Veeva Network

Veeva Network 19R1.0.1 Release Notes

April 2019

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About these Release Notes

These Release Notes describe all features that are included in Veeva Network 19R1.0.1.

Browser requirements

The following are the minimum browser requirements:

- Internet Explorer™ 11+
- Google Chrome™ (most stable version at Network release)
- Safari® 10+
- Microsoft Edge™

Veeva Network is not supported on mobile devices.

Release Note updates

The following enhancement has been removed from the Release Notes since the Early version was published:

- **Bulk merge** - Records with specific states will not be considered in bulk merge jobs.

This enhancement will be included in a future release.

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

What's new

The following key enhancements comprise the Veeva Network 19R1.0.1 major release.

19R1.0 - Features newly released for 19R1.0

18R3.1 - Features previously introduced in minor releases

			ST	DS	DM	AD
Widgets						
Active addresses	Only active addresses will display in the search results for the Search Widget.	19R1.0	●	●	●	●
Add requests	Users can now submit add requests using the Search Widget.	19R1.0	●	●	●	●
Change requests	The Profile Widget now includes the ability to submit change requests.	18R3.1	●	●	●	●

			ST	DS	DM	AD
Profile						
Default view	The redesigned profile is now the default view when you log into Network to view a record.	19R1.0	●	●	●	●
Transition to the new profile	The redesigned profile page will replace the classic view in Network 19R1.0.	18R3.1	●	●	●	●
Find suspect match	The Find Suspect Match box in the new profile includes the name and city by default.	18R3.1	●	●	●	●
Field level revision history	Users can investigate primary and rank details for sub-objects and relationship objects.	18R3.1	●	●	●	●
Profile layout for New Zealand	The standard profile layout for HCPs, NZStandard, has been updated to remove two fields.	18R3.1	●	●	●	●
New profile previews	The summary header now remains fixed when you scroll through a profile preview using the new view.	18R3.1	●	●	●	●
Match						
Ad Hoc Match	Users can now choose the fields for export and administrators can view jobs for users in their Network instance.	19R1.0	●	●	●	●
Network Explorer						
Dragging pop-ups	Users can now move around the pop-ups that display on the Network Explorer canvas.	18R3.1	●	●	●	●
Reports						
Error messages improved	Error messages for advanced ad hoc queries now display more detail to help users troubleshoot issues.	18R3.1	●	●	●	●
Inbox						
Associated tasks	Associated tasks are more visible on data change requests.	19R1.0		●	●	
General Updates						
Timezones	Timezones now display throughout the Network UI.	19R1.0	●	●	●	●
Browser support	Network now supports Microsoft Edge web browsers.	19R1.0	●	●	●	●
Security fingerprint update	Because of a system upgrade, you might need to accept a new security fingerprint when you re-connect to FTP.	18R3.1				●
SSL certificate update	Customers who explicitly download and install certificates must update the certificate for veevanetwork.com.	18R3.1				●

			ST	DS	DM	AD
Merge						
Merge instructions for child objects	Merge behavior can be defined for each locally managed child objects on winning Veeva OpenData records.	19R1.0			●	●
Custom merge rules	Field value survivorship can now be defined to override regular survivorship.	19R1.0			●	●
Custom Objects Data Model						
Managing configurations	Exporting custom object configurations to import to a target environment is now supported.	19R1.0			●	●
Viewing related relationships	Users can now view custom relationship objects from the non-controlling object.	19R1.0	●	●	●	●
Searching for related object names	Users can now use the Advanced Search form to search on a name from the related object in a relationship.	18R3.1	●	●	●	●
Data maintenance						
Unsubscribing from third party records	Administrators can unsubscribe and anonymize records from third party data providers.	19R1.0			●	●
Veeva OpenData						
Email subscriptions	The OpenData team can more easily manage email subscriptions for subsets of US records.	19R1.0			●	●
Users						
Permissions	The Additional Permissions section is updated to more accurately organize and reflect the available options.	19R1.0				●
Network Data Model						
New countries supported	A data model has been added for Bahrain, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, and United Arab Emirates.	18R3.1			●	●
HCP opt-out	Several countries have been added to the list of opted-out countries in OpenData.	18R3.1			●	●
Address type for New Zealand	For New Zealand records, the default value for the address type field is changed to Mail Only.	18R3.1			●	●
Primary address	Administrators and data managers can now enable Network to recalculate primary addresses that use the Unique Checkbox configuration.	18R3.1			●	●

			ST	DS	DM	AD
API						
Version update	The Network API is updated to v17.0.	19R1.0		Developers		
Create unverified	The create_unverified parameter is now supported for the Change Request API.	19R1.0		Developers		

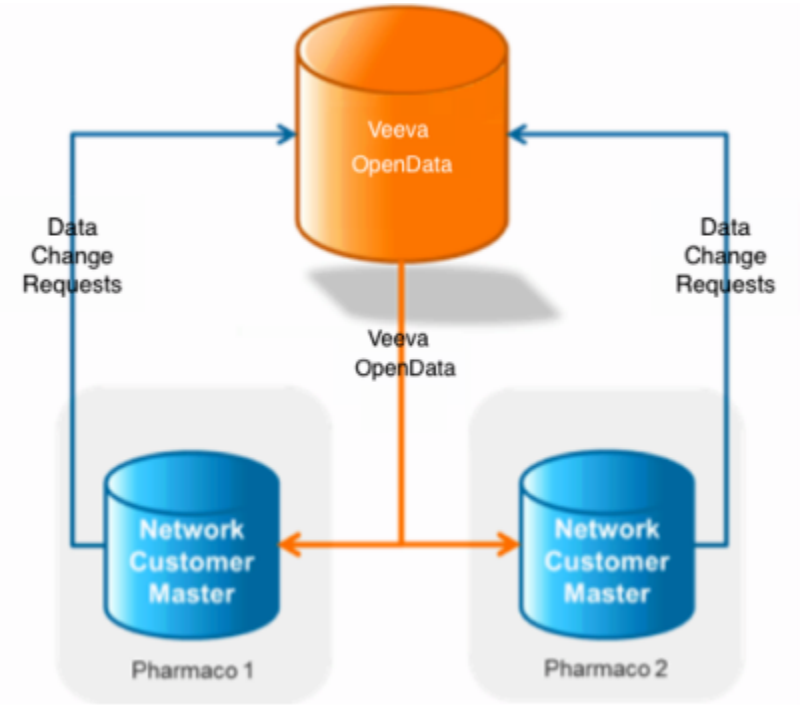
Data Governance - Specific updates for fields and reference data are provided in the *Veeva Network Data Governance* release notes for every minor and major Network release.

Introduction

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

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

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



Network Customer Master

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

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

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

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

Network widgets

SEARCH WIDGET

The following enhancements have been added to the Network Search Widget for this release.

Active addresses

The search widget now only displays active addresses in the search results. Previously, inactive addresses might have displayed. If there are no active addresses on a record, an address does not display in the search results. This enhancement ensures that users do not see inactive addresses.

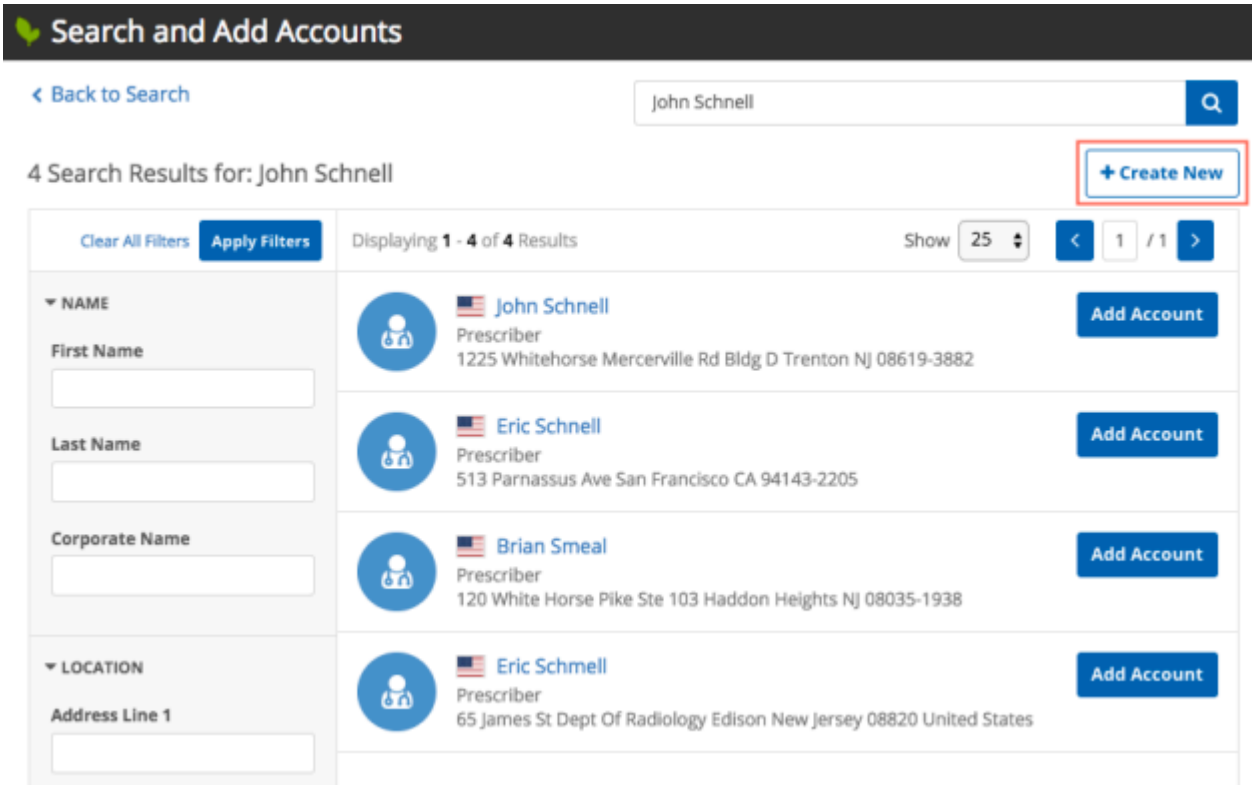
Add requests

You can now submit add requests from the search widget when you cannot find the record you are looking for. When you create a record, a data change request (DCR) is submitted to data stewards to validate and create the record in Network; however, the record is also available immediately in your internal application so you can action it.

This enhancement is enabled by default when administrators are configuring new search widgets. It can be enabled for existing search widgets.

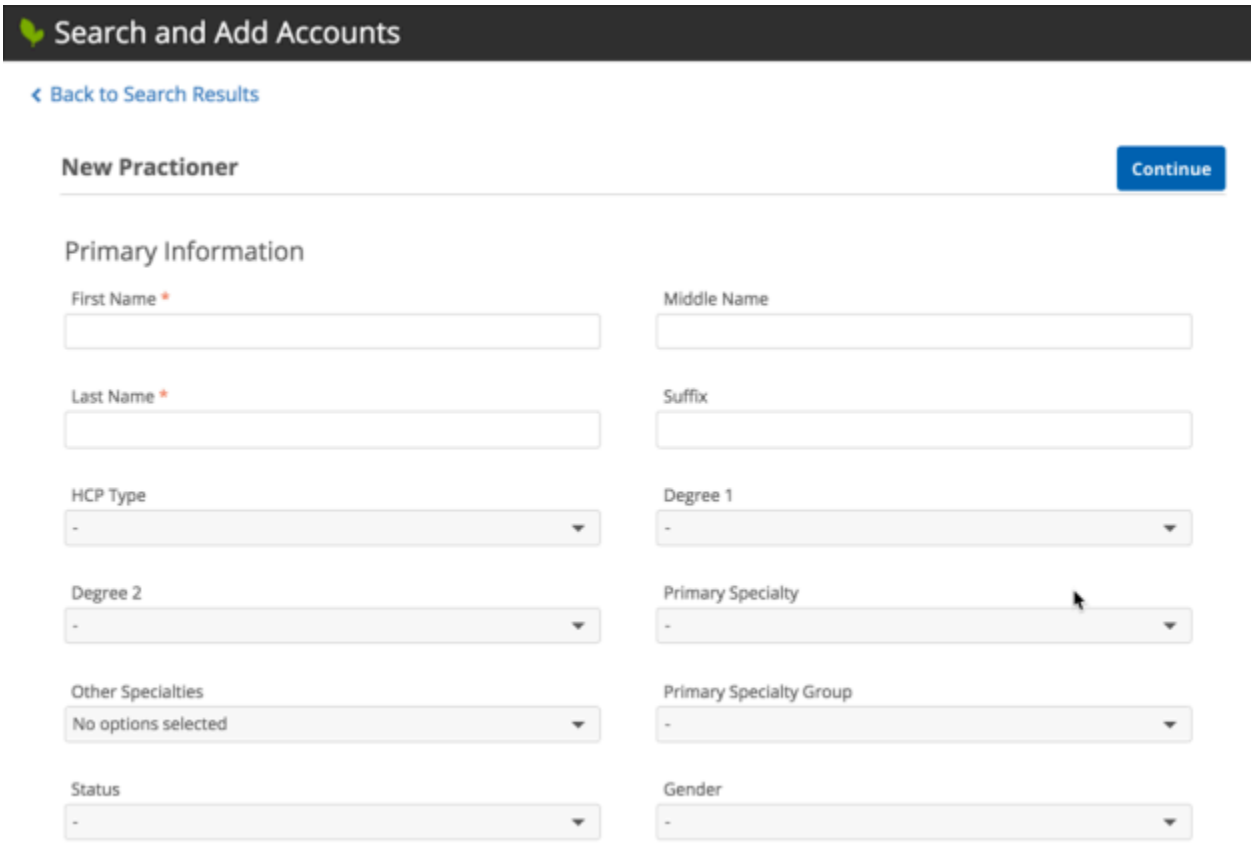
Create an add request

To create a new record, on the search results page, click the **+ Create New** button.



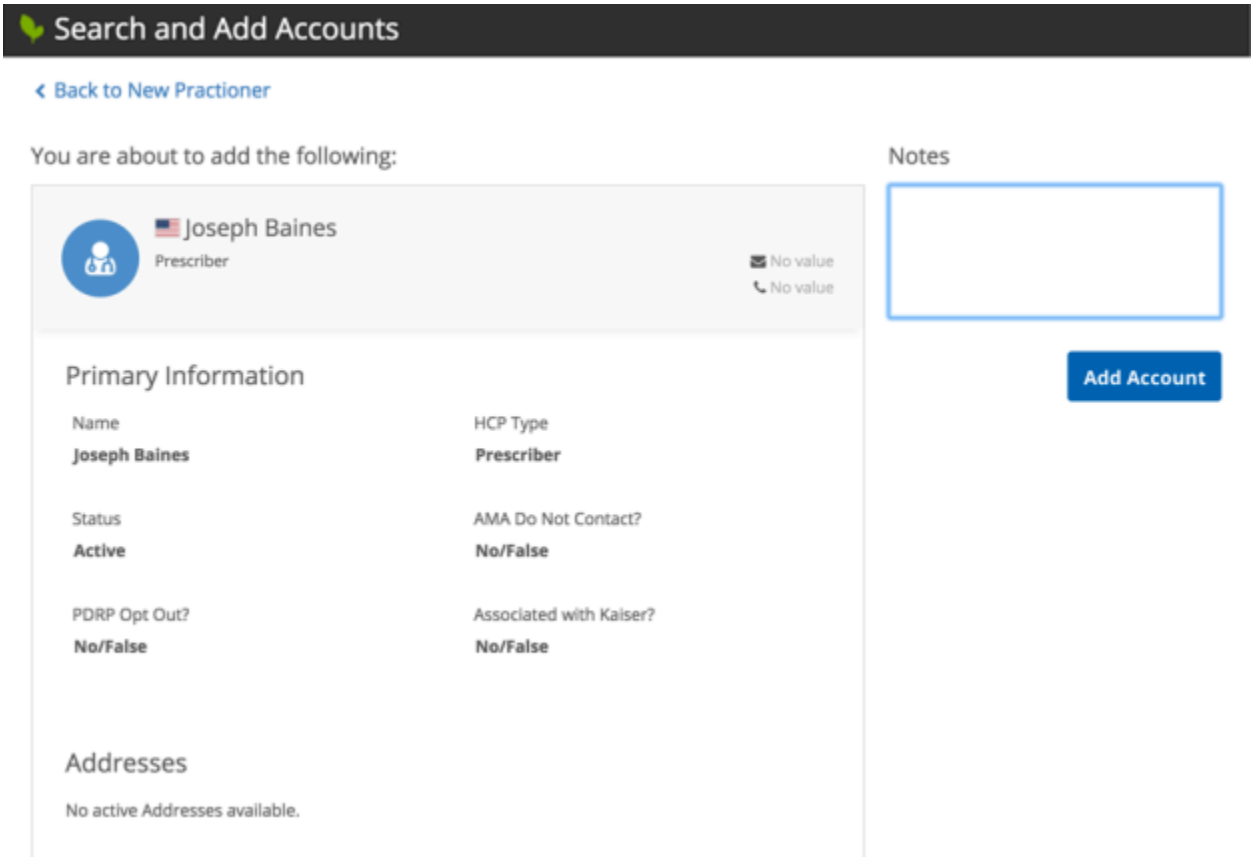
A new page displays so you can add the record information.

Add values for the required fields (First Name, Last Name) and any additional information that you have for the record; for example, addresses and licenses.



Click **Continue** to review the information that you just added.

On the summary page, you can validate the information that you just provided. If you need to make any changes before submitting the record, click the **Back to New Practitioner** link.



In the **Notes** field, optionally add some information to provide details for the data steward who will process this request. Click **Add Account** to submit the add request. The add request is routed to a data steward to process.

The record is now available in your internal application so you can immediately action it.

More information

For more information about creating and using the Network search widget, contact Veeva Support.

Profile Widget

The following enhancement has been added to the profile widget for this release.

Change Requests

Users can now submit changes requests using the profile widget. Users can update existing records by changing primary fields (name, type) or by adding or updating sub-objects (previously called *child objects*). New HCOs and HCPs cannot be added through the profile widget. When changes are submitted, requests are forwarded to the appropriate data stewards for processing, but new sub-objects are immediately available as under review records so users can take action on the record.

How does it work?

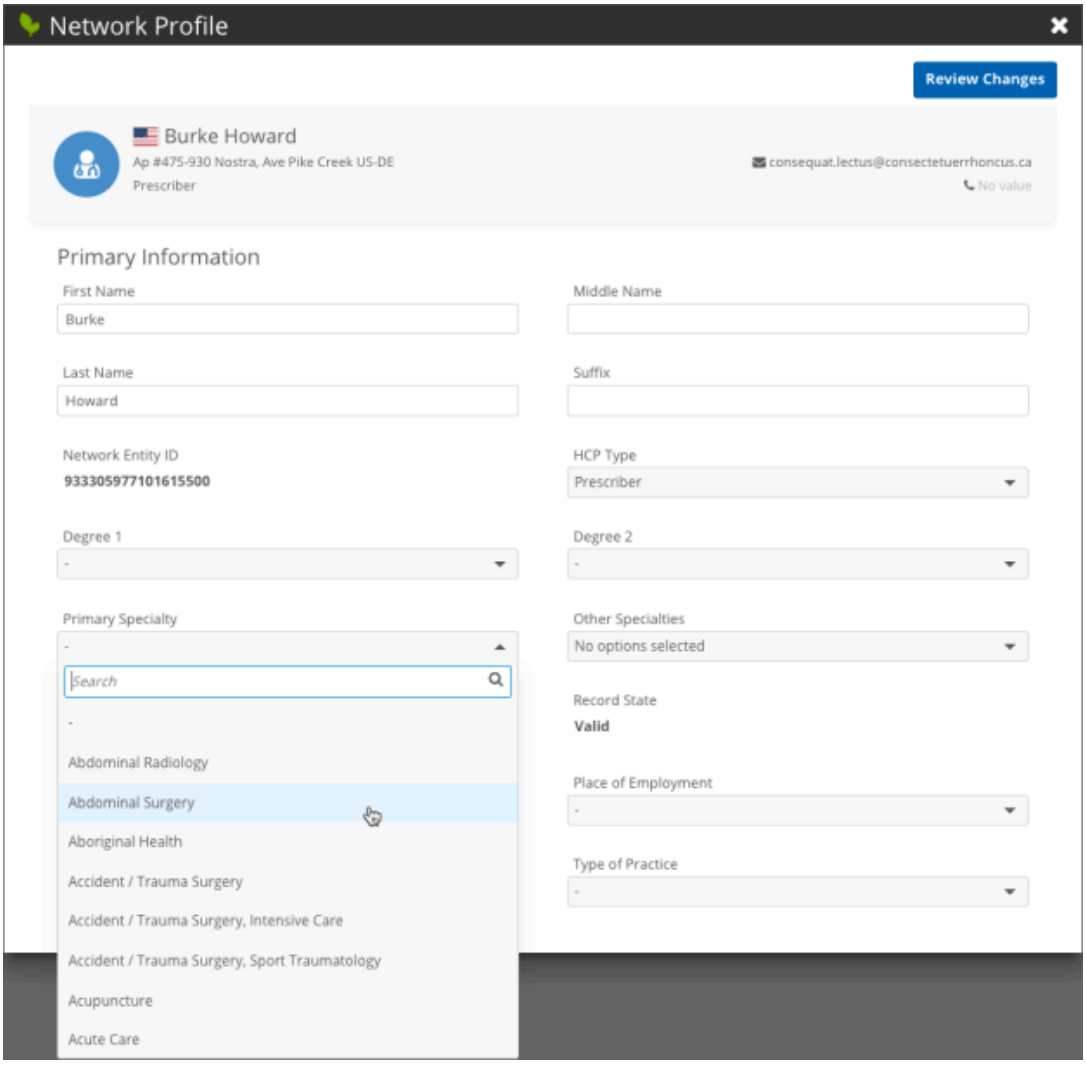
The profile widget configuration in the Network UI now includes a setting to allow users to submit change requests. The setting is enabled by default for new profile widgets; administrators can enable the setting for existing profile widgets.

Users that have edit access to records through their data visibility profile can submit changes to records. When users select a record in the profile widget, the record opens in edit mode so changes can quickly be made.

