFBQcBAQRz
MHEwJAYIKwYBBQUHMAGGGGh0dHA6Ly9vY3NwLmRpZ2ljZXJ0LmNvbTBJBggrBgEF
BQcwAoY9aHR0cDovL2NhY2VydHMuZGlnaWNlcnQuY29tL0RpZ2lDZXJ0VExTUlNB
U0hBMjU2MjAyMENBMS0xLmNydDAJBgNVHRMEAjAAMIIBfgYKKwYBBAHWeQIEAgSC
AW4EggFqAWgAdwDoPtDaPvUGNTLnVyi8iWvJA9PL0RFr7Otp4Xd9bQa9bgAAAYSc
DthuAAAEAwBIMEYCIQC0w0CLXyjDagup66z36Lrx2BpiJmDhrUpzLNBJUyG8bwIh
AKzVk4Z0WqDYyHbHzGLZrc105zFFBsW9Ypi2XacsgbLxAHYAs3N3B+GEUPhjhtYF
qdwRCUp5LbFnDAuH3PADDnk2pZoAAAGEnA7Y6AAABAMARzBFAiEA/xcoHw3hlVAy
V/lEi1+Hr3mnvw/FD+UfucgBvQ6v3e0CIG319rsrg33qAqKHa0W4DMH2mccJ55b3
tk0HgRzrL7WgAHUAtz77JN+cTbp18jnFulj0bF38Qs96nzXEnh0JgSXttJkAAAGE
nA7YoQAABAMARjBEAiAHyrMIQcc1+e+AZNTxIPfBbMpZP3NgtpMVH0ugG4cAWAIg
UlzRceq70J7vPi0UOgC0e9Cpk1LMdq5unkFDlbCRoIcwDQYJKoZIhvcNAQELBQAD
ggEBAAFhOlu5NnZM30/mWCFTe7XYsYlx/eAqYlcdSFSaK0m9xPx/YoKrixDAu/GM
```

```
dNiqnLURhdNx/MKaA/hDZX8qQS3OtrRY30BvXHuf+GxQohWvbTx9y/5VlQpN6S+v
FPqzLQZvn9pTaFRDZrjjIbbtI84Ccc4mRaBgpT7sQ0k5cT0c1SBEUIqzqDcktkfS
h+4BmzQ7nVgmL3tbchjzVTTWc0ihdEGEkHFuzizPIgqIHSl9DvrYJA328jzrqSPG
nRI3Y8OjwLxNlVhirTVPGIXfifrN1gzRGUn8bhCg/I1zw1T2UdnCrFIKyri7y0Nh
Zyp1PiV+bnkJBZ/LhX2HEaaBUAU=
-----END CERTIFICATE-----
```

Intermediate CA certificate

Install this (DigiCertCA) CA certificate to ensure that the SSL certificate is fully trusted by the supported browsers and client computers.