Change request example

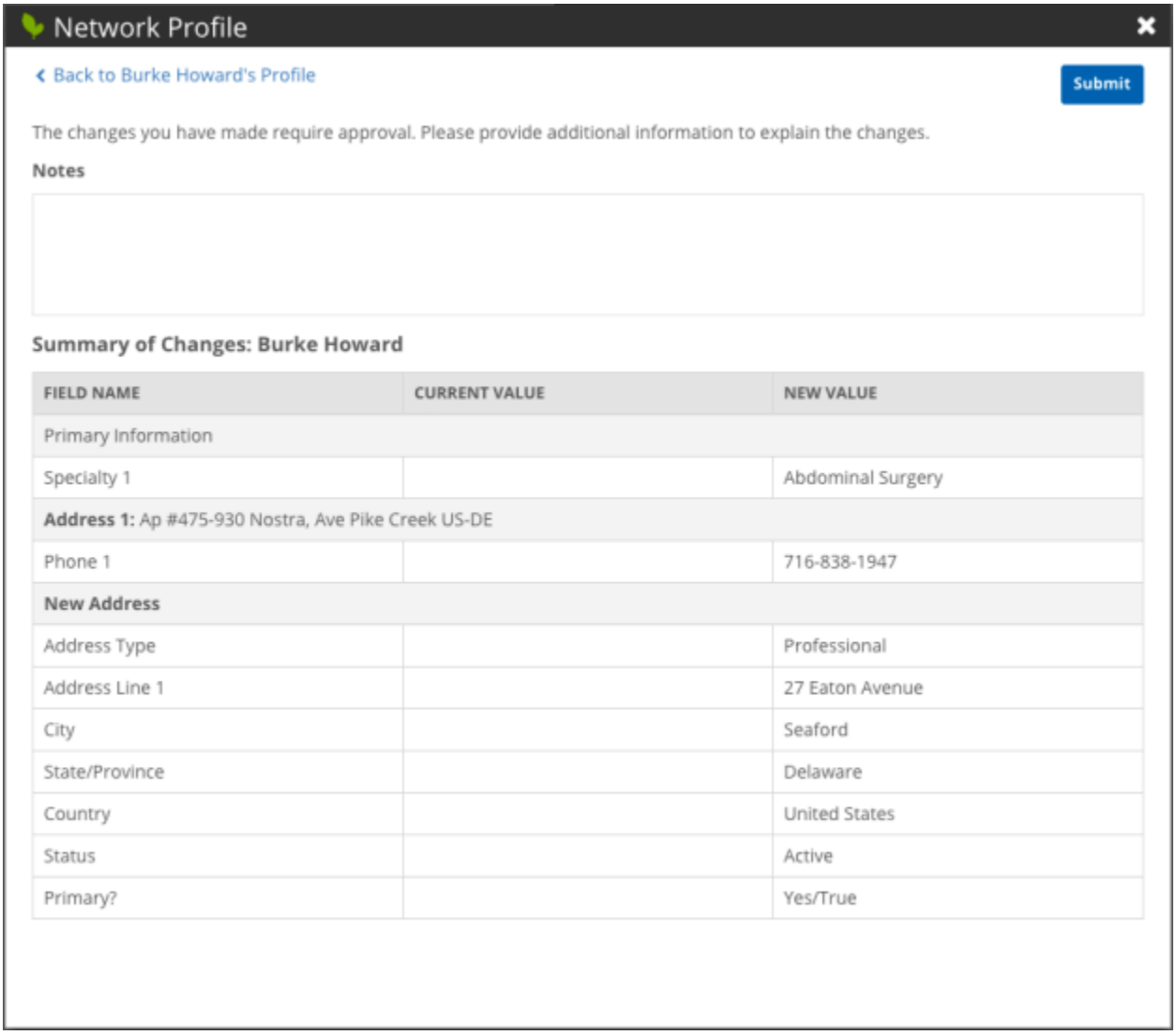
Open a record using the profile widget in your internal application. The record opens in edit mode so you can quickly add the following data:

- HCP specialty
- phone number to an existing address
- new address



When the updates are complete, click **Review Changes**.

A Summary page displays so you can review the current and new values to ensure that the changes are correct and complete.



After reviewing the updates, add a comment in the **Notes** section to help data stewards understand the changes and then click **Submit**.

A data change request is forwarded to the appropriate data stewards (local stewards or Veeva OpenData stewards) to process the request. New sub-objects are added as unverified and are immediately updated so you can action the new data; for example, send marketing material to the new address.

More information

For more information about the Network profile widget, contact Veeva Support.

Profiles

DEFAULT PROFILE VIEW

The redesigned profile is now the default profile view for all users in all countries. When you log into Network and view a profile, the new view will display.

For more information about the features for the new profile, see the "New profile" topic in the *Veeva Network Online Help*.

TRANSITION TO THE NEW PROFILE

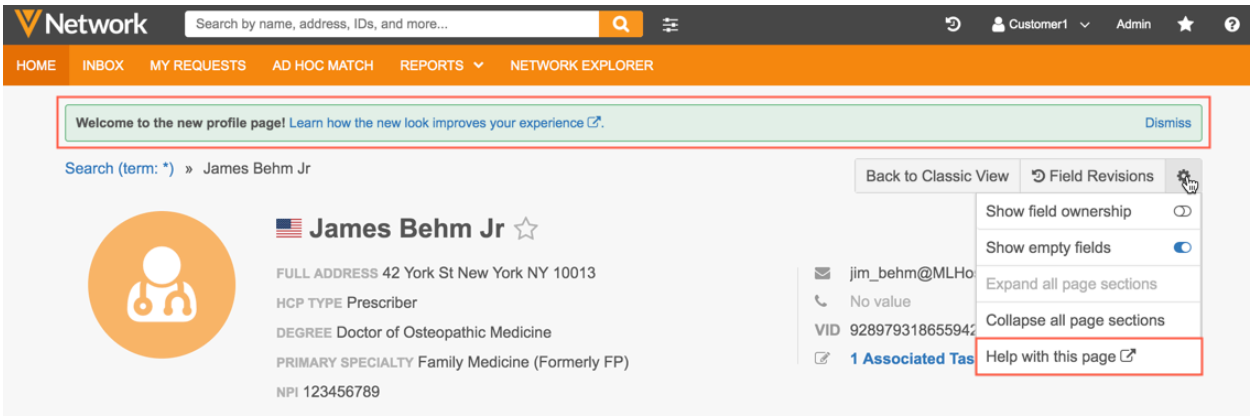
The redesigned profile will become the default view in Network version 19R1.0. The classic view will no longer be the default view when production Network instances are updated to 19R1.0 on April 12, 2019. This update will be applied by default to all Network instances.

A banner at the top of the page alerts you to this change when you view a record in the classic profile view. Within the message, a link is available so you can access resources to help you transition to the new view. The documents highlight the new features, provide a comparison between the classic view and the new view, and contain a video to help you to quickly get started with the new view.

Click the **Try It Now** button to access the new view. You can return to the classic profile from the new view until your Network instance is updated to version 19R1.0.

When you access the new profile view, the link to the resources is also available in the banner at the top of the page. You can **Dismiss** the message to permanently remove the banner.

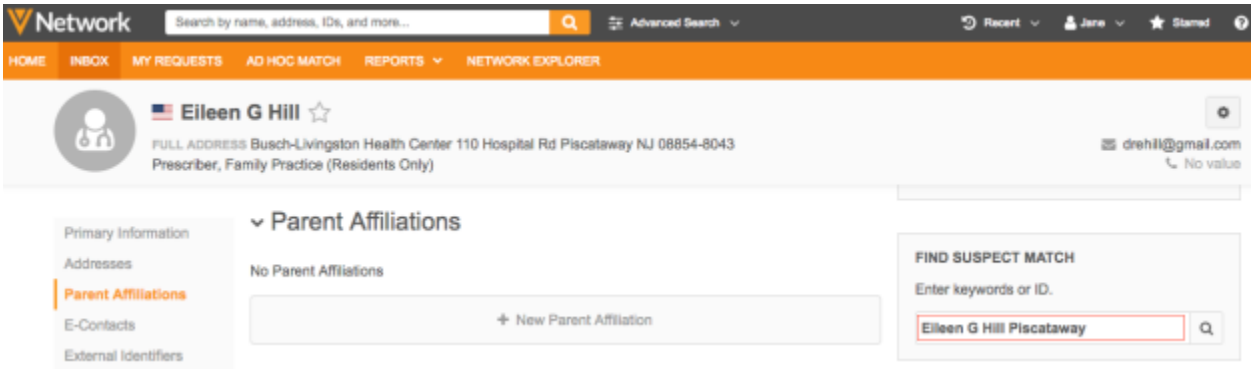
Documentation for the new profile is always available. In the **Options** menu, click the **Help with this page** link to directly access the topics in the *Veeva Network Online Help*.



FIND SUSPECT MATCH

The **Find Suspect Match** box on the new profile now displays the name and city of the record by default. These fields displayed in the **Find Suspect Match** pop-up on the classic profile. Name and city fields are typically used to search for duplicate records so populating them by default is more efficient for data stewards. Data stewards can clear these default search terms and search by other values or by ID.

This enhancement is enabled by default in your Network instance.



FIELD LEVEL REVISION HISTORY

Field revisions for sub-objects and relationship objects can now be accessed using the **Field Revisions** button at the top of the profile page. Previously, this button only displayed entity-level revisions. Additionally, primary field revision data is now available for sub-objects and relationship objects so users can investigate primary changes for these objects. Address field revisions also contain information about rank 1 changes.

These enhancements are available by default in your Network instance. Primary field data displays if you have created primary fields for objects in your Network instance.

Accessing sub-object revisions

Users can now access any sub-object (previously called *child object*) and relationship object field level revisions from the **Field Revisions** button at the top of the profile page. Previously, the field revisions for sub-objects and relationship objects were available only using the **Field Revisions** button on the expanded objects on the profile (which is still available).

Click the **Field Revisions** button at the top of the page to display the list of objects on the record profile; objects can include the record object (for example, HCP) and any Veeva standard or custom sub-objects and relationship objects on the record.

Select a sub-object or relationship object to display a pop-up that contains its field revisions. If there is no revision data, the object is dimmed in the list.

Sub-object and relationship object field revisions

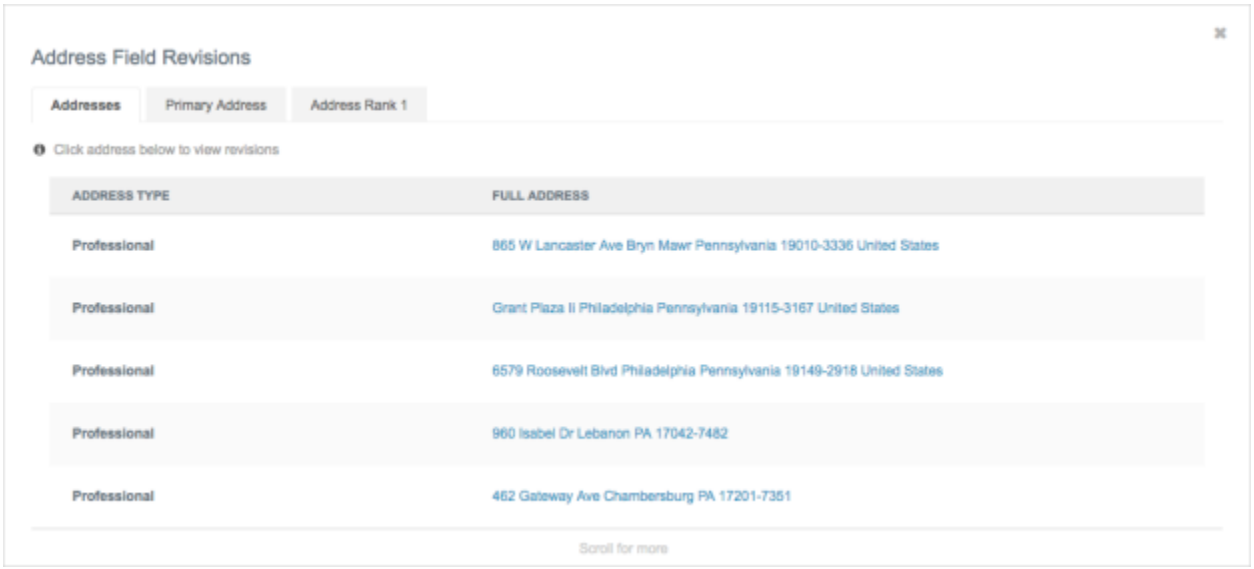
When you access revisions using the **Field Revisions** button at the top of the profile page, the pop-up displays a list of all of those sub-objects or relationship objects on the record. All active and inactive sub-objects or relationship objects are listed.

The tabs that display on the pop-up depends on the object type. If a primary field type (Network Calculated or Unique Checkbox) has been set up on the object type in the Network instance, a **Primary** tab displays on the pop-up. This enables users to investigate primary flag changes for an object

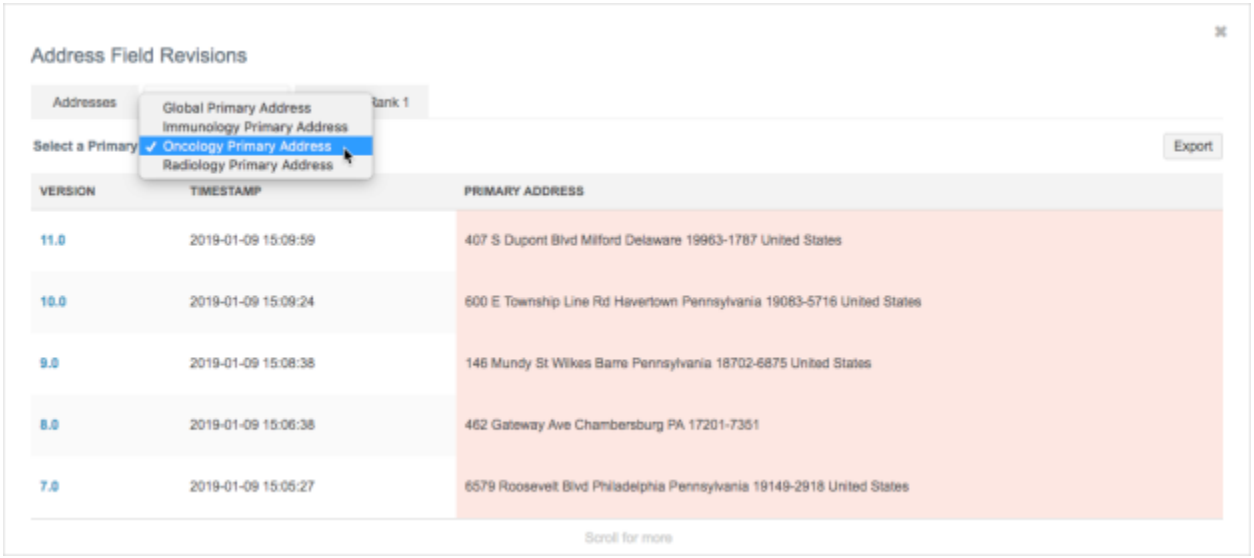
Addresses

The **Address Field Revisions** pop-up can contain up to three tabs:

- **Addresses** - All of the address sub-objects on the record are listed. The address type (for example, Professional or Mail Only) and the formatted address displays. Click a formatted address to investigate individual address revisions.



- **Primary Address** - Displays if a Primary Type (Network Calculated or Unique Checkbox) has been set up on the address sub-object in the Network instance.



The Network Calculated primary displays by default. If a Network Calculated primary is not defined in the Network instance, the first Unique Checkbox primary in alphabetical order displays. Use the **Select a Primary** list to review other primary address flags.

- **Address Rank 1** - Displays addresses that are ranked 1. This tab enables users to monitor the addresses that are ranked 1 over time.

Metadata

Clicking any of the version numbers on the **Primary** and **Rank 1** tabs displays a metadata tooltip with summary information about the change and a link to go to the Revision History page.

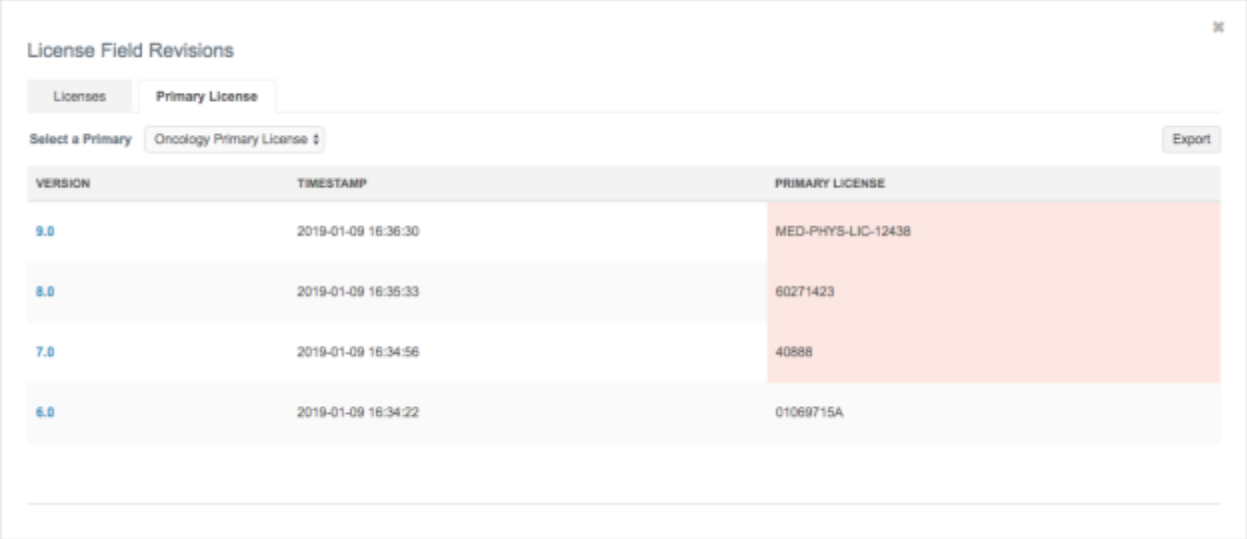
The data contained in the tooltip is specific to the source of the change.

Source Subscription	Data Change Requests
• Job ID • Subscription • Start Time • Duration	• Source • DCR ID • Creator • Approver • Requester Notes • Resolution Notes

Licenses

The **License Field Revisions** pop-up can contain two tabs:

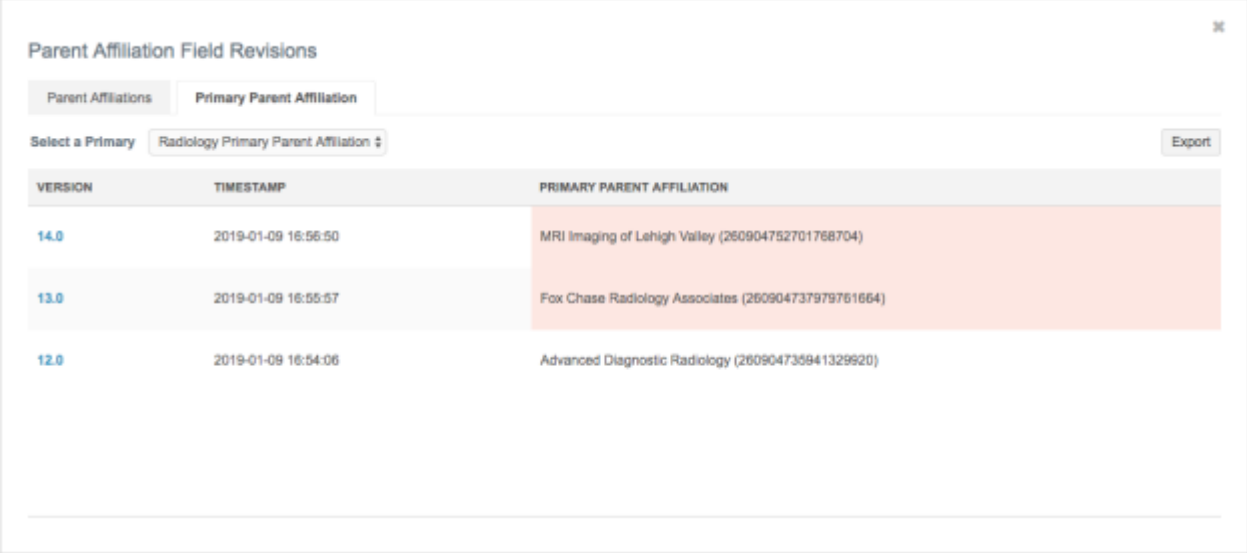
- **Licenses** - All of the license sub-objects on the record are listed. The licensing authority (US) or licensing body (EU) and the license number displays. Click a license number to review revisions for that individual license.
- **Primary License** - Displays if a Unique Checkbox Primary Type has been set up on the license sub-object in the Network instance. The first Unique Checkbox primary in alphabetical order displays. Expand the **Primary License** list to select and review other primary license flags.



Parent Affiliations

The **Parent Affiliation Field Revisions** pop-up can contain two tabs:

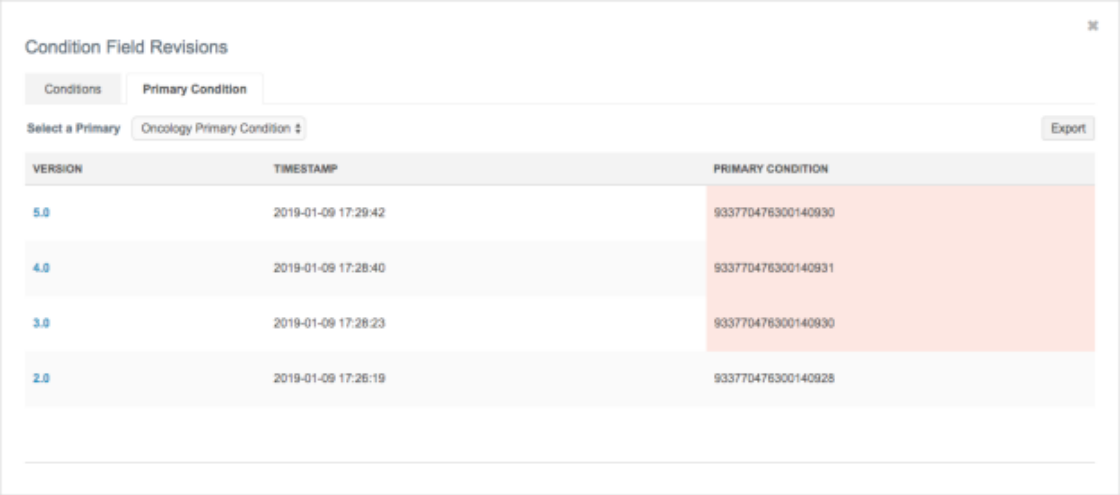
- **Parent Affiliations** - All of the parent affiliations on the record are listed. The relationship type and corporate name displays. Click the corporate name to review the revisions for that affiliation.
- **Primary Parent Affiliation** - Displays if a Primary Type (Network Calculated or Unique Checkbox) has been set up on the parent affiliation relationship object in the Network instance. Network Calculated primary displays by default. If a Network Calculated primary is not defined in the Network instance, the first Unique Checkbox primary in alphabetical order displays. Expand the **Primary Parent Affiliation** list to select and review other primary parent affiliation flags.



Custom sub-objects

Selecting a custom sub-object displays a pop-up with the following tabs:

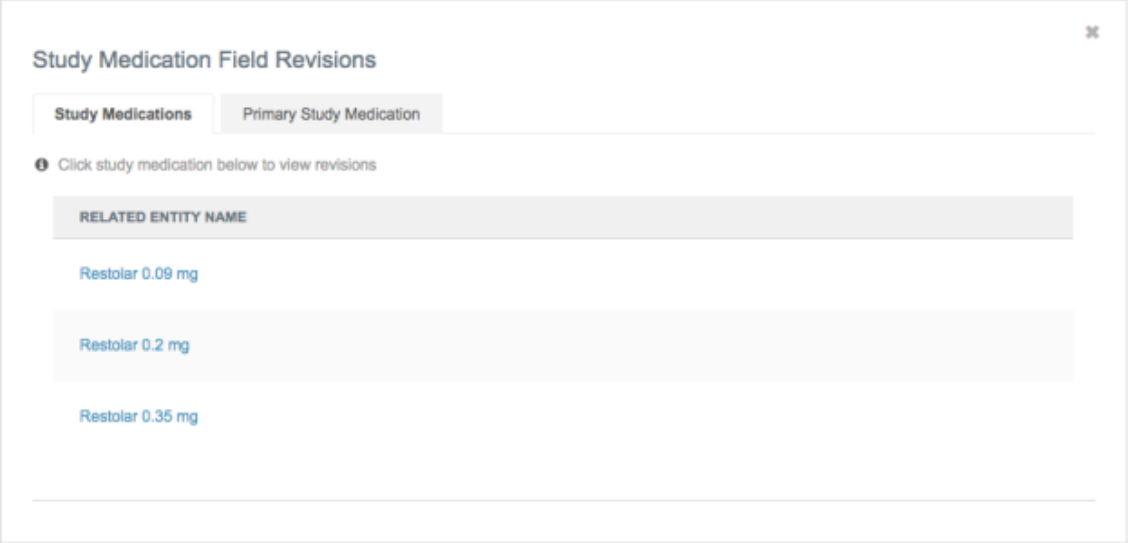
- **Custom sub-object name** - A list of Network entity IDs (VIDs) display; the VID displays because there is no name field for custom sub-objects. Click the VID to see the revisions for that individual sub-object.
- **Primary** - Displays if any Unique Checkbox primary fields have been created for the custom sub-object in the Network instance.



Custom relationship objects

Selecting a custom relationship object type displays a pop-up with the following tabs:

- **Custom relationship object name** - The name of the related object displays as a link. Click the name to see the revisions for that individual relationship object.
- **Primary**- Displays if a Unique Checkbox primary field has been created for the custom relationship object in the Network instance.



PROFILE LAYOUTS

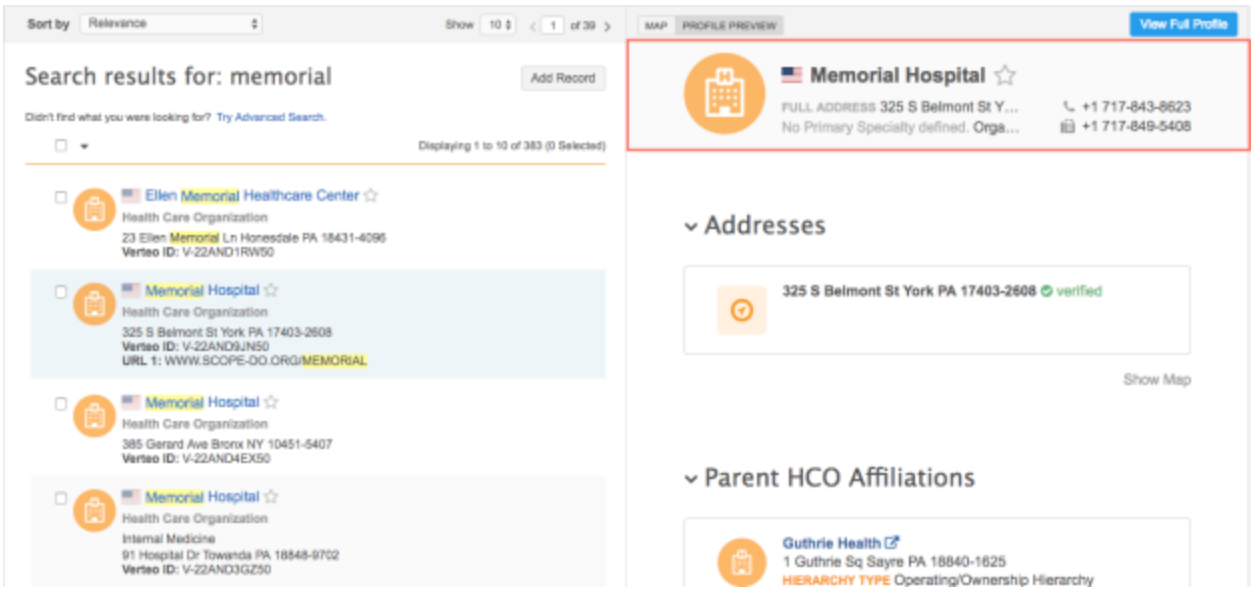
The profile layout for HCPs in New Zealand, **NZStandard**, has been updated to remove fields that Veeva OpenData does not use. The following medical degree fields have been removed:

- `medical_degree_1__v`
- `medical_degree_2__v`

NEW PROFILE PREVIEWS

The summary header now remains fixed at the top as you scroll through a profile preview using the new view. Profile previews are available for all users from the search results and in the profile layout configuration for administrations. Previously, when you previewed a profile using the new view, the header did not remain at the top. Now, the header collapses and remains fixed so that you can always see the summary information as you scroll through a record.

This enhancement is enabled by default in your Network instance.



Match

AD HOC MATCH

Several enhancements have been made to the ad hoc match feature to improve the usability of the match configuration and to allow administrators to view ad hoc match jobs created by other users in the Network instance.

The enhancements have been added so you can do the following actions:

- Match against the Veeva OpenData master instance (available when specific requirements are met).
- Choose the fields and the order they display in your exported ad hoc match file.
- Save the field export selections so you can use it for future ad hoc match jobs.
- Download the input file that you used for each match job.
- View all jobs for the users in your Network instance that share your data visibility profile (administrators only).

Most of these enhancements are enabled by default in your Network instance. The option to match against Veeva OpenData is available to customers that subscribe to all records for a country and must be enabled by Veeva Support.

Review the following sections for more details about these improvements.

Match a new file

Ad hoc match enables you to match an external file with data in Network. Depending on your match rules, the job can identify exact or high confidence matches that you can export and use for your business processes. Enhancements have been made to the ad hoc match configuration so you can choose and arrange the fields to export. An option to match against the Veeva OpenData master instance is also available if specific requirements are met.

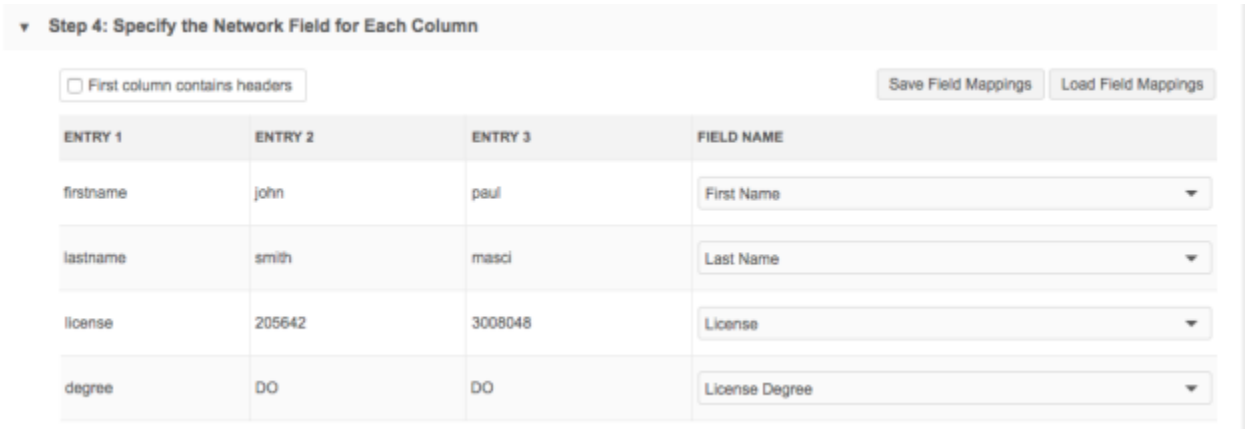
To match a file:

1. On the Network menu bar, click **Ad Hoc Match**.
2. Click **Match New File**.
3. In **Step 1**, select the type of object data in your file: HCPs or HCOs.
4. Expand the list in **Step 2** and select the country. The countries are listed alphabetically.

   An option to **Match against OpenData** might display. This option displays only when all of the following requirements are met:

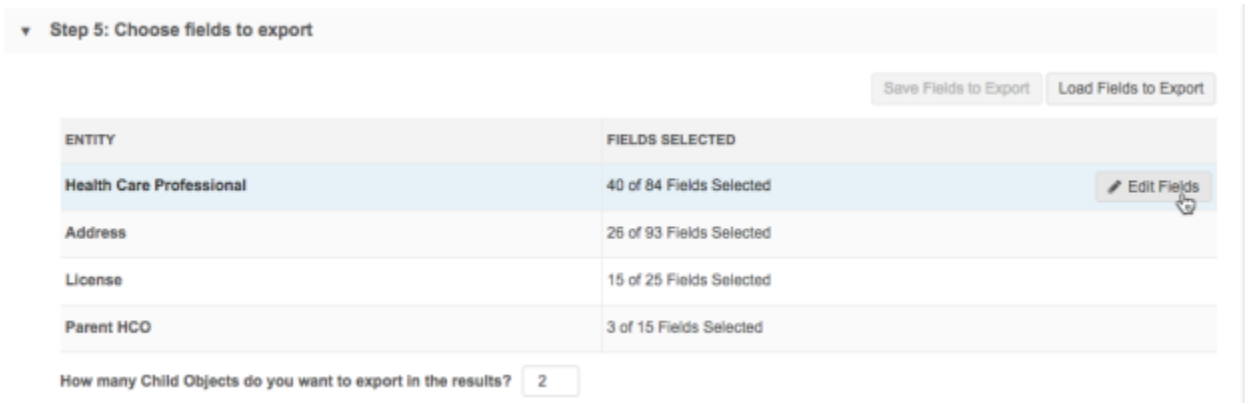
   a. You subscribe to Veeva OpenData for all records in that country. If you subscribe to only a sub-set of records in the country, this option is not available.
   b. The setting to ad hoc match against Veeva OpenData is enabled in your Network instance. Contact Veeva Support to enable the feature.
   c. The **Search OpenData** setting is enabled in the Admin console (**Settings > General Settings**) for your Network instance.
   d. In your data visibility profile, the **Ad Hoc Match** and **Ad Hoc Match Against OpenData** permissions are enabled.
5. In **Step 3**, first add a description of the file that you are uploading. The description displays on the Matched Files page and is helpful for identifying your match job. Now, upload your file. The file must be in .csv format.
6. After you upload the file, **Step 4** displays so you can map Network fields to the columns in your file.
   - If you have previously created ad hoc match jobs and have field mappings saved, click **Load Field Mappings** and select the mappings that you want to use for this job.
   - To create new mappings, use the **Field Name** list to select the field that maps to the data in each row.
   - To save the mappings from this job, click **Save Field Mappings**. In the **Save Field Mappings** dialog, you can overwrite existing mappings or create a new mapping.

   Select **First column contains headers** if you want the match job to ignore the data in **Entry 1**. This is helpful if the **Entry 1** column contains the headers from your external file. If this option is not selected, and the **Entry 1** column contains headers, the column is treated as data and won't match but it will not impact the job.



7. **Step 5** provides the new ability to select the fields that you want to export in the match file for each object type. You can also order the selected fields.

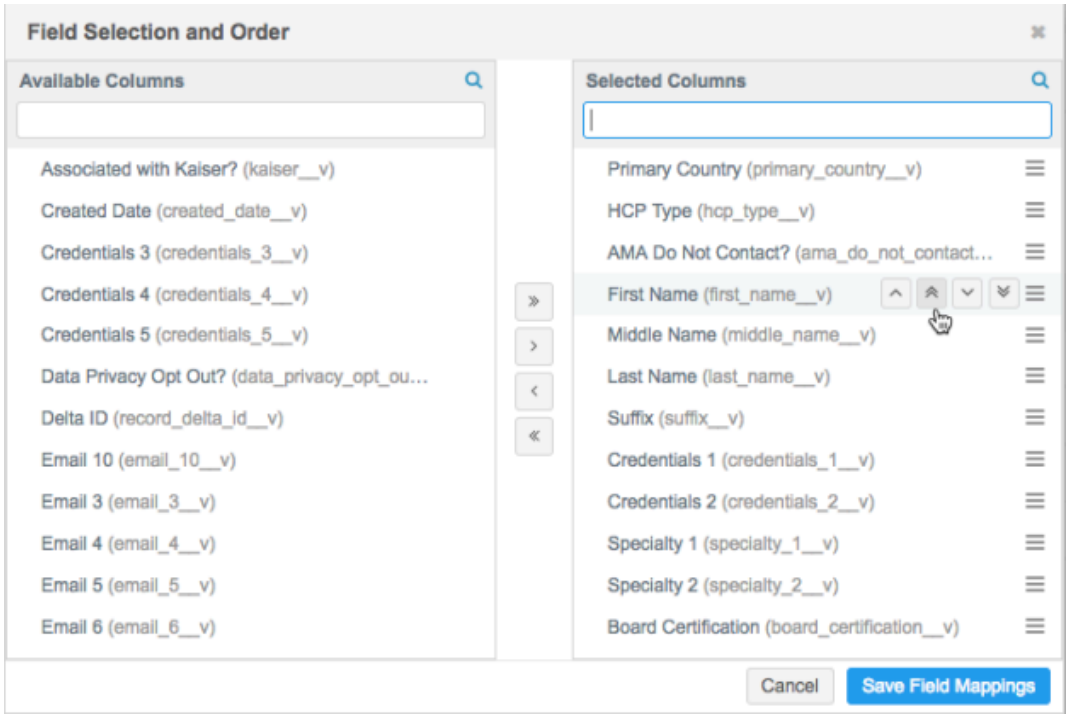
   All of the object types contained in your external file display in the table. The **Fields Selected** column displays the number of fields selected out of the total number of available fields for export.



   To select or update fields, highlight an object row to display the **Edit Fields** button. Click the button to display the **Field Selection and Order** dialog.

   The dialog contains the available fields and selected fields. Custom fields are included.

   - Move any fields between the **Available Columns** pane and the **Selected Columns** pane using the directional arrow buttons in the middle.
   - To reorder the fields in the Selected Columns pane, highlight a field to display the directional arrow buttons. Use the buttons to move the field into the desired position. You can also use the handle ☰ to move the field.



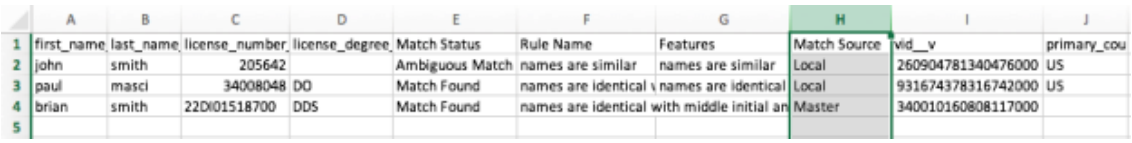
- Click **Save Field Mappings** to close the dialog.
- To save your field selections and ordering so you can use it for future ad hoc match jobs, click **Save Fields to Export**. In the dialog, you can choose to overwrite an existing configuration or create a new one. The next time you create an ad hoc match, you can load the saved field configuration using the **Load Fields to Export**.

To specify the number of each child object to export in the results, type the number in the field. By default, two objects for each object type are exported; for example, two addresses, two licenses, and two Parent HCOs will be exported. You can select a maximum of 15 objects for each object type; however, if there are only five objects, only five will be exported.

The objects for each type that are exported are determined by Network; for example, active objects will be exported before inactive objects.

8. Click **Start Matching** to run the ad hoc match job.
9. When the job completes, in the **Match Result** column on the Matched Files page, click the **Download Match** link to save the exported file to your local computer.

   The ad hoc match file contains the fields that you selected in the order that you defined. In addition, a new column, **Match Source**, indicates if the match is against a **Local** or **Master** (Veeva OpenData) record. Any matches that occurred within your Network instance are considered **Local**; this includes locally managed, Veeva OpenData managed, and third party master records. **Master** indicates matches with records that are in the Veeva OpenData master instance and have not yet been downloaded to your Network instance.



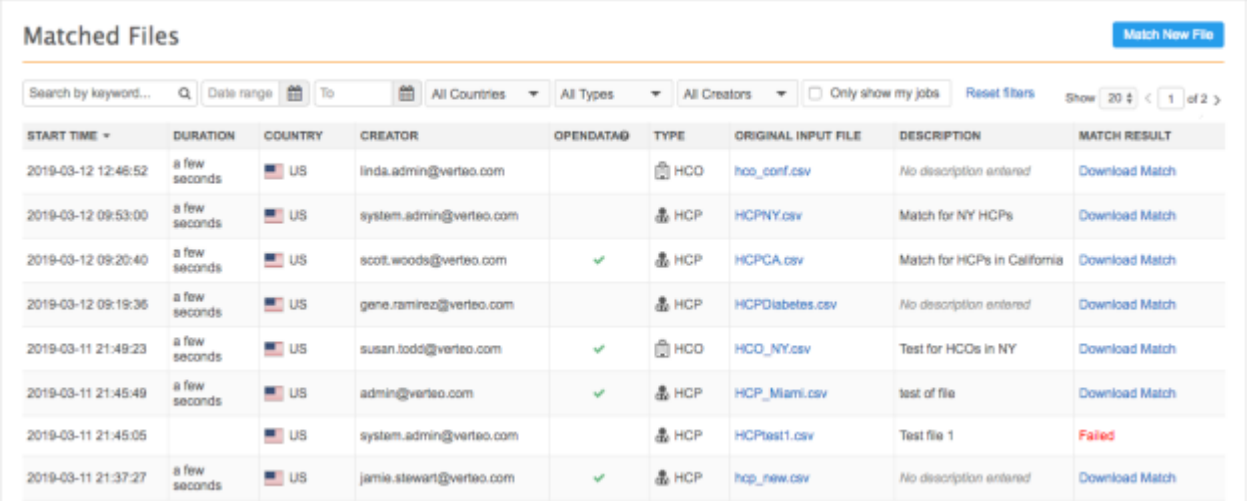
	A	B	C	D	E	F	G	H	I	J
1	first_name	last_name	license_number	license_degree	Match Status	Rule Name	Features	Match Source	vid__v	primary_cou
2	john	smith	205642		Ambiguous Match	names are similar	names are similar	Local	260904781340476000	US
3	paul	masci	34008048	DO	Match Found	names are identical	names are identical	Local	931674378316742000	US
4	brian	smith	22DI01518700	DDS	Match Found	names are identical	with middle initial an	Master	340010160808117000	
5										

View match jobs

The Matched Files page has been updated to include more information and to enable you to download the input file that you used for each match job. Administrators can now view the jobs for any users in their Network instance that share the same data visibility profile. This allows administrators to support users with their ad hoc match jobs.

The Matched Files table contains the following changes:

- **Country** - This column is added so you can easily find jobs that you created for specific countries.
- **Creator** - This column data was removed for all users, except administrators, because you can view only your own ad hoc match jobs anyway.
- **OpenData** - A green checkmark in this column indicates that you chose to match against the Veeva OpenData database during the match job. An empty column indicates that the option wasn't available, or wasn't used.
- **Original Input File** - The link in this column is the filename for the external data that you used in the ad hoc match job. Click the link to download the file to your local computer. This is helpful for investigating previous jobs.
- **Description** - This column previously contained the name of the input file if a description was not provided in the ad hoc match configuration. Now, the column will indicate either the description or "No description entered". Previous jobs will continue to show the filename.
- **Match Result** - Previously, this column was named **Match Progress**. The name more accurately reflects the data. Click the link to download the exported ad hoc match file to your local computer.



Filter matched files

Administrators can view ad hoc match jobs submitted by other users in the Network instance that share the same data visibility profile. This includes inactive users in case administrators need to investigate jobs by those users. If your data visibility profile changes and you can no longer view records for a country, the ad hoc match jobs for the country no longer display on the Matched Files page.

To easily find specific jobs, you can filter the table using the following methods:

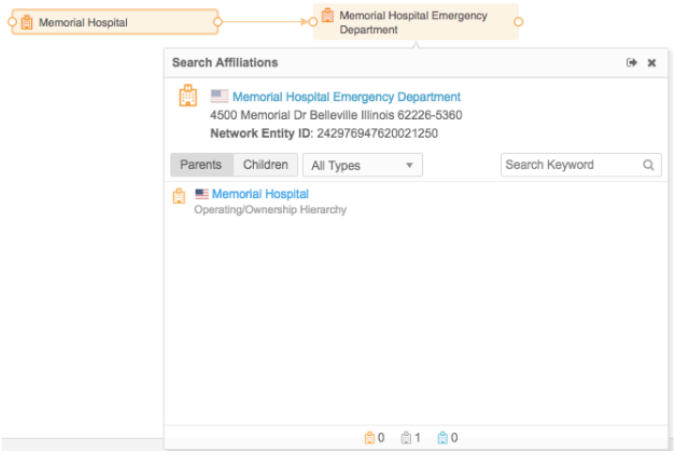
- **Search** - Find a job using a keyword; for example, search for a term in the filename. The search function applies to the jobs displayed on the current page only; 20 jobs display by default.
- **Date** - Define a data range. This filter applies to all of the jobs you have access to view.
- **Country** - Select a country in the list. The countries that you have access to through your data visibility profiles (DVPs) display by default. Changes to your DVP might alter the jobs that you can see in your list, but not the list seen by an administrator.
- **Type** - Filter the view for HCP or HCOs. Custom objects are not supported for ad hoc match. All types are listed by default.
- **Creators** - Filter the table by user. All creators are listed by default. (Administrators only)
- **My Jobs** - To view only the jobs that you have submitted, select **Only show my jobs**. (Administrators only).

Use the **Reset filters** link to return to the default view that displays all of the jobs available to you through your data visibility profile.

Network explorer

DRAGGING POP-UPS

You can now move the pop-ups that display when you view profiles or search for and view affiliations in Network Explorer. Data stewards and data managers can move around the pop-ups that display when they are editing affiliations or adding objects. This enhancement enables you to more easily view the canvas underneath the pop-up when you are reviewing affiliations. Previously, these pop-ups could only be docked to the right-side of the canvas.



When Network Explorer is in edit mode, data managers and data stewards can move around the following pop-ups:

- Add Affiliation
- Manage Affiliations
- Add Elements

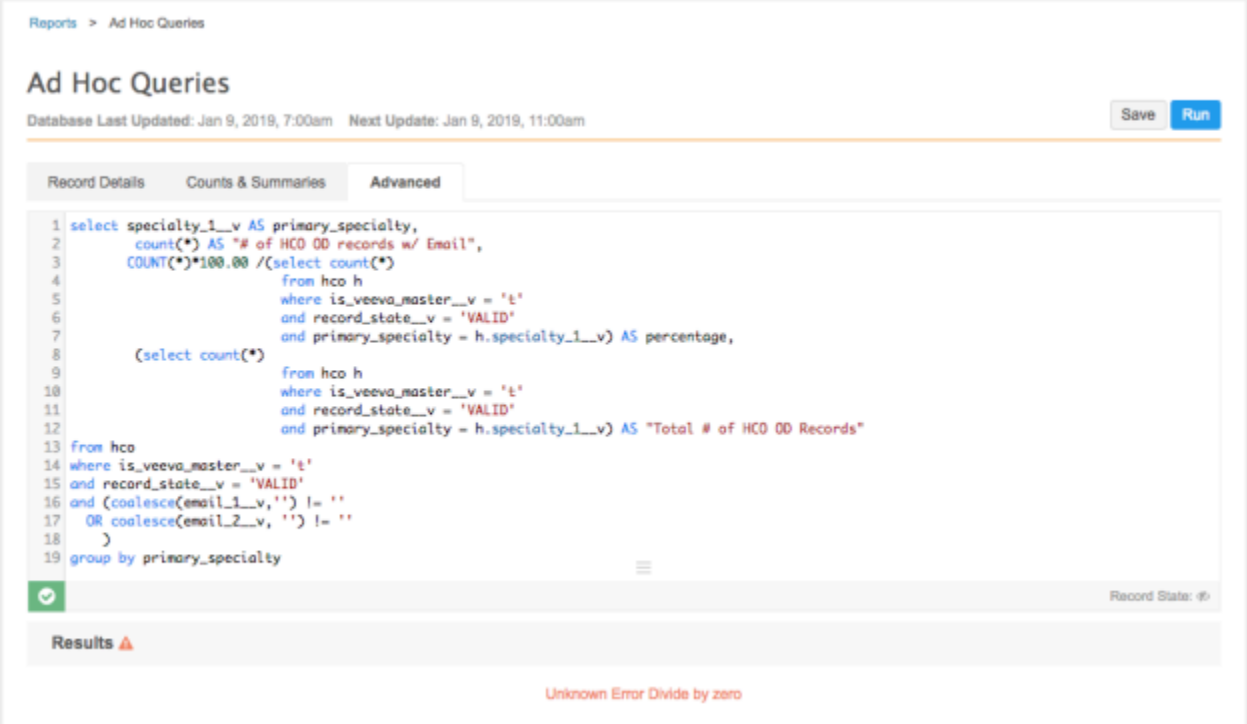
Reports

Error Messages Improved

Error messages for advanced ad hoc queries now display more detail to help users troubleshoot issues. Previously, a query could validate and run, but if an error occurred, the message **Unknown Error** would display. Now, the error message from the data warehouse also displays to provide more detail.