```
-----BEGIN CERTIFICATE-----
MIIEvjCCA6agAwIBAgIQBtjZBNVYQ0b2ii+nVCJ+xDANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMSAwHgYDVQQDExdEaWdpQ2VydCBHbG9iYWwgUm9vdCBD
QTAeFw0yMTA0MTQwMDAwMDBaFw0zMTA0MTMyMzU5NTlaME8xCzAJBgNVBAYTAlVT
MRUwEwYDVQQKEwxEaWdpQ2VydCBJbmMxKTAnBgNVBAMTIERpZ2lDZXJ0IFRMUyBS
U0EgU0hBMjU2IDIwMjAgQ0ExMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKC
AQEAwUuzZUdwvN1PWNvsnO3DZuUfMRNUrUpmRh8sCuxkB+Uu3Ny5CiDt3+PE0J6a
qXodgojlEVbbHp9YwlHnLDQNLtKS4VbL8Xlfs7uHyiUDe5pSQWYQYE9XE0nw6Ddn
g9/n00tnTCJRpt8OmRDtV1F0JuJ9x8piLhMbfyOIJVNvwTRYAIuE//i+p1hJInuW
raKImxW8oHzf6VGo1bDtN+I2tIJLYrVJmuzHZ9bjPvXj1hJeRPG/cUJ9WIQDgLGB
Afr5yjK7tI4nhyfFK3TUqNaX3sNk+crOU6JWvHgXjkkDKa77SU+kFbnO8lwZV21r
eacroicgE7XQPUDTITAHk+qZ9QIDAQABo4IBgjCCAX4wEgYDVR0TAQH/BAgwBgEB
/wIBADAdBgNVHQ4EFgQUt2ui6qiqhIx56rTaD5iyxZV2ufQwHwYDVR0jBBgwFoAU
A95QNVbRTLtm8KPiGxvDl7I90VUwDgYDVR0PAQH/BAQDAgGGMB0GA1UdJQQWMBQG
CCsGAQUFBwMBBggrBgEFBQcDAjB2BggrBgEFBQcBAQRqMGgwJAYIKwYBBQUHMAGG
GGh0dHA6Ly9vY3NwLmRpZ2ljZXJ0LmNvbTBABggrBgEFBQcwAoY0aHR0cDovL2Nh
Y2VydHMuZGlnaWNlcnQuY29tL0RpZ2lDZXJ0R2xvYmFsUm9vdENBLmNydDBCBgNV
HR8EOzA5MDegNaAzhjFodHRwOi8vY3JsMy5kaWdpY2VydC5jb20vRGlnaUNlcnRH
bG9iYWxSb290Q0EuY3JsMD0GA1UdIAQ2MDQwCwYJYIZIAYb9bAIBMAcGBWeBDAEB
MAgGBmeBDAECATAIBgZngQwBAgIwCAYGZ4EMAQIDMA0GCSqGSIb3DQEBCwUAA4IB
AQCAMs5eC91uWg0Kr+HWhMvAjvqFcO3aXbMM9yt1QP6FCvrzMXi3cEsaiVi6gL3z
ax3pfs8LulicWdSQ0/1s/dCYbbdxglvPbQtaCdB73sRD2Cqk3p5BJl+7j5nL3a7h
qG+fh/50tx8bIKuxT8b1Z11dmzzp/2n3YWzW2fP9NsarA4h20ksudYbj/NhVfSbC
EXffPgK2fPOre3qGNm+499iTcc+G33Mw+nur7SpZyEKEOxEXGlLzyQ4UfaJbcme6
ce1XR2bFuAJKZTRei9AqPCCcUZlM51Ke92sRKw2Sfh3oius2FkOH6ipjv3U/697E
A7sKPPcw7+uvTPyLNhBzPvOk
-----END CERTIFICATE-----
```

View updated certificates

After the certificates are updated, they can be viewed or downloaded by running:

```
openssl s_client -connect login.veevanetwork.com:443 -showcerts
```

The new certificates expire on January 1, 2024.

Admin settings

WORKFLOW SETTINGS

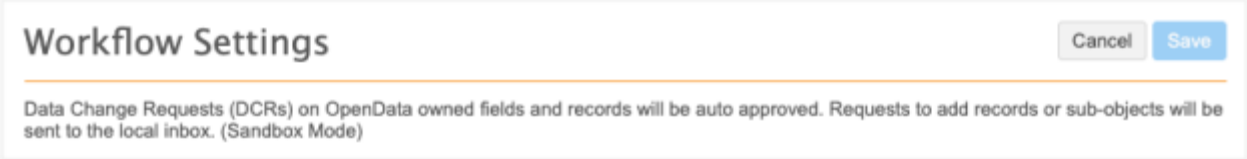
22R2.1

For Sandbox instances only, a description is added to the Workflow settings page to indicate how the instance will process data change requests.

Sandboxes can have one of the following configurations:

- **Sandbox is connected to an OpenData instance** - Data change requests on OpenData owned fields and records are routed to OpenData. All other requests will be processed locally according to the workflow settings on the page.
- **Sandbox is not connected to an OpenData instance** - Data change requests on OpenData owned fields and records are automatically approved. All other requests will be processed locally according to the workflow settings on the page.

Example - Sandbox not connected to OpenData



This enhancement is enabled in your Sandbox instance by default.

API

VERSION UPDATE

22R3

The Network API is updated to v28.0.

The Network API version is updated for every major release. Any additional changes are documented in this section of the Release Notes.

As with all version updates, Integration Users should continue to use v27.0 until there is a change for v28.0 that they want to apply.

For more information about the Network API, see the *Veeva Network API Reference* at http://developer.veevanetwork.com.