Example

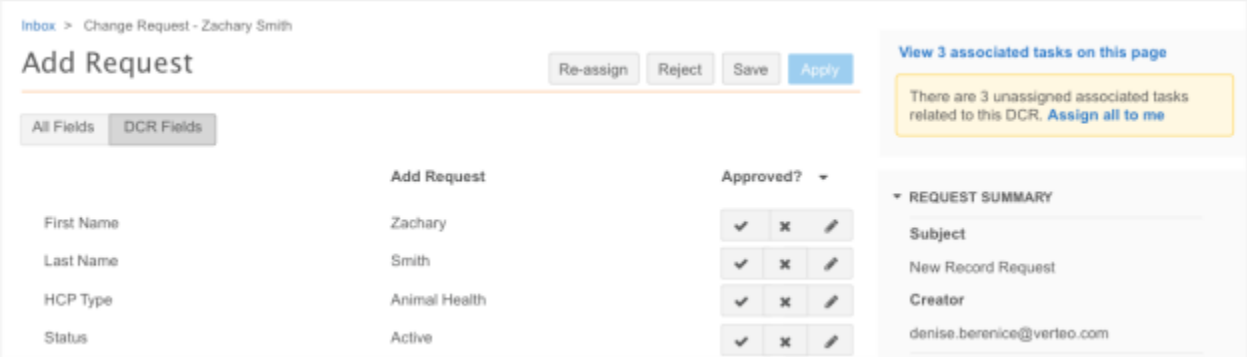
The following query validates and runs, but an error occurs because the query is trying to divide by zero. The **Unknown Error** message includes the error details from the data warehouse: **Divide by zero**.



Inbox

Associated Tasks

Associated tasks display on data change requests to alert data stewards and data managers that there are additional tasks for that object. DCRs have been updated to make it easier to see when there are multiple tasks for the same record and if they are assigned to another data steward. Previously, a link displayed at the top of the **Request Summary** to show a count of associated tasks. A highlighted box now displays below the link to provide task assignment information. This enables you to proactively assign those tasks to yourself or coordinate with the data stewards assigned to the other tasks to avoid making multiple calls to verify the data.



This enhancement is enabled in all Network instances by default.

Assign related tasks

The highlighted box below the count of associated tasks provides assignment information about those tasks.

- If all of the related tasks are unassigned, click **Assign all to me**. All of the tasks will be assigned you with a single click. Previously, you had to assign each task individually.
- If any or all of the related tasks are assigned to different data stewards, a message displays to remind you to coordinate with those stewards.
- If any of the tasks remain unassigned, click **Assign the unassigned tasks to me**.

When you are assigning related tasks to yourself, if another task is added to the queue in the process, a message displays to alert you that some tasks are still not assigned. Click **Assign all to me**. If another data steward claims the task before you click the link, a message displays so you are aware of the change. You can proceed to assign the task to yourself.

Considerations for In Queue tasks

For unverified records, only *Pending Review* tasks are available to view in the inbox. Any related tasks must be processed in order after the *Pending Review* task, so their status is *In Queue*. This enhancement does not impact this process. Only *Pending Review* tasks are considered as associated tasks.

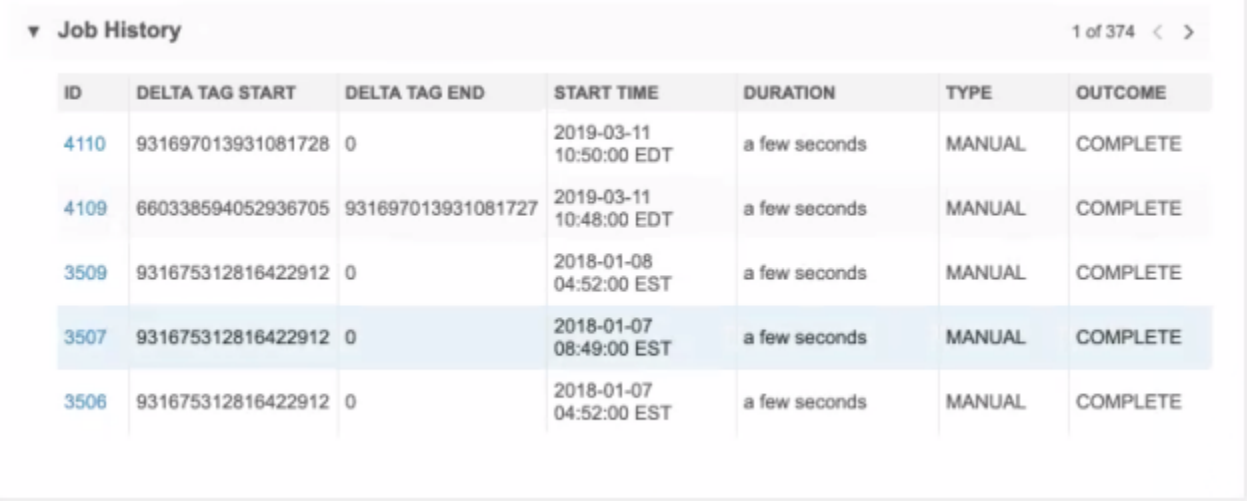
General updates

TIMEZONES

Several features in the Network UI have been updated to display timezones so users know exactly when events have occurred or will occur. This is particularly helpful for subscription jobs because multiple schedules can be set by users in different timezones.

The timezone that displays is based on the profile settings of the user viewing the time in the Network UI. To view your timezone setting, on the Network menu bar, click your user name and select **My Profile**. The timezone is defined in the **Settings** section.

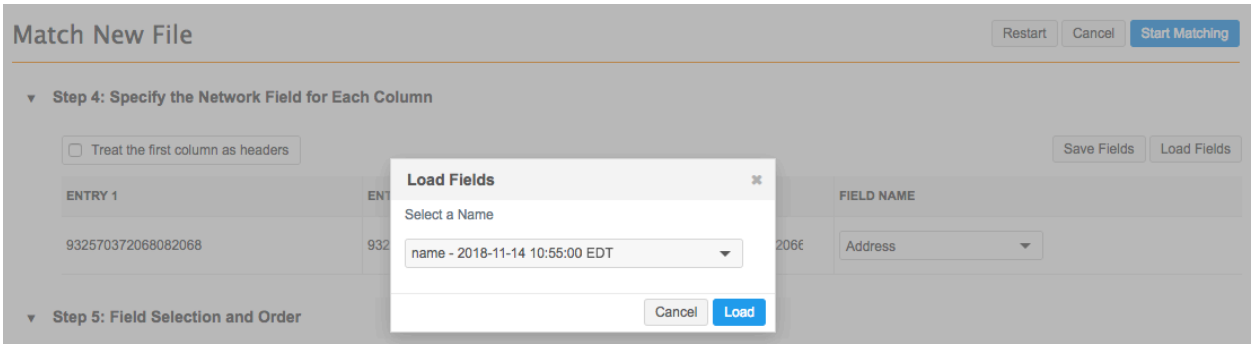
This enhancement is enabled by default in all Network instances.



View timezones

All users will notice that timezones display on these pages of the Network UI:

- **Ad Hoc Match** - Timezones will display in the following areas for ad hoc match:
  - The **Start Time** column on the Matched Files page.
  - The **Load Fields** dialog when you identify Network fields in Step 4 to match a file.



Administrators and data managers will notice timezones on the following pages in the Admin console:

- **Subscriptions** - Timezones display in the following areas for source, target, Veeva OpenData, and US Compliance subscriptions; data maintenance jobs; and Network Address Inheritance jobs:
  - The schedule in the **Schedule** section.
  - The **Start Time** column in the **Job History** section.
  - The **Start Time** field on the Job Details page.
- **General Settings** - The **Build Time** field.
- **Profile Layouts** - The **Created On** time for each custom layout.
- **Reference Aliases** - The **Last Updated Date** column.
- **Task Audit History** - The **Action Date** column.
- **Export Configurations** - The **Created At** and **Processed At** date for each export package.
- **Import Configurations** - The **Created At** and **Processed At** date for each import package.

BROWSER SUPPORT

Veeva Network is now supported for the Microsoft Edge web browser.

SECURITY FINGERPRINT UPDATE

In 18R3.1, a system upgrade was performed on Network that caused security fingerprints to change. As a result, an error message might occur when you attempt to re-connect to FTP.

Resolving the error requires updating/removing the fingerprint and then accepting the new fingerprint.

Fingerprints are typically unique for each host, so you might need to update it for both your production and sandbox instances if the target host name is different.

For more details or assistance, contact Veeva Support.

SSL CERTIFICATE UPDATE

The SSL certificate for `veevanetwork.com` is being updated in Network 18R3.1. The new certificate expires in 2021. Only customers who explicitly download and install certificates on any site caches or proxy servers must update their certificates.

The following certificates must be updated:

veevanetwork.com certificate

Installing this certificate covers all sandbox and production Network instances and `login.veevanetwork.com`.

```
-----BEGIN CERTIFICATE-----
 MIIG0TCCBbmgAwIBAgIQDPaR/LAAOzMMuFQkcylTNTANBgkqhkiG9w0BAQsFADBN
 MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMScwJQYDVQQDEx5E
 aWdpQ2VydCBTSEEyIFNlY3VyZSBTZXJ2ZXIgQ0EwHhcNMTkwMTEwMDAwMDAwWhcN
 MjEwMTE0MTIwMDAwWjCBijELMAkGA1UEBhMCVVMxEzARBgNVBAgTCkNhbGlmb3Ju
 aWExEzARBgNVBAcTClBsZWFzYW50b24xHDAaBgNVBAoTE1ZlZXZhIFN5c3RlbXMs
 IEluYy4xFjAUBgNVBAsTDVZlZXZhIE5ldHdvcmsxGzAZBgNVBAMMEioudmVldmFu
 ZXR3b3JrLmNvbTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAPkegJJS
 ygRI3A33EWB4nesIRw8/qB6vyyKICizpTNlZ9edMzYPdk7HoNKtrTQsxJyAbsP3h
 UE/qgZSp3nLdGsgIaEsNyBylqlF8NnPgyoFaVY0T1izUNrliQYKKHlJqNqvnXTZm
 QBmkf11ig7osJMIg39XOW7GOMmLzmdOkSdOIEQ9XOcmJIj8XQkvT4hdOm7rcwNW5
 oXf1nXzMJ2GXd/SDp9jsD0zreXrOD1HIWg5xvdeEx45iDXweAFPurNi42MkGKdva
 +BAAZuwReZYA4SZW3MIr+w0FrFhhlcvyCFl6zp6NdKmCESOL9RnesdMTRYMcfpfY
 xAxpU28RZ5OZbQ8CAwEAAaOCA20wggNpMB8GA1UdIwQYMBaAFA+AYRyCMWHVLyjn
 jUY4tCzhxtniMB0GA1UdDgQWBBRKej7wMduFUXrk81i3pN2OXAY+WjAvBgNVHREE
 KDAmghIqLnZlZXZhbmV0d29yay5jb22CEHZlZXZhbmV0d29yay5jb20wDgYDVR0P
 AQH/BAQDAgWgMB0GA1UdJQQWMBQGCCsGAQUFBwMBBggrBgEFBQcDAjBrBgNVHR8E
 ZDBiMC+gLaArhilodHRwOi8vY3JsMy5kaWdpY2VydC5jb20vc3NjYS1zaGEyLWc2
 LmNybDAvoC2gK4YpaHR0cDovL2NybDQuZGlnaWNlcnQuY29tL3NzY2Etc2hhMi1n
 Ni5jcmwwTAYDVR0gBEUwQzA3BglghkgBhv1sAQEwKjAoBggrBgEFBQcCARYcaHR0
 cHM6Ly93d3cuZGlnaWNlcnQuY29tL0NQUzAIBgZngQwBAgIwfAYIKwYBBQUHAQEE
 cDBuMCQGCCsGAQUFBzABhhhodHRwOi8vb2NzcC5kaWdpY2VydC5jb20wRgYIKwYB
 BQUHMAKGOmh0dHA6Ly9jYWNlcnRzLmRpZ2ljZXJ0LmNvbS9EaWdpQ2VydFNIQTJT
 ZWN1cmVTZXJ2ZXJDQS5jcnQwDAYDVR0TAQH/BAIwADCCAX4GCisGAQQB1nkCBAIE
```

```
ggFuBIIBagFoAHYA7ku9t3XOYLrhQmkfq+GeZqMPfl+wctiDAMR7iXqo/csAAAFo
OgtISgAABAMARzBFAiBK8j+y8mcKbWc8YQPZlJotBP//676W3saU4+SrEzdWugIh
AKNVMoLrblTMKyqepFxfqfbI5vahuKkGNbr1PtCnmyhBAHYAh3W/51l8+IxDmV+9
827/Vo1HVjb/SrVgwbTq/16ggw8AAAFoOgtJHgAABAMARzBFAiAMbqWU0aXIFQT1
ZUP/dtPYgdNc5ZeXQAjTL7HBbpUwBwIhAMuszMcWPA27wU9tbSnDnZeyo1FC9P36
sJ/uihP2TqTyAHYAb1N2rDHwMRnYmQCkURX/dxUcEdkCwQApBo2yCJo32RMAAAFo
OgtJpwAABAMARzBFAiBggx6Rq6w9s4mgdXJasnXxou6wRX0lgEnoqI9pkm1fogIh
AJCiutpq/uomWgPpJKq4Olwinji3Fw+AMHYZW1xJr1zNMA0GCSqGSIb3DQEBCwUA
A4IBAQDMCdxQhUPc6WtCIY2DuooVaqDsIR7C6+3Eh/9H9tmZE9YtCL0RJ3+Oa8wf
W1psaImqRKltJBx4Xlyo2qw5Y/xJrbHCQepfx77RUJpmOVX1mjD0lqxkYyU5TMJ/
wR7GSZvRI3hazBLux6Wd3egew0ElXhVaaxOoctUZK8Qg9xJNRJEokF3amZxvjAU9
mehzfUUeMawLRtxzJJ2JIzlWJw6ItCPblTHIOQRwRNYziS9uO1jHq/fSLNTEnmJs
K9xHD+G9p7Hw4k/Fz9icio1mOtQjCMJJq0ZlTieDohij/EtT4Xwb3fHvll9J7rKI
qFA5b/KCmma35FZ50O2hR4caD91e
-----END CERTIFICATE-----
```

Intermediate CA certificate cert

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

```
-----BEGIN CERTIFICATE-----
MIIElDCCA3ygAwIBAgIQAf2j627KdciIQ4tyS8+8kTANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMSAwHgYDVQQDExdEaWdpQ2VydCBHbG9iYWwgUm9vdCBD
QTAeFw0xMzAzMDgxMjAwMDBaFw0yMzAzMDgxMjAwMDBaME0xCzAJBgNVBAYTAlVT
MRUwEwYDVQQKEwxEaWdpQ2VydCBJbmMxJzAlBgNVBAMTHkRpZ2lDZXJ0IFNIQTIg
U2VjdXJlIFNlcnZlciBDQTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEB
ANyuWJBNwcQwFZA1W248ghX1LFy949v/cUP6ZCWA1O4Yok3wZtAKc24RmDYXZK83
nf36QYSvx6+M/hpzTc8zl5CilodTgyu5pnVILR1WN3vaMTIa16yrBvSqXUu3R0bd
KpPDkC55gIDvEwRqFDu1m5K+wgdlTvza/P96rtxcflUxDOg5B6TXvi/TC2rSsd9f
/ld0Uzs1gN2ujkSYs58O09rg1/RrKatEp0tYhG2SS4HD2nOLEpdIkARFdRrdNzGX
kujNVA075ME/OV4uuPNcfhCOhkEAjUVmR7ChZc6gqikJTvOX6+guqw9ypzAO+sf0
/RR3w6RbKFfCs/mC/bdFWJsCAwEAAaOCAVowggFWMBIGA1UdEwEB/wQIMAYBAf8C
AQAwDgYDVR0PAQH/BAQDAgGGMDQGCCsGAQUFBwEBBCgwJjAkBggrBgEFBQcwAYYY
aHR0cDovL29jc3AuZGlnaWNlcnQuY29tMHsGA1UdHwR0MHIwN6A1oDOGMWh0dHA6
Ly9jcmwzLmRpZ2ljZXJ0LmNvbS9EaWdpQ2VydEdsb2JhbFJvb3RDQS5jcmwwN6A1
oDOGMWh0dHA6Ly9jcmw0LmRpZ2ljZXJ0LmNvbS9EaWdpQ2VydEdsb2JhbFJvb3RD
QS5jcmwwPQYDVR0gBDYwNDAyBgRVHSAAMCowKAYIKwYBBQUHAgEWHGh0dHBzOi8v
d3d3LmRpZ2ljZXJ0LmNvbS9DUFMwHQYDVR0OBBYEFA+AYRyCMWHVLyjnjUY4tCzh
xtniMB8GA1UdIwQYMBaAFAPeUDVW0Uy7ZvCj4hsbw5eyPdFVMA0GCSqGSIb3DQEB
CwUAA4IBAQAjPt9L0jFCpbZ+QlwaRMxp0Wi0XUvgBCFsS+JtzLHgl4+mUwnNqipl
5TlPHoOlblyYoiQm5vuh7ZPHLgLGTUq/sELfeNqzqPlt/yGFUzZgTHbO7Djc1lGA
8MXW5dRNJ2Srm8c+cftIl7gzbckTB+6WohsYFfZcTEDts8Ls/3HB40f/1LkAtDdC
2iDJ6m6K7hQGrn2iWZiIqBtvLfTyyRRfJs8sjX7tN8Cp1Tm5gr8ZDOo0rwAhaPit
c+LJMto4JQtV05od8GiG7S5BNO98pVAdvzr508EIDObtHopYJeS4d60tbvVS3bR0
j6tJLp07kzQoH3jOlOrHvdPJbRzeXDLz
-----END CERTIFICATE-----
```

View or download the updated certificates

After the certificates are updated, they can be viewed and downloaded by running the following command:

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

Merge

MERGE INSTRUCTIONS FOR CHILD OBJECTS

Administrators can now define the behavior for each locally-managed child object when records are merged. Previously, the merge property for child objects was either on or off for all child objects, so if you wanted to retain parent HCOs but remove addresses and licenses, it wasn't possible. You can now add a new property to define merge instructions for a specific child object.

This enhancement can be used for merges in source subscriptions and suspect matches when the winning record is a Veeva OpenData record.

Merge properties

The existing and new merge properties for child objects are defined in the advanced mode in source subscriptions (**System Interfaces > Source Subscriptions**).

Existing property

`job.merge.allowCustomerOwnedChildren`

This property applies to all locally managed child objects. When the value is *True*, all locally managed child objects are retained on the winning master record.

New property

`job.merge.allowCustomerOwnedChildren.<CHILD>`

This new property enables you to define a specific child object to retain or remove from the winning master record.

Example: `"job.merge.allowCustomerOwnedChildren.ADDRESS": "false"`

When the property value is *false*, locally managed addresses will be dropped from the winning record.

This property supports Veeva standard child objects and custom sub-objects

Note: The child object name must be in uppercase format; for example, ADDRESS, PARENTHCO, LICENSE, CONDITION__C (custom sub-object).

Merge instruction order

The `job.merge.allowCustomerOwnedChildren.<CHILD>` property takes precedence over the `job.merge.allowCustomerOwnedChildren` property.

Review the following table to understand how the property values determine the child objects that will be retained or removed from the winning Veeva OpenData record.

Entity level setting (job.merge.allowCustomerOwnedChildren)	Child object setting (job.merge.allowCustomerOwnedChildren.CHILD)	Outcome for locally managed child object on winning OpenData record
True	ADDRESS = False LICENSE = True	Addresses - Not added Licenses - Added Parent HCOs - Added
False	ADDRESS = False LICENSE = True	Addresses - Not added Licenses - Added Parent HCOs - Not added
True	ADDRESS = False LICENSE = True PARENTHCO = False	Addresses - Not added Licenses - Added Parent HCOs - Not added
False	ADDRESS = False LICENSE = True PARENTHCO = True	Addresses - Not added Licenses - Added Parent HCOs - Added

Network merge_request subscriptions

The merge_request subscription is an internal subscription that is used by Network to processing merge requests done from the Network UI or through API calls. For this subscription, the default value is *True* for the following merge properties:

- `job.merge.allowCustomerOwnedChildren`
- `job.merge.allowCustomerOwnedChildren.<CHILD>`

The value is *False* for all other subscriptions.

To change the value for the merge_request subscriptions for these properties, contact Veeva Support.

CUSTOM MERGE RULES

Administrators can now define business logic for merge rules to ensure that field values are not lost or overwritten when two records are merged together. Previously, field values were not considered during record merges; the fields that were retained were determined either by source survivorship or the winning record. This caused some field values to be lost; particularly custom field values. Now, custom merge rules can be defined for the field for each object for a country. If rules are applied to fields, they override regular Network survivorship rules.

Custom merge rules can be applied to Veeva fields (__v) and custom fields (__c). Custom keys are not supported for merge rules.

This feature is enabled by default in all Network instances. Custom merge rules must be explicitly created for each object and country.

Subscriptions

Custom merge rules are automatically applied when records are merged during the following jobs:

- Suspect Match
- Unmerge - when combining 2 or more source records into a new record.
- OpenData subscription
- Bulk Merge
- Data deduplication
- Veeva OpenData takes ownership of record (under_review records and Send to OpenData requests).

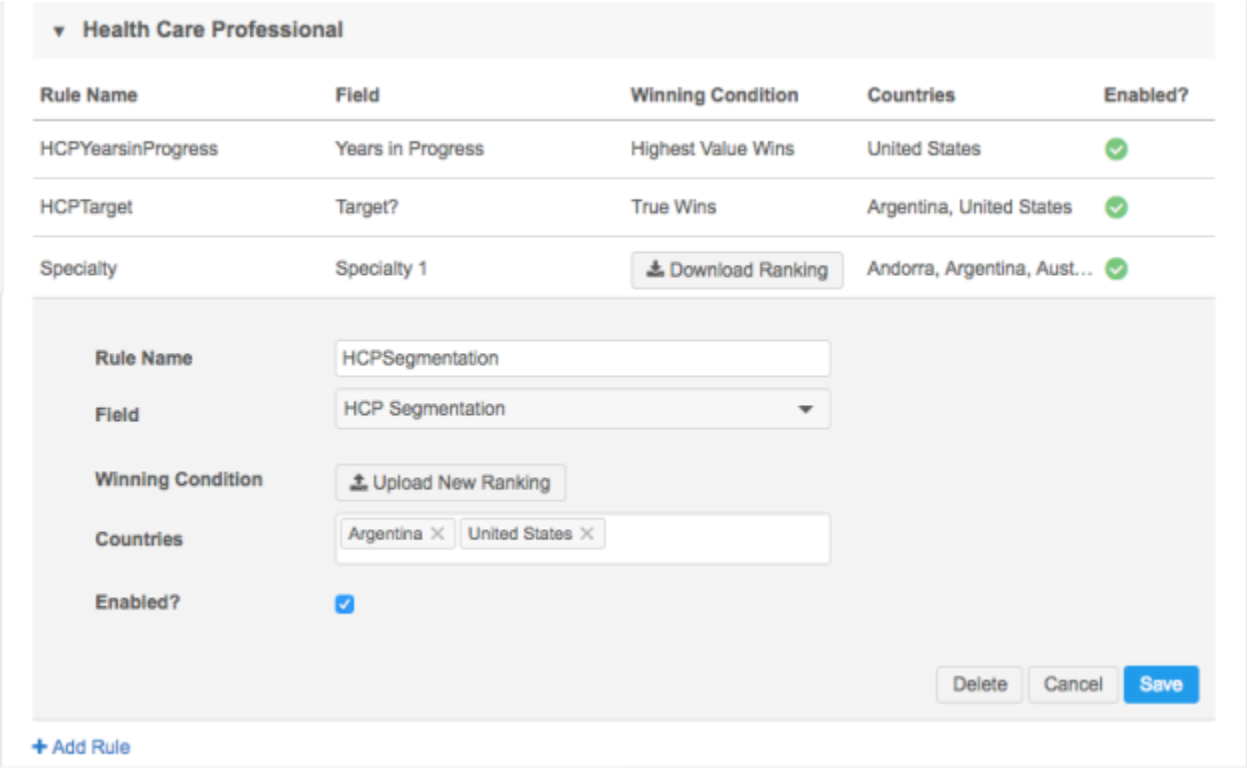
Custom merge rules are only applied to merging two or more records together. They are not applied to update jobs (for example, source subscription update jobs).

Create custom merge rules

Administrators and data managers can define merge rules for objects in their Network instance.

1. In the Admin console, click **Data Model > Custom Merge Rules**.

   The Custom Merge Rules page contains a section for each object type in your Network instance.
2. *Optional* - Expand the **Country** list to filter the page for a specific country.
3. In an object section (for example, License), click **+ Add Rule**.



4. In the **Rule Name** field, type an identifiable name for this merge rule.

   Name requirements:

   - Must be unique for each object; for example, Health Care Professional cannot have two rules with the same name.
   - Limited to 100 characters
   - Contains alphanumeric characters, hyphens (-) and underscores (_) only. Spaces are not permitted.

5. Expand the **Field** list and select the field that this rule applies to. The fields are filtered by the object type.

   Custom merge rules support the following field types:

   - Numbers (integers, decimals)
   - Date (Date, Date and Time)
   - Checkbox
   - Reference

6. The **Winning Condition** setting displays after the **Field** is selected. The condition is based on the field type. For example, if you choose `cholecap_target__c` (a checkbox field), the list displays the available options: **True Wins** or **False Wins**.

   Condition options

Field Type	Winning Condition Options
Integer/Decimal Number	Highest Value Wins / Lowest Value Wins
Date	Most Recent Wins / Oldest Value Wins
Checkbox (reference with Boolean Reference list)	True Wins / False Wins
Reference Fields	Upload the list of fields Rank the reference codes for survivorship and then upload the edited file back into Network.

7. Expand the **Countries** list and select all of the countries where this rule applies.

   The list contains all of the countries that the selected **Field** is enabled for; however, if the field is used for a country in another rule, that country removed from the list. This ensures that there is only one custom merge rule for a field for each country.

8. The **Enabled** field is selected by default. Clear the field if you do not want to use this rule yet.
9. **Save** your changes.

If the rule is enabled, the next time a merge action occurs, the field value survivorship will be defined by this rule.

Defining reference rankings

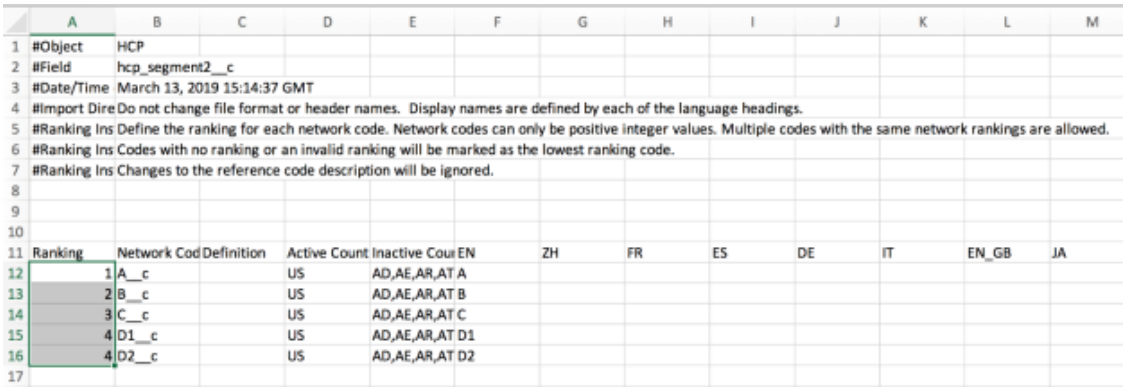
If you select a reference field type field for a custom merge rule, you can apply new rankings to the reference codes.

1. In the **Winning Condition** field, click **Upload New Ranking**.
2. In the **Update Reference Rankings** dialog, click **Download**. A .csv file is downloaded to your local computer; for example, *ReferenceRanking_HCP_hcp_segment2__v_2019_03_04_GMT.csv*.
3. Open the .csv file and update the **Ranking** column to specify survivorship for each reference code.

   Considerations for ranking values:

   - Ranking value can be a positive integer or blank.
   - Ties are allowed; multiple reference values can have the same ranking value.
   - Codes can have blank values. The ranking is treated as the lowest ranking.

   Example ranking file



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	#Object	HCP											
2	#Field	hcp_segment2__c											
3	#Date/Time	March 13, 2019 15:14:37 GMT											
4	#Import Dire	Do not change file format or header names. Display names are defined by each of the language headings.											
5	#Ranking Ins	Define the ranking for each network code. Network codes can only be positive integer values. Multiple codes with the same network rankings are allowed.											
6	#Ranking Ins	Codes with no ranking or an invalid ranking will be marked as the lowest ranking code.											
7	#Ranking Ins	Changes to the reference code description will be ignored.											
8													
9													
10													
11	Ranking	Network Cod	Definition	Active Count	Inactive Cou	EN	ZH	FR	ES	DE	IT	EN_GB	JA
12	1	A__c		US	AD,AE,AR,AT	A							
13	2	B__c		US	AD,AE,AR,AT	B							
14	3	C__c		US	AD,AE,AR,AT	C							
15	4	D1__c		US	AD,AE,AR,AT	D1							
16	4	D2__c		US	AD,AE,AR,AT	D2							
17													

4. In the **Update Reference Rankings** dialog, click **Upload**. Choose the updated file on your computer.
5. The **Winning Condition** field will update to display **New ranking uploaded successfully**.

After the custom merge rule is saved, the HCP segment field survivorship rule will run when HCP records are merged to preserve the requested field data on the winning record.

Field survivorship example

The rankings that were defined for the `hcp_segment2__v` field in the .csv file result in the following behavior after a merge.

Example	Losing Record	Winning Record	End Result
1	Segment A (Ranking:1)	Segment B (Ranking:2)	Segment A
2	Segment D1 (Ranking:4)	Segment C (Ranking:3)	Segment C
3	Segment C (Ranking:3)	Segment D1 (Ranking:4)	Segment C
4	Segment D1 (Ranking:4)	Null	Segment D1
5	Segment D2 (Ranking:4)	No Value	Segment D2

Tie breaker cases

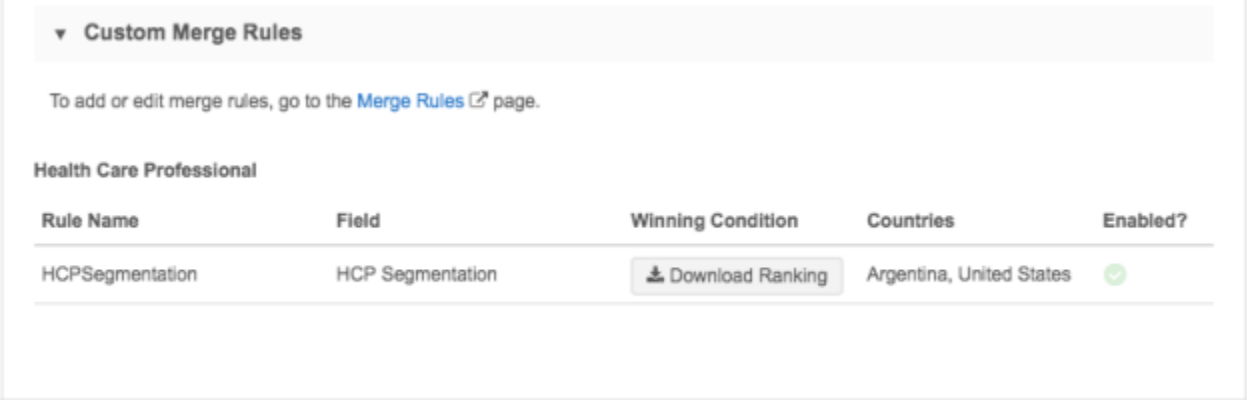
When a tie occurs between two reference code rankings, the winning value is retained from the record where the field was most recently updated.

Example	Losing Record	Winning Record	End Result
6	Segment D1 (Ranking:4) Last Modified: March 5, 2019	Segment D2 (Ranking:4) Last Modified: January 1, 2019	Segment D1
7	Segment D2 (Ranking:4) Last Modified: February 3, 2019	Segment D1 (Ranking:4) Last Modified: March 13, 2019	Segment D1

View custom merge rules from the data model

You can view the rules that you've applied to a field from that field's data model page.

A **Custom Merge Rules** section displays on each data model field page. If the field has been used in a rule, the associated object displays in the merge rule summary. To edit or add a rule, click the **Custom Merge Rules** link to navigate to go to that page.



Suspect match exceptions

When custom merge rules for fields are enabled, they override Network survivorship rules. However, when data stewards are processing suspect match tasks, they can determine which fields survive on the winning record for fields on the object level (HCP, HCO, and so on). In this case, data stewards can override the defined custom merge rules because they often have information outside of this logic that would help them determine field survivorship.

This applies to object fields only; data stewards cannot pick sub-object and relationship object fields. Also, suspect match tasks that are generated from the Source Dedupe option in source subscriptions do not allow data stewards to pick object field values.

Bulk merge considerations

Two subscription properties can be used for merging records in bulk using source subscriptions; `job.merge.allowSourceMerge` and `job.merge.mergeInstruction`.

Custom merge rules are applied differently depending on the properties that are defined.

- **Custom merge rules apply to all applicable fields (recommended)**

  Applies when the following properties are defined:

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

  and

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

  Inclusive merge means that all items (keys, sub-objects, fields) are considered for merging.

- **Custom merge rules apply to all applicable fields (recommended)**

  Applies when the following properties are defined:

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

  and

  `"job.merge.mergeInstruction": "ExclusiveMerge"`

  Exclusive merge means that the values on the winning record are always retained.

- **Custom merge rules apply to custom fields only**

  Applies when the following property is defined:

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

  If there is no merge instruction defined, merge applies to keys and custom fields only.

For more information about the bulk merge instructions, see the "Bulk merge" topic in the *Veeva Network Online Help*.

Merge survivorship comparison

Field value survivorship can depend on the object type, the type of merge job, and the merge instruction applied to the job.

Review these tables to understand how field value survivorship is determined when merge rules are applied, and not applied, for each merge situation.

Merging two Veeva OpenData records

	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins	Value from winning record retained. If no value on winning record, value from losing record retained.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained

Merging a locally managed record into a third party master record

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Merge a locally managed under_review record into a third party master record (DCR)				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.
Data Deduplication				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Source survivorship determines the winning value.	Third party master value wins.	Source survivorship determines the winning value.

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Suspect Match - No field picking (tasks that are generated from Source Dedupe)				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.
Suspect Match - Field picking allowed (objects only)				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule not applied. Field picked by data steward wins.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Field picked by data steward wins.	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.
Bulk Merge - No Merge Instruction (default)				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Source survivorship determines winning value.	Third party master value wins.	Source survivorship determines winning value.

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Bulk Merge - Inclusive Merge Instruction				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Source survivorship determines winning value.	Third party master value wins.	Source survivorship determines winning value.
Bulk Merge - Exclusive Merge Instruction				
	Third Party Master Field	Custom Fields	Third Party Master Field	Custom Fields
Fields with merge rules	Merge rule not applied. Third party master value wins.	Merge rule applied.	Merge rule not applied. Third party master value wins.	Merge rule applied.
Fields without merge rules	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Third party master value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.

Merging a locally managed record into a Veeva OpenData record

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Merging an under_review record into a Veeva OpenData record (DCR, Send to OpenData)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins	Value from winning record retained. If no value on winning record, value from losing record retained.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Data Deduplication				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.
Suspect Match - No Field Picking (tasks that are generated from Source Dedupe)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.
Suspect Match - Field Picking Allowed (objects only)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule not applied. Field picked by data steward wins.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins.	Field picked by data steward wins.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Bulk Merge - No Merge Instruction (default)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied
Fields without merge rules	Veeva OpenData value wins.	Source survivorship determines winning value.	Veeva OpenData value wins.	Source survivorship determines winning value.
Bulk Merge - Inclusive Merge Instruction				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins.	Source survivorship determines winning value.	Veeva OpenData value wins.	Source survivorship determines winning value.
Bulk Merge - Exclusive Merge Instruction				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.	Merge rule not applied. Veeva OpenData value wins.	Merge rule applied.
Fields without merge rules	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Veeva OpenData value wins.	Value from winning record retained. If no value on winning record, value from losing record retained.

Merging two locally managed records

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Bulk Merge - Inclusive Merge Instruction				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule applied	Merge rule applied	Merge rule applied	Merge rule applied
Fields without merge rules	Source survivorship determines winning value.	Source survivorship determines winning value.	Source survivorship determines winning value.	Source survivorship determines winning value.
Bulk Merge - Exclusive Merge Instruction				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule applied	Merge rule applied	Merge rule applied	Merge rule applied
Fields without merge rules	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.
Bulk Merge - No Merge Instruction (default)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Value is retained from the winning record, even if the value is null.	Merge rule applied	Merge rule not applied. Value is retained from the winning record, even if the value is null.	Merge rule applied
Fields without merge rules	Value is retained from the winning record, even if the value is null.	Source survivorship is applied.	Value is retained from the winning record, even if the value is null.	Source survivorship is applied.

Merge Job	Merge Logic for Objects (HCP, HCO, custom object)		Merge Logic for Sub-objects / Relationship Objects	
Suspect Match - Field Picking Allowed (object fields only)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule not applied. Field picked by data steward wins.	Merge rule not applied. Field picked by data steward wins.	Merge rule applied.	Merge rule applied.
Fields without merge rules	Field picked by data steward wins.	Field picked by data steward wins.	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.
Suspect Match - No Field Picking (tasks that are generated from Source Dedupe)				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule applied	Merge rule applied	Merge rule applied	Merge rule applied
Fields without merge rules	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.	Value from winning record retained. If no value on winning record, value from losing record retained.
Data Deduplication				
	Veeva fields	Custom Fields	Veeva Fields	Custom Fields
Fields with merge rules	Merge rule applied.	Merge rule applied.	Merge rule not applied.	Merge rule applied.
Fields without merge rules	Source survivorship determines winning value.	Source survivorship determines winning value.	Source survivorship determines winning value.	Source survivorship determines winning value.

Managing configurations

You can export custom merge rules so you can import them to a target environment. Custom merge rules for custom object fields are not supported for configuration packages.

For more information about creating export packages and importing them to another environment, see the "Managing configurations" topic in the *Veeva Network Online Help*.

Custom objects

MANAGING CONFIGURATIONS

Administrators and data managers can now include custom objects in configuration packages. This enables administrators to test a custom data model in their sandbox environment and then create an export package that includes the custom objects so they can be imported to a production environment.

This enhancement is available by default for custom objects that are enabled in your Network instance.

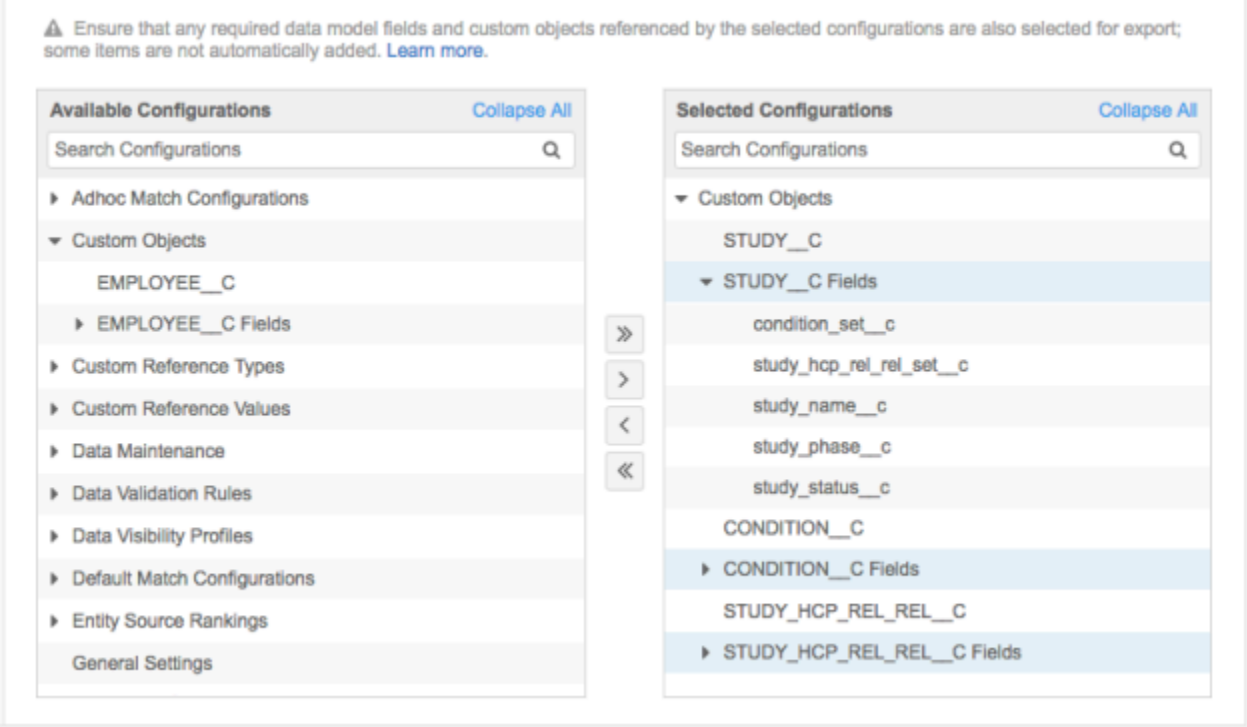
Exporting configurations

To create an export package that includes custom objects:

1. In the Admin console, click **Settings > Configuration Export**.
2. Click **Create Export Package**.

   You can also click Ad Hoc Download to create a JSON file for the custom object configurations. This is helpful if you want to compare the configurations of several instances to ensure that they are consistent. Use a third party diff tool to do the comparison.
3. Type a **Name** and **Description** for this package.
4. In the **Target Environment**, choose the Network instance that this package will be imported to. The list is pre-populated with environments on the same domain.
5. In the **Available Configurations** pane, expand the **Custom Objects** section and move the custom object to the **Selected Configurations** pane. If you want to move all of the custom objects in your Network instance, select the **Custom Objects** heading and move it to the **Selected Configurations** pane - all of the configurations in that section will move over.

Note: Veeva standard fields and objects are located under the **Network Data Model** node now. Previously, all standard and custom fields and objects were located under the **Custom and Veeva Fields** node. All Network instances are updated with this new structure. If you do not have custom objects in your Network instance, the **Custom Objects** section does not display. The JSON file format for Ad Hoc Downloads is also updated to reflect this change.



6. Add dependencies to the export package.

   Dependent custom object fields

   In the **Custom Objects** section, each custom object has the following configurations:

   - **<*name*>__C**
   - **<*name*>__C Fields**

   The **<*name*>__C Fields** configuration contains any custom fields that you created for that custom object. Move the **<*name*>__C Fields** configuration, or expand the configuration and select individual fields to move into the **Selected Configurations** pane.

   For example, if you want to export the STUDY custom object to a target environment. Select the **STUDY__C** configuration and any required fields from the **STUDY__C Fields** configuration and move them into the **Selected Configurations** pane.

   Dependent custom objects

   For custom object types, dependencies are automatically added to the export package. For example, a custom sub-object cannot exist without its linked custom object, so the custom object will be automatically added to the export package. Similarly, a custom relationship object cannot exist without the linking custom objects.

Dependent features

If you include other feature configurations in the export package, custom object dependencies are not automatically included. For example, if you created a new profile layout for the STUDY custom object and you are exporting the layout to a target environment, ensure that the STUDY custom object is included in the package, or already exists in the target environment. The custom object is not automatically added to the package.

See the "Dependencies in export packages" section to understand the dependencies that need to be manually added to the package.

7. When you have finished selecting the configurations for the package, click **Export**.
8. On the **Confirm Export** dialog, ensure that the target environment is correct. Click **Proceed**.
9. Review the details in the **Export Transferred** dialog. Click **Done**.

The export package can be imported to the target environment.

Dependencies in export packages

When you create an export package, moving a custom object type to the **Selected Configurations** pane also automatically moves its dependencies with other custom objects. However, if you add other feature configurations to the export package, dependent custom object types and fields are not automatically included.

These feature configurations do not export the following dependencies:

Configuration Object	Dependencies that must be manually added to the export package
Ad-hoc Match Configurations	Custom fields, custom objects, custom sub-objects, custom relationship objects
Data Maintenance Jobs	Custom fields, custom objects, custom sub-objects, custom relationship objects
Data Validation Rules	Custom fields, custom objects, custom sub-objects, custom relationship objects
Data Visibility Profiles	Page layouts
Default Match Configuration	Custom fields, custom objects, custom sub-objects, custom relationship objects
Inbox Task Groups	Custom reference values
Network Address Inheritance	Custom fields, custom reference values
Profile Layouts	Custom fields, custom objects, custom sub-objects, custom relationship objects
Source subscriptions	Custom fields, custom objects, custom sub-objects, custom relationship objects
Target subscriptions	Custom fields, custom objects, custom sub-objects, custom relationship objects

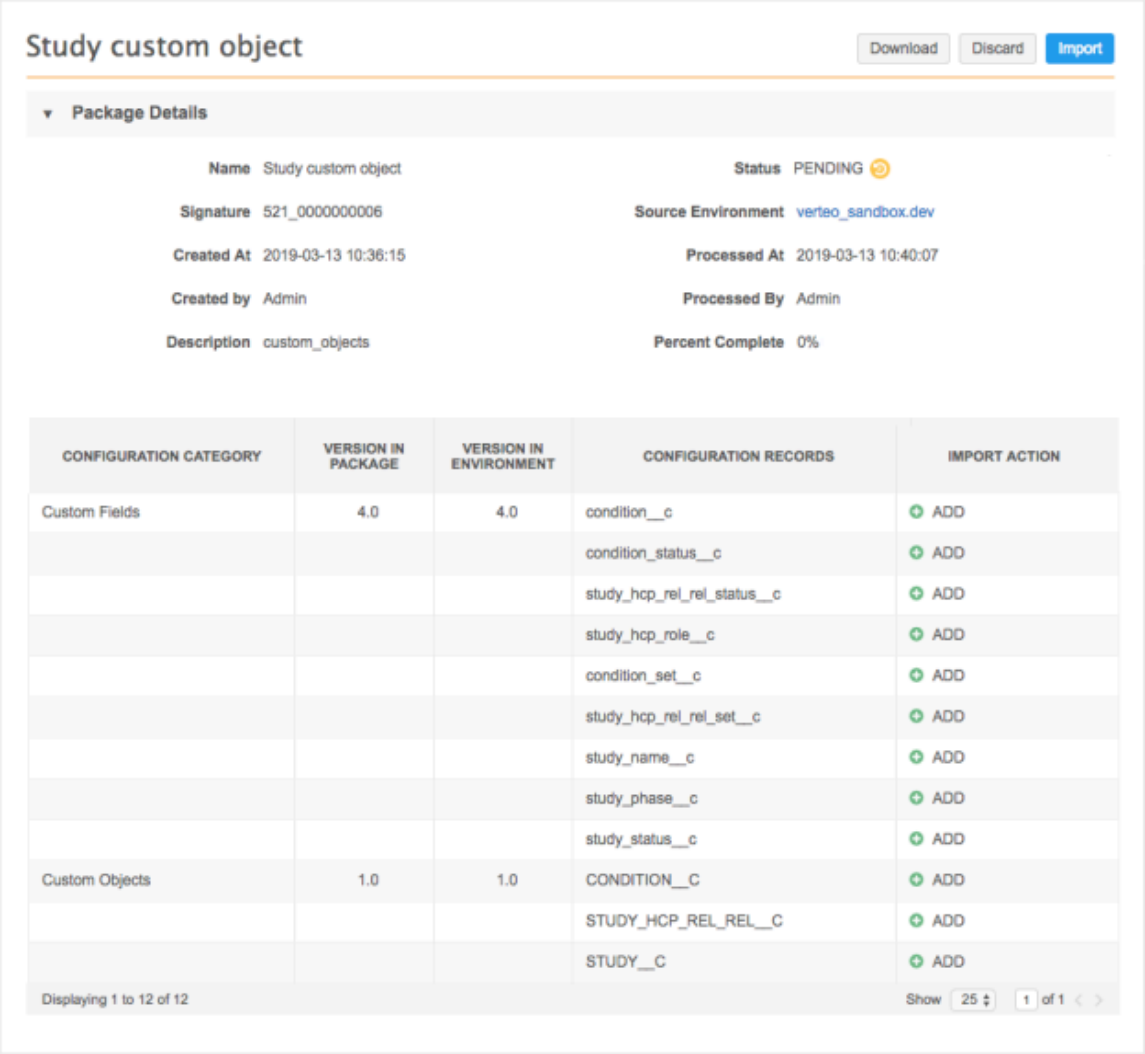
Importing configuration packages

Import the package containing the custom objects on the target environment.

To import a package:

1. In the Admin console, click **Settings > Configuration Import**.
2. Select a package that is in **Pending** state. The configurations that were included in the package display in the table in the following categories:
    - Custom Objects - All of the custom object types (objects, sub-objects, and relationship objects).
    - Custom Fields- All custom fields associated to the custom objects.
    - Network Data Model - All Veeva standard fields and custom fields on Veeva objects, grouped by Veeva object.

    All of the standard Network configurations are listed by name in the table; for example, Data Maintenance, Data Validation Rules, and so on.



3. Click **Import**.
4. In the **Confirm Import** dialog, click **Proceed**.

   When the package is being processed, the **Status** field updates to **Active**. You can monitor the progress using the **Percent Complete** field. Refresh the page to update this field; it does not automatically refresh. You can navigate to other pages in the Network UI when the package is processing.

   When the package is imported, the **Status** updates to **Completed**.
5. Review the **Import Action** column in the configuration table to ensure that the custom objects imported successfully.

Imported custom objects will now display in your Custom Object Data Model.

Considerations for pending packages

If you have older packages that are pending for import, they may no longer be valid. To support custom objects, the Feature Version for Network data model objects and fields has changed. The version in the package and the version in your target environment must be the same for the package to successfully import.

For more information about feature versions, see the "View exported configuration records" topic in the *Veeva Network Online Help*.

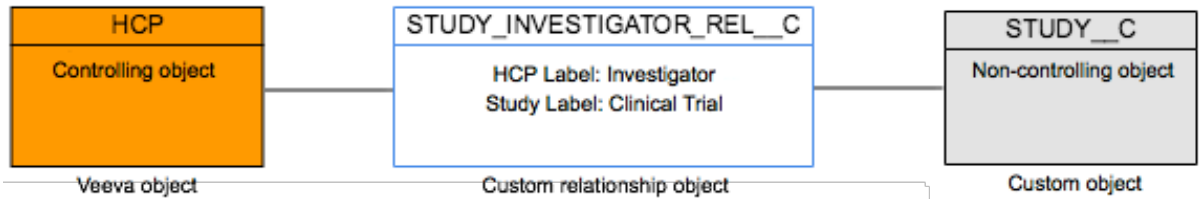
VIEWING RELATED OBJECTS

You can now view relationships on the non-controlling object's profile page. Previously, relationships could only be viewed from the controlling object's profile page. Administrators and data managers can add the relationship to the non-controlling object's profile using the profile layout editor.

Example relationship

Custom relationship objects link related objects; for example, STUDIES and HCPs. Within the relationship, one of the objects is defined as the controlling object and the other is the non-controlling object. In this example, the STUDY custom object and the standard HCP object are linked using the STUDY INVESTIGATOR custom relationship object.

We'll configure the STUDY profile layout to add the STUDY INVESTIGATOR relationship object. This will allow users to view the related Investigators (HCPs) from a STUDY profile.



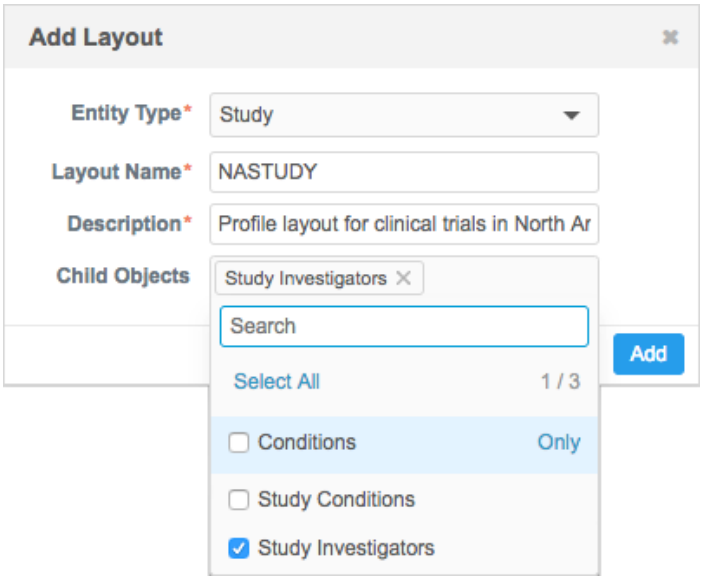
On the STUDY profile, HCPs are referred to as "Investigators". This label was defined when the STUDY INVESTIGATOR custom relationship object was configured. Similarly, when users view STUDIES on an HCP profile, STUDIES are referred to as "Clinical Trials".

For more information about object labels on custom relationship objects, see the topic called "Enabling custom objects" in the *Veeva Network Online Help*.

Configure the profile layout

Relationship objects can be applied to profile pages for controlling and non-controlling objects using their profile layout.

When you add a profile layout (**Data Model > Profile Layout**), relationship objects are available to choose in the **Child Objects** section. For this example, the relationship object called Study Investigators is added to the STUDY (non-controlling) object's profile layout.



A new section on the STUDY profile will be created for the STUDY INVESTIGATOR relationship object.

Default fields

The following fields are added to the relationship object section by default:

- Controlling object name - The name is the label defined in the custom relationship object configuration. In this example, the HCP label is "Investigator".
- Status - The status of the custom relationship.
- Entity Type - The entity type of the controlling object. In this example, the entity type is Health Care Professional.
- Custom fields - Includes any custom fields created on the custom relationship object.
- Custom Keys - Identifiers assigned to the custom relationship object.

Summary fields

Summary fields display on the custom relationship object's summary card on the profile page. By default, the following fields are defined as summary fields:

- Controlling object name
- Entity Type

You can manage summary fields by editing the field on the profile layout. In the **Edit Field** dialog, select or clear the **Is Summary Field?** checkbox.

For more information about adding or removing fields and defining summary fields, see the topic called "Configuring profile layouts" in the *Veeva Network Online Help*.

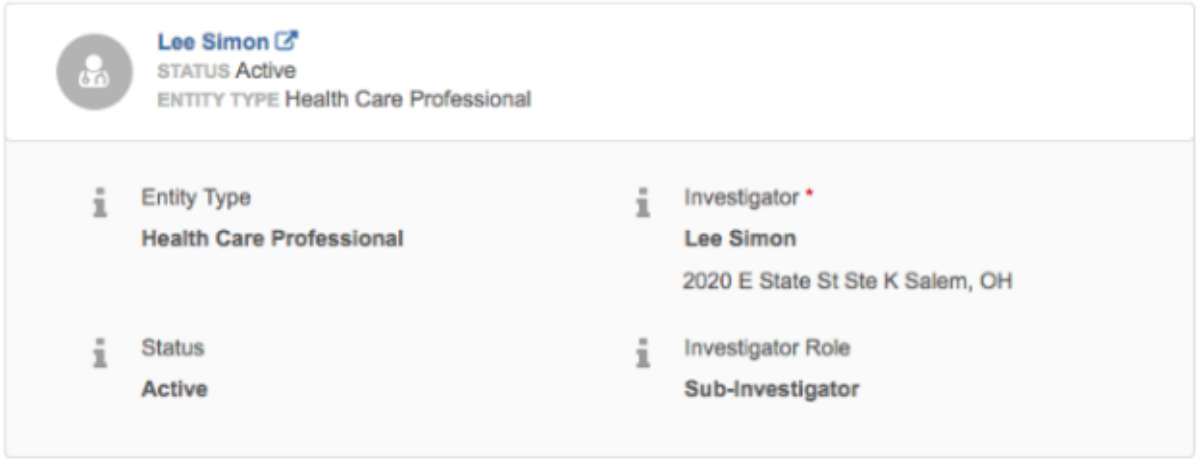
View relationship on non-controlling object profiles

After the controlling object has been added to the non-controlling object's profile layout, you can now view the relationship on the profile page of the non-controlling object. The relationship is read-only on the non-controlling object's profile; new relationships must be added from the controlling object's profile.

In this example, you can view related Investigators on the STUDY custom object profile.

On each Investigator summary card, the icon indicates the related object type, in this example, HCPs. The color of the icon indicates ownership of that record. Records managed by Veeva OpenData have orange icons. Locally managed records have gray icons (or green in China) and third party managed records have blue icons. The summary fields that were defined in the profile layout also display on the summary card.

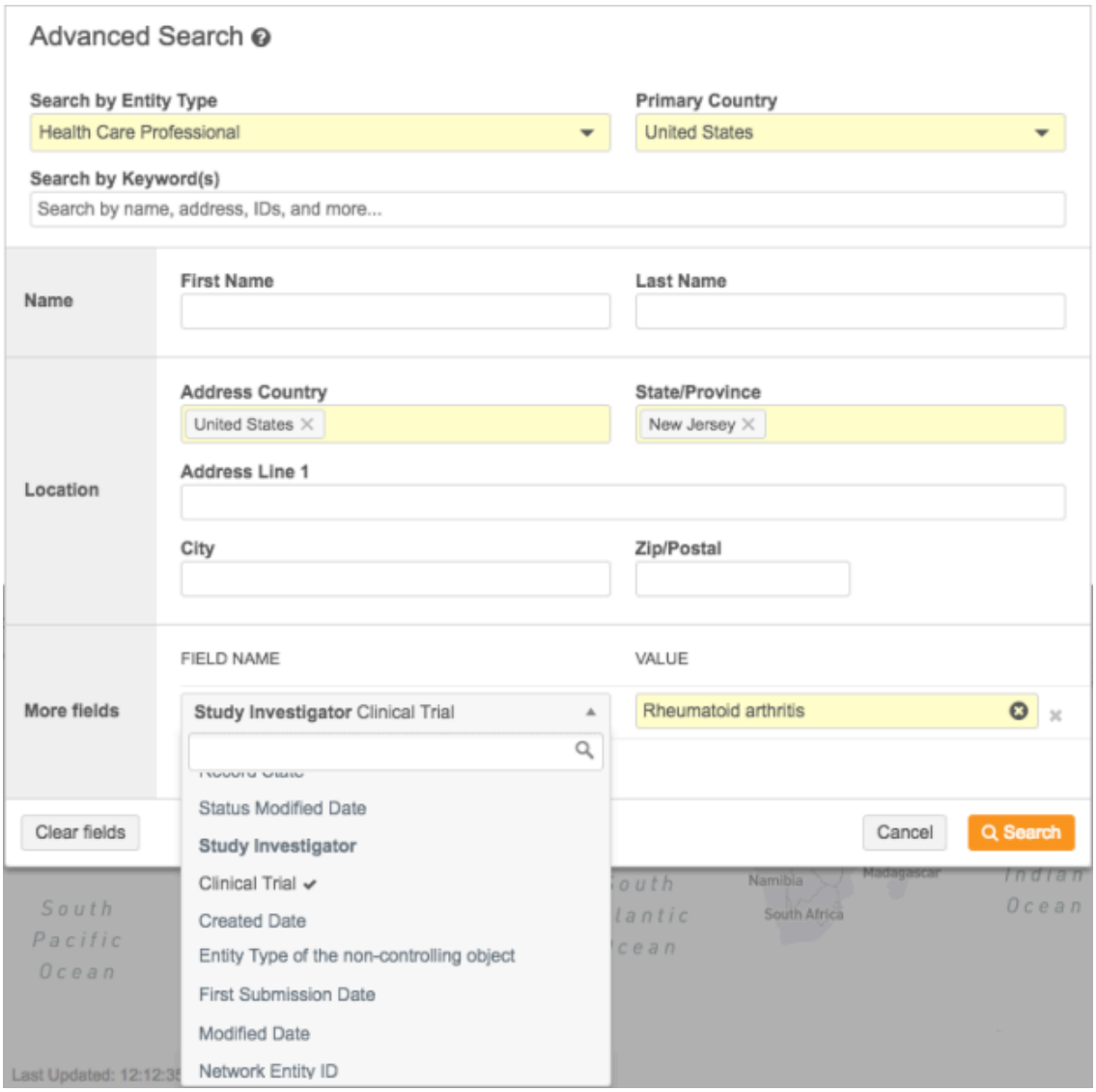
Click the summary card to expand it for more details.



SEARCHING FOR RELATED OBJECTS

You can now use the Advanced Search form to search on a name from the related object in a relationship. When you search by entity type, the **More fields** list now contains the custom relationship objects and related object. For example, you might need to find HCPs that participated in a study related to rheumatoid arthritis. Because HCPs and the custom object called STUDY are linked in a custom relationship object, if you search by the HCP entity type, the custom relationship object will display in the **More fields** list and you can select the related object. Previously, related object names in a relationship could not be queried.

This enhancement is enabled by default if custom objects are enabled in your Network instance.



In the example above, we want to find HCPs that have participated in rheumatoid arthritis studies in New Jersey.

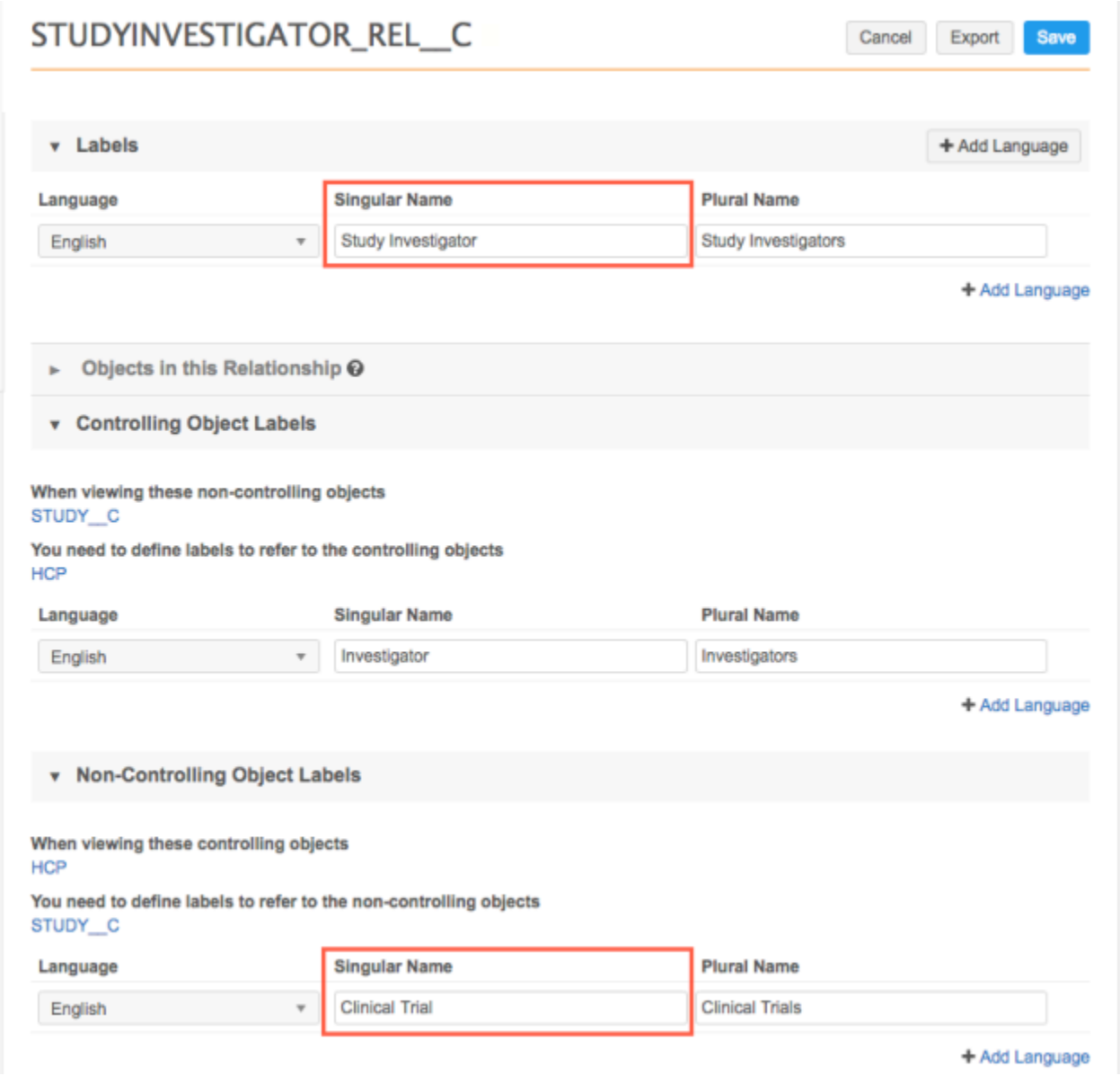
Note: The entity type that you search by must be the controlling object.

Understanding custom relationship objects

Objects (Veeva and custom) can be linked by a custom relationship object. In each relationship, one of the objects is defined as the controlling object (meaning that users with access to the controlling object, through their data visibility profile, can also access the non-controlling objects). The controlling and non-controlling objects are defined when the custom relationship object is created in your Network instance by Veeva Support.

When the custom relationship object is configured in your Network instance, administrators define labels for the controlling and non-controlling objects so the name makes sense when you are viewing it from the related object.

In the example below, for the HCP (controlling object), the STUDY custom object (non-controlling) is given the label "Clinical Trial" - a more appropriate name than "Study" in the context of an HCP. So when you use the advanced form to search for HCPs that participated in a specific study, in the **More fields** list, “Clinical Trial” is listed below the custom relationship object.



Perform a search

To search for the name of a related object:

1. In the advanced search form, expand the **Search by Entity Type** list and select an object; for example, Health Care Professional (HCP). The object must be the controlling object in the relationship.
2. In the **More fields** section, click **+ Add Search Fields**.
3. Expand the **Field Name** list and find the relationship object name; for example, Study Investigator.
4. From the list under the relationship object, select the label (name) that the controlling object uses to refer to the non-controlling object. For example, for HCPs, the STUDY custom object is called *Clinical Trial*.
5. In the **Value** field, type the name of the object. This search supports fuzzy search, so the exact name is not required.
6. Add any other field values to help narrow your search; for example, **State**, **City** and so on.
7. Click **Search**.

The search results page will display the objects that match your query.

Examples for supported relationship patterns

Using custom relationship objects, several modeling patterns are supported in the custom objects data model. Review the following examples to understand how you can search for the name of a related object.

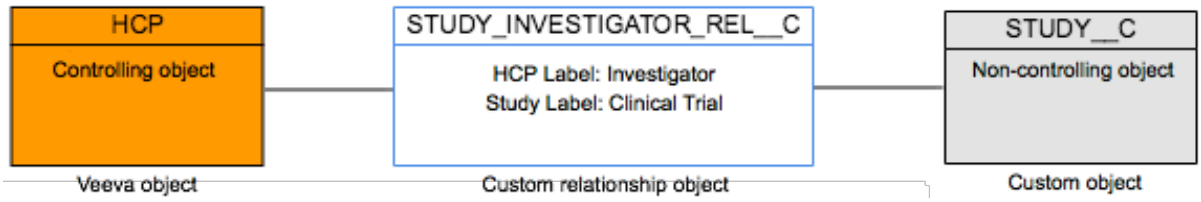
Many-to-many relationships

The HCP and STUDY example is a many-to-many relationship. HCPs can participate in multiple studies, and studies can include multiple HCPs. Support for the related name depends on which object is defined as the controlling object in the relationship:

- To search for HCPs that participated in specific studies, HCPs must be the controlling object.
- To search for studies that included specific HCPs, STUDY must be the controlling object.

Example

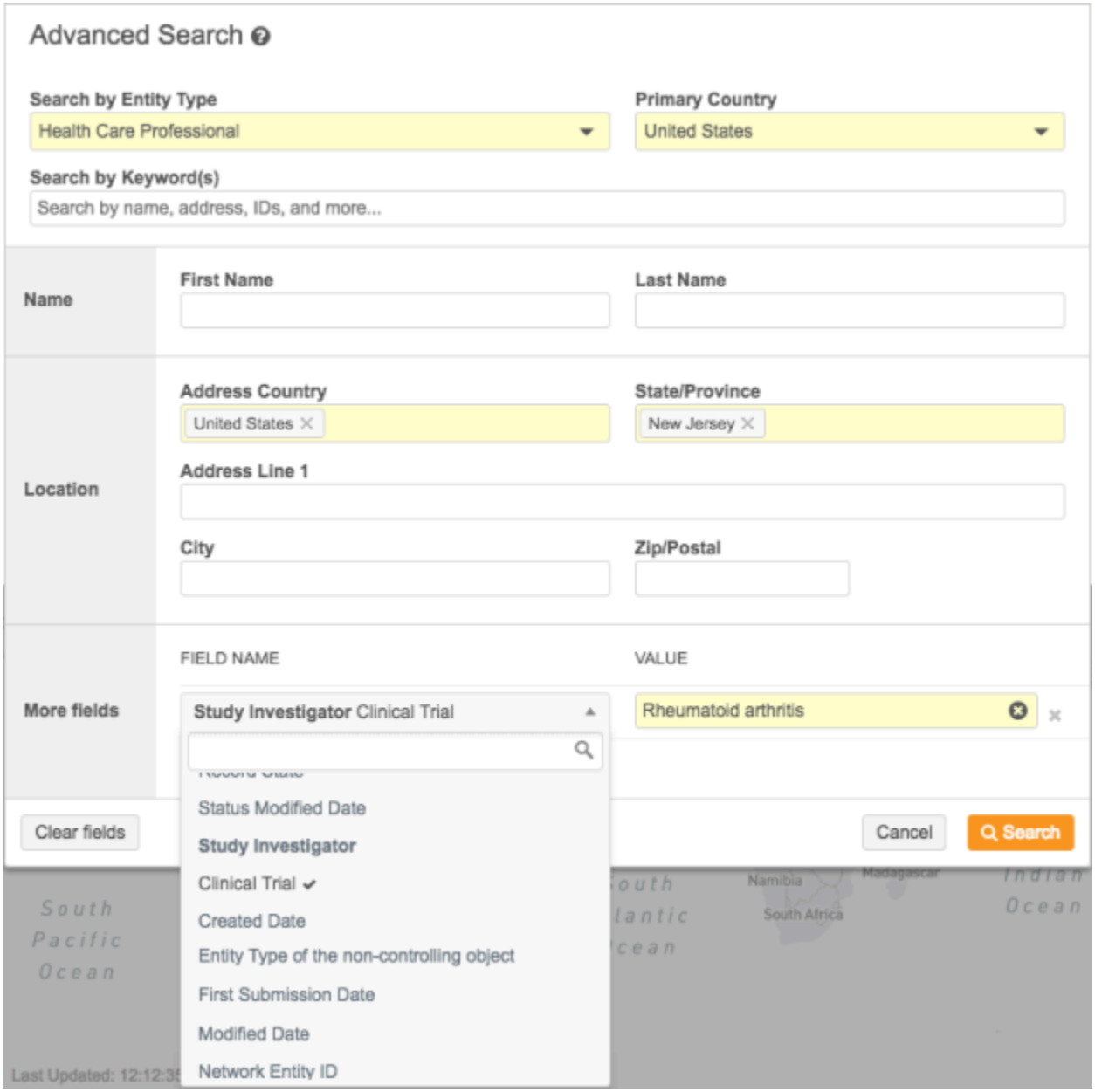
The HCP Veeva object and the STUDY custom object are linked using the STUDYINVESTIGATOR_REL__C custom relationship object. When STUDYINVESTIGATOR_REL__C was created, HCP was defined as the controlling object.



The referring label (Investigator, Clinical Trial) for the related object is the name of the `related_entity_name__v` field under the relationship object in the **More fields** section.

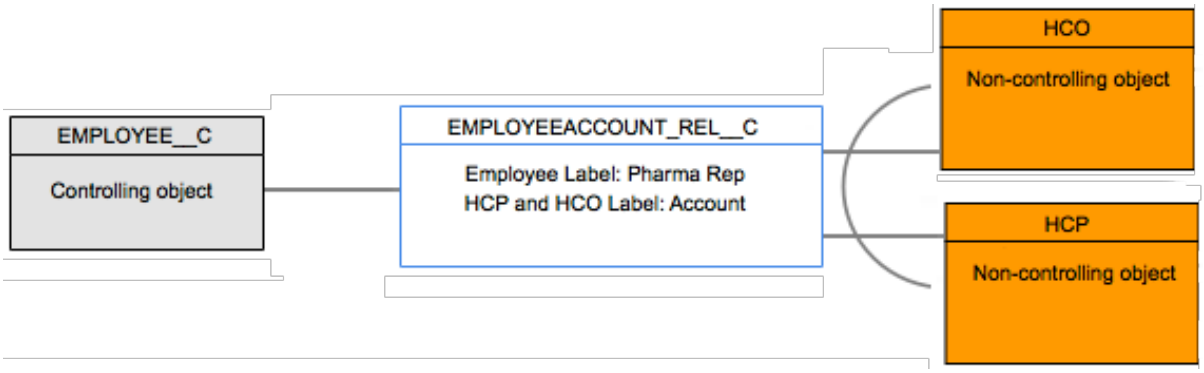
Using this example, search for an HCP that has participated in a study:

1. In the Advanced Search form, select **HCP** in the **Search by Entity Type** field.
2. In the **More fields** section, expand the list and find the relationship object name, **Study Investigator**.
3. Select **Clinical Trial** (the referring label) from the list under **Study Investigator**.
4. In the **Value** field, type the name of the study, *rheumatoid arthritis*.



Arc relationships

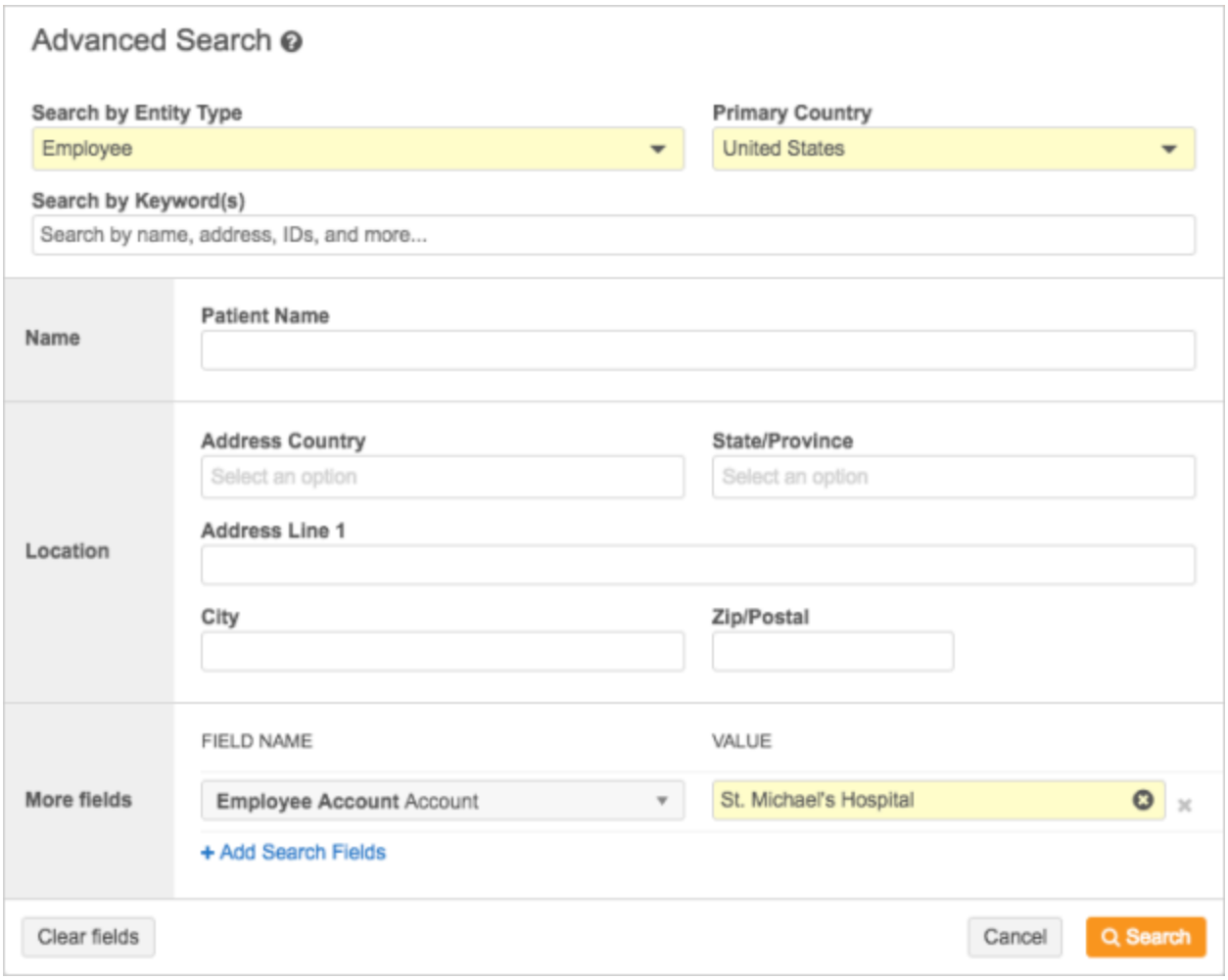
Arc relationships support linking a root entity to more than one root entity type. For example, an EMPLOYEE custom object (sales representative) can have an exclusive relationship with both HCPs and HCOs (account types) using the same custom object relationship (EMPLOYEEACCOUNT_REL__C). In this example, the EMPLOYEE custom object is the controlling object in the relationship. For data privacy, objects that contain confidential data, like personal data, are often selected as the controlling object so administrators can easily limit the users that have access to the data (using data visibility profiles).



Example

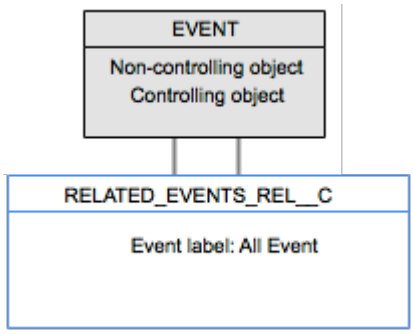
A sales leader might want to search for the sales representative who has the account with St. Michael's Hospital (HCO).

1. In the Advanced Search form, select **Employee** in the **Search by Entity Type** field.
2. In the **More fields** section, expand the list and find the **Employee Account** relationship object.
3. Choose **Account** (referring label) from the list under **Employee Account**.
4. Type the name of the specific account; for example, *St. Michael's Hospital*, in the **Value** field.



Recursive relationships

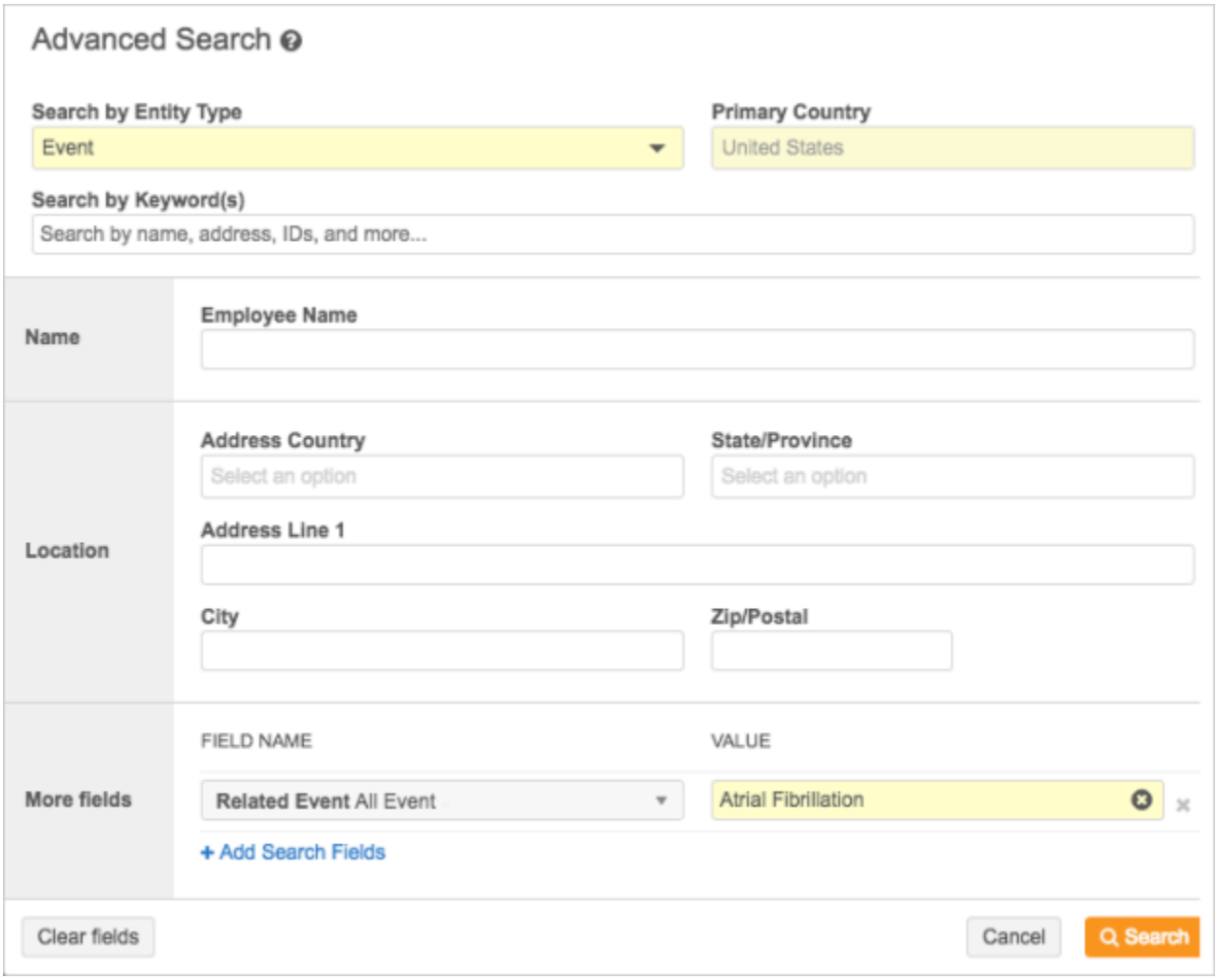
An entity type can refer to itself, so you can search for names of related objects from the same kind of object. For example, a custom object called EVENT can include conferences, workshops, lectures, symposiums, seminars, and so on. As a sales representative, you might want to search for conferences that held workshops on Atrial Fibrillation (the disease that your product is used for treating).



Example

To search for a conference that held workshops on atrial fibrillation:

1. Using the Advanced Search form, select **Events** in the **Search by Entity Type** field.
2. In the **More fields** section, expand the list and find the **Related Event** relationship object.
3. From the list under **Related Event**, choose **All Event** (referring label).
4. Type the name of the specific workshop, *Atrial Fibrillation*.



New entity name field

A new field called `related_entity_name__v` is introduced to enable users to search for the names of the related objects. This field is only available in the advanced search form and through the Network Search API; it does not display in the custom object data model.

API

Integration users can search for related entity names using the Network API. In the Search API, the <*relationship_object_api_name*>.related_entity_name__v field can be used in a filter or a field query.

Note that in the Network API, the custom relationship object includes set in the name; for example, for the custom relationship object HCP_STUDY_REL__C, the name in the API is hcp_study_rel_set__c.

Example response


```
{
     "responseStatus": "SUCCESS",
     "entities": [
          {
               "entityId": "933889313829028228",
               "entityType": "STUDY__C",
               "metaData": {},
               "entity": {
                    "study_phase__c": "Phase 3",
                    "vid__v": "933889313829028228",
                    "primary_country__v": "US",
                    "study_official_title__c": "Prospective Evaluation Of Biventricular
Pacing In Patients With Left Ventricular Dysfunction After Cardiovascular Surgery",
                    "study_name__c": "Biventricular Pacing In Patients With Left
Ventricular Dysfunction After Cardiovascular Surgery",
                    "study_hcp_rel_set__c": [
                         {
                              "study_hcp_role__c": "Sub-Investigator",
                              "study_hcp_rel_status__c": "A",
                              "related_entity_type__v": "HCP",
                              "record_owner_type__v": "LOCAL",
                              "status_update_time__v": "2019-01-30T22:08:19.000Z",
                              "related_entity_vid__v": "2609048593125877776",
                              "related_entity_name__v": "Elliot Brown",
                              "record_delta_id__v": "933889314146189311",
                              "entity_type__v": "STUDY__C",
                              "record_owner_name__v": "Local",
                              "modified_date__v": "2019-01-30T22:08:20.000Z",
                              "record_state__v": "VALID",
                              "is_primary_relationship__v": "N",
                              "vid__v": "933889313829028230",
                              "entity_vid__v": "933889313829028228",
                              "created_date__v": "2019-01-30T22:08:19.000Z",
                              "is_veeva_master__v": false
                         }
                    ]
               }
          }
     ]
 }
```

Data maintenance

UNSUBSCRIBING FROM THIRD PARTY RECORDS

Administrators can now unsubscribe from records from third party master feeds and then anonymize the records in Network. This enhancement supports the GDPR requirements for allowing HCPs to request that their data is removed and also to remove data that is no longer needed; for example, to delete HCP records that sales reps no longer visit.

Unsubscribe process

When HCPs ask for their data to be deleted from your database, you must notify the third party data provider and unsubscribe from the records so they are no longer included in the data feed you receive.

Follow the steps below to unsubscribe from the records from the third party data provider.

Step 1 - Contact the third party provider

When HCPs have requested removal of their data, advise the third party provider. Agree on the field and value that will be used in the next delta data feed to indicate that the record is now unsubscribed.

Step 2 - Create Network expression rules

In the source subscription for the third party data provider, create a NEX rule using the UNSUBSCRIBE() and RESUBSCRIBE() functions. These are new functions to support this feature. The RESUBSCRIBE function supports adding an unsubscribed record back into your Network instance.

```
[
    "IF(status == 'DELETED', UNSUBSCRIBE())",
    "IF(status == 'ACTIVE', RESUBSCRIBE())",
 ]
```

Note: The `status` field and the DELETED and ACTIVE values are examples. Replace them with the field and value that the third party data provider uses to indicate that the records are unsubscribed or resubscribed.

The File Preparation and Transformation rule points support these functions.

The next time the source subscription runs and the UNSUBSCRIBE() function is called, the record state in Network is set to DELETED.

Step 3 - Export deleted records

Allow time for the deleted record to be pushed to your downstream systems (for example, Veeva CRM) through your scheduled target subscriptions.

Step 4 - Anonymize personal data in deleted records

After the deleted record is pushed to all downstream systems (for example, two weeks later), you can choose to anonymize the personal data stored in the unsubscribed records. When deleted HCP records are anonymized, all of the personal data is masked or blanked out and access to the record is further restricted in the Network instance. If records are exported to downstream systems, only record information and data that is not personally identifiable (created date, last modified date, VID, record state, and so on) can be viewed.

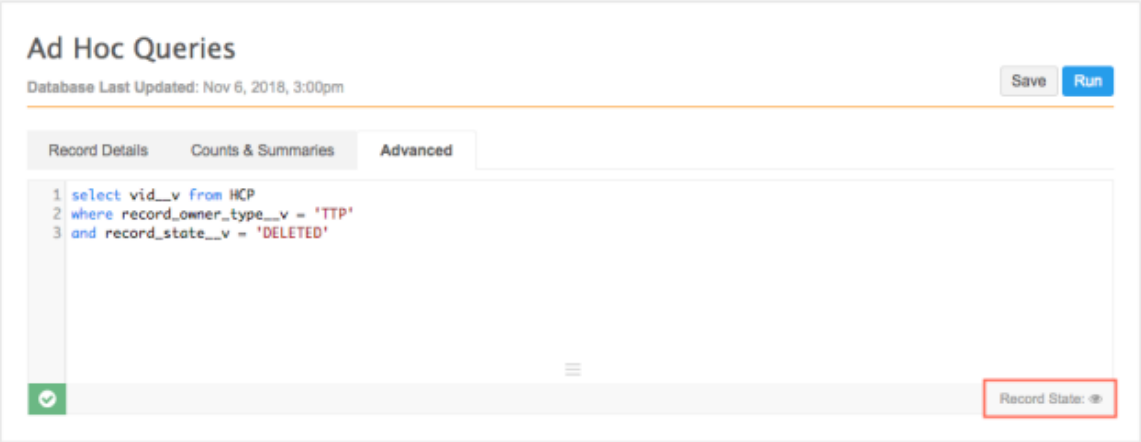
To anonymize records:

1. Use Network Reporting to identify any third party records that were unsubscribed and deleted.

   Navigate to **Reports > Ad Hoc Queries**. Click the **Advanced tab** and type the following SQL query:

   ```
   select vid__v from HCP
    where record_owner_type__v = 'TTP'
    and record_state__v = 'DELETED'
   ```

   To see the relevant results, you must toggle the **Record State** icon to show records that have DELETED record state.

2. Create a .csv file to include the Network entity ID of the affected records; the records from the report results.
3. Run the **Anonymize Deleted HCP Records** data maintenance job to anonymize the personal data in the records.

For more information, see the topic called "Anonymize HCP records" in the *Veeva Network Online Help*.

The anonymized records are no longer available in Network.

NEX functions

The UNSUBSCRIBE () function can only be called for third-party managed HCO and HCP records. It does not process locally managed or Veeva OpenData-managed records.

Impact

When the NEX functions for UNSUBSCRIBE or RESUBSCRIBE are called, the following behavior occurs on third party managed records:

UNSUBSCRIBE() Impact	RESUBSCRIBE() Impact
• The record state is set to DELETED. • The record state of all related sub-objects and relationship objects are set to DELETED. • All custom keys associated with the root object (HCO, HCP) remain active. (This is for matching purposes in case you need to resubscribe to the record again). • The record status of all associated sub-objects is set to inactive. • All parent HCO relationships that point to a deleted HCO are deleted and inactivated. • Any custom keys on the parent HCO relationship that point to a deleted HCO are inactivated.	• A new valid third party record is created. The old third party record that was previously unsubscribed remains DELETED. • The new record contains a new Network entity ID (VID) and the original custom keys. • Custom keys of the unsubscribed record (old record) are inactivated

Supported records

The UNSUBSCRIBE() NEX function can update the following record states to DELETED:

- Valid
- Invalid

The following record states are not supported:

- Under_review
- Merged_into

Options for HCP requests to third party data providers

HCPs could request removal of their data from the data provider, but give consent for you to process their personal data. In this case, data providers typically inform their customers that HCPs have opted out of their database so the record will no longer be included in your data feed. This means that you will no longer receive updates to the data and your sales reps can no longer submit change requests for the record.

In this situation, there are two potential options you can consider:

Option 1 - Allow the third party managed record to remain active

You might decide to allow the record to remain active in your Network instance. The third party data provider removes the HCP from the data feed, so you no longer receive updates and any DCRs sent for that record are rejected by the third party data provider.

Option 2 - Create a locally managed record

Because the current record will no longer be updated, you can alternatively create a new locally managed record for the HCP. This ensures that any changes requested to the data are processed by local data stewards. To avoid duplicate records in your Network instance, ask the third party provider to update the record to a state that triggers the NEX function during the next data feed so the record state in your Network instance is set to DELETED. After the updates are exported to your downstream systems, run the data maintenance job to anonymize the personal data in the deleted record.

Resubscribing to records

You can resubscribe to a third party record after it's been deleted and the personal data is anonymized in Network. For example, HCPs might give consent to process their data again, or you might find that a record has been unsubscribed to by mistake and your sales reps need to visit that HCP again.

Follow the steps below to resubscribe to the third party record.

Step 1 - Contact the third party data provider

If a sales rep obtains consent from an HCP to process their data again, the sales rep can create an add request in Network which will be routed to the third party data provider. Based on the incoming add request, the third party data provider can include the record in the data feed again and change the record state so it will trigger the RESUBSCRIBE() NEX function.

Alternatively, if the unsubscribe was a mistake, you can contact the third party data provider directly and request that the record is set to a state that will trigger the RESUBSCRIBE() NEX function.

Step 2 - Run the source subscription

The next time the delta subscription runs, the NEX rule is triggered and calls the RESUBSCRIBE() function.

```
[
    "IF(status == 'DELETED', UNSUBSCRIBE())",
    "IF(status == 'ACTIVE', RESUBSCRIBE())",
 ]
```

Note: The `status` field and the DELETED and ACTIVE values are examples. Replace them with the field and value that the third party data provider uses to indicate that the records are unsubscribed or active.

When the source subscription completes, it has the following impact:

- A new record is created in Network for the HCP.

  The data in the new record is based on information from the data feed only. When a record is resubscribed, the information (sub-objects, source keys, and so on) from the old record is not moved to the new record.

- The new record contains a new Network Entity ID (VID) and the custom key from the old record (that remained active when the record was unsubscribed).
- The old record for the HCP remains DELETED (original VID).
- The custom key on the old record is set to inactive.

Users can view and update the new record; data change requests will be routed to the third party data stewards.

Veeva OpenData subscriptions

Email subscriptions

Veeva OpenData has additional capability to manage email subscriptions for customers who purchase emails for only a subset of records in the United States. This enhancement ensures that you receive regular updates for email data for the records that are outlined in your contract.

Users

Permissions

The **Additional Permissions** section on user profiles has been updated to more accurately reflect the setting options. Previously, the value for each permission was **Allow All** or **Don't Allow**. Now the permission values describe the options more clearly. Additionally, the permissions have been reorganized on the User page because some permissions are dependent on the value of others and might not need to display.

These usability enhancements are enabled by default in your Network instance. The label changes and reordering do not impact any of the permissions set for existing users.

Permission updates

The permissions that display on the User page depends on the user type (data steward, integration user, and so on). Additionally, some permissions are dependent on other permissions, so they might not display if the parent permission is not available to the user; for example, the **Reporting Ad Hoc Queries** permission does not display if the **Reports** permission is set to **Hide Tab**.

Note: When administrators create new users, the permissions that display will reflect this enhancement. Existing user profiles will not be changed.

This table lists each permission, user type, the previous and new values, and dependency.

Permission	User Type	Previous Values	New Values	Description
API Access	Data Steward Data Manager Standard User System Admin Integration User	Don't Allow or Allow All	(no change)	Controls a user's access to the Network APIs.
Compliance Data	Data Steward Data Manager Standard User System Admin	Don't Allow or Allow All	Hide Tab or Display Tab	Controls access to the Compliance tab on the profile page. The default value is Hide Tab for new users.
Data Lineage	Data Steward Data Manager Standard User System Admin	Don't Allow or Allow All	Hide Tab or Display Tab	Controls access to the data lineage tab on the profile page.
FTP Access	Data Steward Data Manager Standard User System Admin Integration User	Don't Allow or Allow Directory or Allow All	(no change)	Controls access to one or all FTP folders, or prevents access to the FTP site.
FTP Directory	Data Steward Data Manager Standard User System Admin Integration User			Identify the specific path that a user can access. Displays only if the **FTP Access** permission is set to **Allow Directory**.
Reports	Data Steward Data Manager Standard User System Admin	Don't Allow or Allow All	Hide Tab or Display Tab	Controls access and visibility to the Reports tab on the Network menu bar. When the value is set to Hide Tab, the Reports tab is completely removed.
Reporting Ad Hoc Query Access	Data Steward Standard User	Don't Allow Advanced Queries or Allow All	Hide Advanced Tab or Display Advanced Tab	Controls access to the Advanced tab for creating advanced ad hoc queries. If the **Reports** permission is set to **Hide Tab**, this permission does not display.

Permission	User Type	Previous Values	New Values	Description
Data Quality Report Access	Data Steward	Allow Read-Only View or Allow All	Read-Only Access or Allow	Determines whether data stewards can view or edit Data Quality Reports. If the **Reports** permission is set to **Hide Tab**, this permission does not display.

Data model

NEW COUNTRIES SUPPORTED

A data model has been added for seven new countries:

- Bahrain (BH)
- Kuwait (KW)
- Lebanon (LB)
- Oman (OM)
- Qatar (QA)
- Saudi Arabia (SA)
- United Arab Emirates (AE)

The reference data is based on the Other Countries (ZZ) data model.

To view the data model for these new countries, in the Admin console, click **Data Model > Network Data Model**. On the Network Data Model page, expand the **Country** list and select the country.

Localization

English translations will be used for the reference data in the Network UI.

HCP OPT OUT

The following countries have been added to the list of opted-out countries in Veeva OpenData:

- Bahrain (BH)
- Kuwait (KW)
- Lebanon (LB)
- Oman (OM)
- Qatar (QA)
- Saudi Arabia (SA)
- United Arab Emirates (AE)
- United States (US)

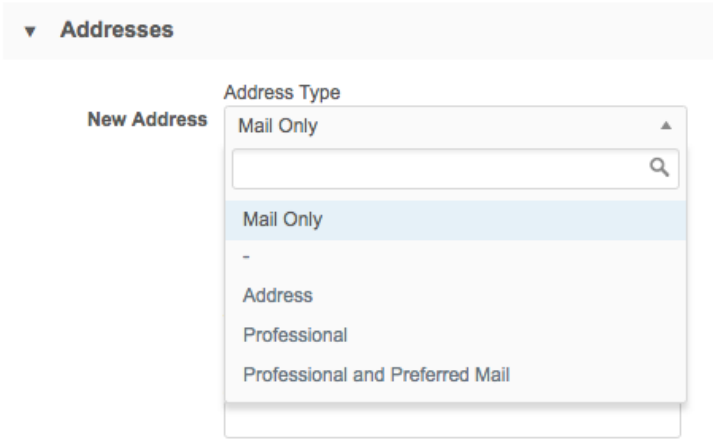
Records that are opted-out by Veeva OpenData do not display and cannot be accessed in downstream systems. This ensures data privacy for opted-out HCPs to satisfy regional regulatory requirements.

To review the list of opted-out countries in the `data_privacy_opt_out__v` field, in the Admin console, click **Data Model > Network Data Model** and select the field.

DEFAULT ADDRESS TYPE FOR NEW ZEALAND

The default value for the **Address Type** (address_type__v) for New Zealand records has been changed to M (Mail Only). Previously, the default value was P (Professional).

When users add an address to a record, the **Address Type** field will default to **Mail Only**. Other values can be selected from the list.



PRIMARY ADDRESS CALCULATIONS

Administrators and data managers can now choose to have Network recalculate primary addresses that use the Unique Checkbox configuration. This enhancement enables you to control the behavior of the primary flag using the options on the primary address custom field.

Primary address calculations can be used for any address on any HCP or HCO. The HCP, HCO, and address objects can be locally managed or managed by Veeva OpenData.

The new options for allowing Network to calculate the primary address support the following situations:

- **The record DOES NOT HAVE a primary address** - For records that do not have a primary address defined (the primary value is *No Value*, *Unknown* or *No*) Network will set a primary. Only valid, under review, and active addresses are considered.
- **The status of the primary address is INACTIVE** - For primary addresses where the address status is *Inactive*, Network will recalculate a primary address.
- **The record state of the primary address is INVALID or DELETED** - For primary address records that have been reviewed and are considered invalid, Network will recalculate a primary address.

By default, none of these options are selected.

Previously, the primary setting did not move from an address that used the Unique Checkbox configuration. This behavior still exists and is still available. Multiple primary address fields can be created using the Unique Checkbox configuration, so you can define primary addresses with each specific behavior to support your business needs.

Note: This enhancement applies only to address sub-objects. The options are available by default on any primary address field that uses the Unique Checkbox configuration. The options are not available on other sub-objects and relationship objects that use the Unique Checkbox primary field. The Unique Checkbox configuration is available for all standard (address, license, parent HCO) and custom sub-objects and relationship objects.

Triggers for Network calculation

When primary options are selected, Network calculates the primary whenever new addresses are added to your Network instance or specific changes are made to an address.

Events

The following events will trigger Network to calculate the primary:

- New address is added or specific fields on an existing address are changed using source subscriptions, DCRs, or the Network API
- Merging records manually using Find Suspect Match
- Merging records in bulk through source subscriptions
- Unmerging records
- Downloading records from Veeva OpenData (using OpenData subscriptions or the **Ad Hoc Download** or **Download from OpenData** buttons on a record).
- Syncing a record with Veeva OpenData (using the **Sync with OpenData** button).

Updates to existing addresses

Network calculates primary when the following changes occur on an existing record:

- A primary value changes - Any change to the primary value will trigger Network to calculate.
- The address status changes - Any change to the address status value will trigger Network to calculate; for example, when an address becomes inactive. Inactive address status includes *Inactive* and any custom status values in your Network instance.
- The record state changes - Any change to the record state value will trigger Network to calculate; for example, a record state becomes invalid. Invalid address states include *Deleted*, *Invalid*, and any custom state values in your Network instance.

  Addresses with the following record states are not considered for primary address calculation: MERGED_INTO, PARENT_MERGED, MERGE_INACTIVATED, MERGE_ADDED.

Changing any other fields, such as Address Line 1 or Specialty, will not trigger any of the calculation rules.

Configuring a primary address field

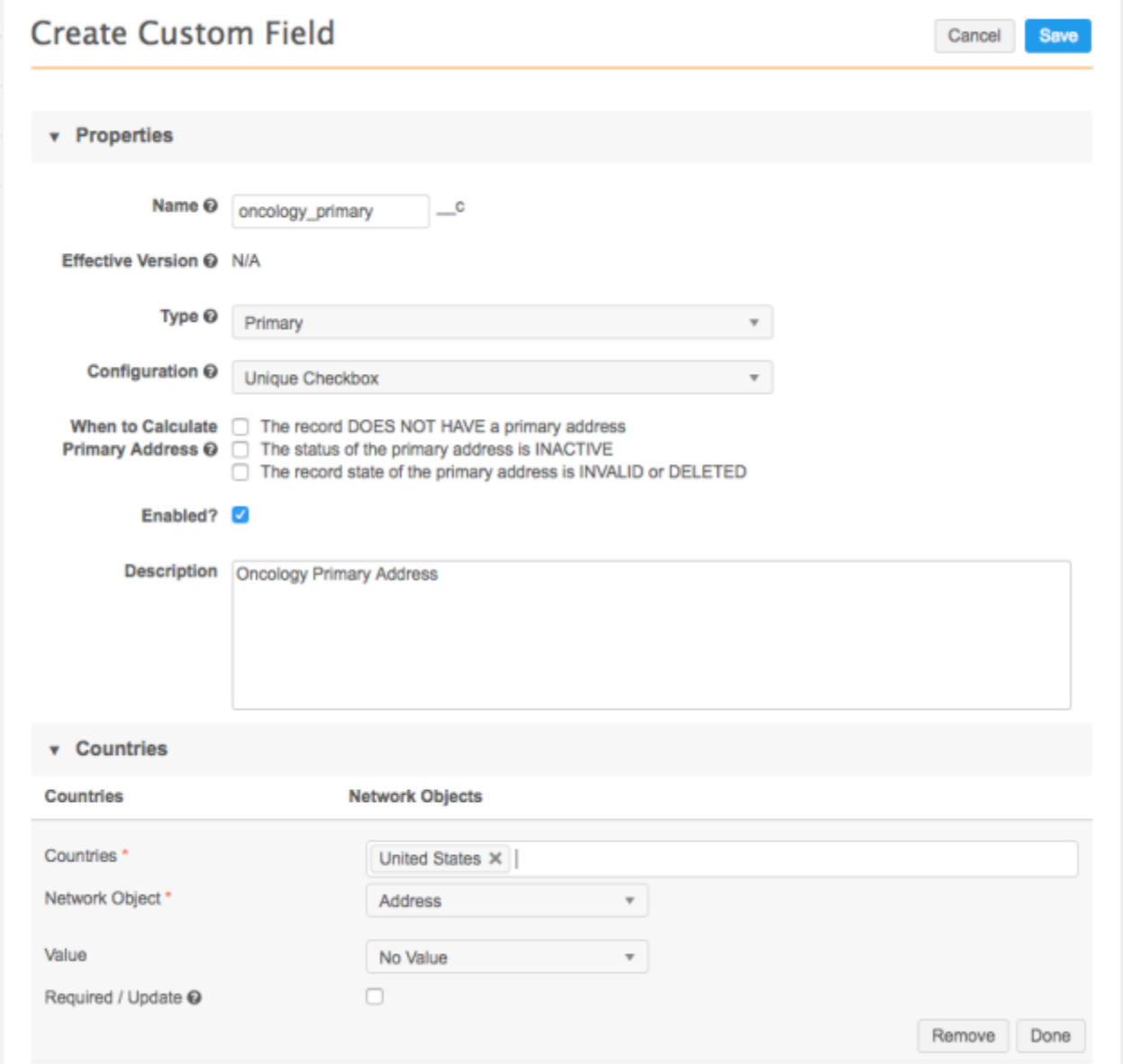
Administrators and data managers can select specific behavior for each primary address field that uses the Unique Checkbox configuration.

To create a primary address field:

1. In the Admin console, click **Data Model > Network Data Model**.
2. Click the **Create Custom Field** button.
3. Type a **Name** and **Description** for the new field.
4. In the **Type** list, choose **Primary**.
5. In the Configuration list, choose **Unique Checkbox**.
6. In the **Countries** section, click **Add Country Group** and define the object and countries that this field applies to:
    a. In the **Countries** field, click the field and select all of the applicable countries.
    b. In the **Network Object** list, select Address.

    When Address is chosen as the object for the primary field, a new setting called **When to Calculate Primary Address** displays in the **Properties** section. This setting does not display for any other object type.

7. In the **When to Calculate Primary Address** section, select any combination of options.
    - **The record DOES NOT HAVE a primary address** - Calculate when records do not have a primary defined for this address field.
    - **The status of the primary address is INACTIVE** - Calculate when the address status is *Inactive*.
    - **The record state of the primary address is INVALID or DELETED** - Calculate when the record state is *Invalid*.
8. **Save** your changes.



The next time an address calculation is triggered, if required, Network will calculate the primary for that address field.

Setting an active and valid primary address on existing records

After enabling Network to calculate the primary address using the options for the Unique Checkbox primary field, Network will calculate the primary address for records over time as addresses undergo changes. However, to ensure that all existing records in your instance have a primary now, a source must set the field. You can identify the records in your Network instance that do not have an active and valid primary using reporting.

Step 1: Run a report to identify the affected addresses in your Network instance

The report finds addresses that have the following situations:

- no primary is available on a record
- inactive or invalid addresses have been set to primary

To create a report to find these addresses:

1. In the Network menu bar, click **Reports > Ad Hoc Queries**.
2. Click the **Advanced** tab.
3. In the text box, type the SQL query below.

   Replace the primary field name, `oncology_primary__c`, with the name of your primary custom field.

```
SELECT address.entity_vid__v,
       vid__v,
       address_ordinal__v,
       oncology_primary__c /*Displaying the Oncology Primary located on the Rank 1
Address*/
 FROM address
   INNER JOIN (SELECT entity_vid__v
                      FROM address
               WHERE (oncology_primary__c IS NULL OR oncology_primary__c <> 'Y')
               AND   entity_vid__v NOT IN (SELECT entity_vid__v
                                           FROM address
                                           WHERE address_status__v = 'A'
                                           AND   record_state__v IN ('VALID',
'UNDER_REVIEW')
                                           AND   oncology_primary__c = 'Y')
               GROUP BY entity_vid__v) entity_with_no_primary ON address.entity_vid__v
= entity_with_no_primary.entity_vid__v
 WHERE address_ordinal__v = 1
```

4. Click **Run**.

Considerations for the report results:

- If there are multiple addresses on the same entity with `address_ordinal__v = 1`. Both addresses will be in the report.
- If none of the addresses on the entity have `address_ordinal__v = 1`, the entity won't be displayed in the report.

This query extracts all of the rank 1 addresses on records. These rank 1 addresses can be set to primary in the subscription file. Values in the `address_ordinal__v` field are maintained by Veeva OpenData for OpenData addresses or by the record owner for non-OpenData addresses.

Step 2: Set a primary on active and valid addresses

Use a source subscription to set the rank 1 addresses to primary.

1. Create a .csv file that contains the fields below.

entity VID (vid__v)	address VID (vid_v)	oncology_primary__c
2233445566	9988776655	Y

2. Create a source subscription that includes this .csv file.
3. Run the source subscription.

After the subscription runs, all the records that you updated using a source subscription in your Network instance will be updated with a primary.

Understanding how Network calculates primary for address updates

Network's calculations for primary when addresses are added or updated depend on the options that you have selected for a primary address field. Any combination of options can be selected.

Review the sections below to understand how primary is calculated when addresses are added or updated using the following actions:

- source subscriptions
- updates on the profile page
- updates in data change requests
- change request API

Each example includes a number (for example, A1, D2, and so on) in the **Workflow Example** column to refer to a diagram. You can refer to the diagram in the **Workflows** section below to see how Network decides whether a primary should be calculated based on the address and the options that are enabled for the primary field.

No options selected

If you choose not to select any of the primary options, you control which address is primary. After you define the primary, it will not move unless you explicitly move it by submitting a change. Network will not calculate a primary if a primary is defined on a record.

Option 1 - The record DOES NOT have a primary address

When this option is selected:

- You can control what address is primary. You can define the primary on any address (active, valid, inactive, invalid, deleted, and so on).
- Network calculates primary only if a record does not have a primary defined. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **No source primary** (A1, A2, B1, B2, C1, C2)
- **One source primary only, no Network primary** (G, H,)
- **One source, non-matching Network primary** (M, N)
- **Multiple source primaries only** (R, S)
- **Multiple matching source and Network primaries** (Y)

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=no value status=A state=VALID		**address1**: primary=Y status=A state=VALID	A1, A2
address1: primary=no value status=A state=VALID	**address2**: primary=no value status=A state=VALID	**address1**: primary=no value status=A state=VALID source=SAP ordinal=1 **address2**: primary=no value status=A state=VALID source=SAP ordinal=2	**address1**: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID	A1, A2
	address1: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=A state=VALID		**address1**: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=Y status=A state=VALID	A1, A2

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=I state=VALID		**address1**: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=I state=VALID	A1, A2
	address1: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID		**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	G
address1: primary=N status=A state=VALID	**address2**: primary=Y status=A state=VALID		**address1**: primary=N status=A state=VALID **address2**: primary=Y status=A state=VALID	G
address1: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID	**address1**: primary=Y status=A state=VALID		**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	G
address1: primary=Y status=A state=VALID	**address1**: primary=N status=A state=VALID		**address1**: primary=N status=A state=VALID	B1, B2
	address1: primary=Y status=I state=VALID		**address1**: primary=Y status=I state=VALID	H
	address1: primary=Y status=A state=INVALID		**address1**: primary=Y status=A state=INVALID	H

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=Y status=I state=INVALID		**address1**: primary=Y status=I state=INVALID	H
address1: primary=Y status=A state=VALID	**address1**: status=I		**address1**: primary=Y status=I state=VALID	C1, C2
address1: primary=Y status=A state=VALID	**address1**: state=INVALID		**address1**: primary=Y status=A state=INVALID	C1, C2
address1: primary=Y status=A state=VALID	**address2**: primary=Y status=A state=VALID		**address2**: primary=Y status=A state=VALID	M
address1: primary=Y status=A state=VALID	**address2**: primary=Y status=I state=INVALID		**address1**: primary=N status=A state=VALID **address2**: primary=Y status=I state=INVALID	N
	address1: primary=Y status=A state=VALID **address2**: primary=Y status=A state=VALID	**address1**: primary=Y source=Change Request source rank=1 ordinal=1 **address2**: primary=Y source=Change Request source rank=1 ordinal=2	**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	R
	address1: primary=Y status=I state=INVALID **address2**: primary=Y status=I state=INVALID	**address1**: primary=Y source=SAP source rank=1 ordinal=1 **address2**: primary=Y source=SAP source rank=1 ordinal=2	**address1**: primary=Y status=I state=INVALID **address2**: primary=N status=I state=INVALID	S

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=Y status=A state=VALID **address2**: primary=Y status=A state=INVALID **address3**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=INVALID		**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=INVALID **address3**: primary=N status=I state=VALID **address4**: primary=N status=I state=INVALID	R
address2: primary=Y status=A state=VALID	**address1**: primary=Y status=A state=VALID **address2**: primary=Y status=A state=INVALID **address3**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=INVALID		**address1**: primary=N status=A state=VALID **address2**: primary=Y status=A state=INVALID **address3**: primary=N status=I state=VALID **address4**: primary=N status=I state=INVALID	Y

Option 2 - The status of the primary address is INACTIVE

When this option is selected:

- Network calculates primary only if the address is inactive. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **One source primary only, no Network primary** (K, I)
- **One source, non-matching Network primary** (O, P)
- **Multiple source, non-matching Network primary** (T, U, V)
- **Multiple matching source and Network primaries** (W, X)
- **One matching source and Network primary** (D1, D1, E1, E2)

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=Y status=I state=VALID		**address1**: primary=N status=I state=VALID	K
	address1: primary=Y status=A state=INVALID		**address1**: primary=Y status=A state=INVALID	I
address1: primary=Y status=A state=VALID	**address1**: status=I		**address1**: primary=N status=I state=VALID	F1, F2
address1: primary=Y status=A state=VALID	**address1**: primary=Y status=I state=VALID		**address1**: primary=Y status=I state=VALID	D1, D2
address1: primary=Y status=I state=VALID **address2**: primary=no value status=A state=VALID	**address1**: primary=Y status=A state=VALID **address3**: primary=no value status=A state=VALID		**address1**: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID **address3**: primary=no value status=A state=VALID	E1, E2
address1: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	**address3**: primary=Y status=A state=VALID **address4**: primary=N status=A state=VALID		**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=N status=I state=VALID **address4**: primary=no value status=A state=VALID	P

In Network	Change submitted	Summary of Data	Results	Workflow Example
address1: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID	**address3**: primary=Y status=I state=VALID **address4**: primary=no value status=A state=VALID	**address2**: primary=N status=A state=VALID source=SAP source rank=1 **address4**: primary=no value status=A state=VALID source=MedPro source rank=2	**address1**: primary=N status=I state=VALID **address2**: primary=Y status=A state=VALID **address3**: primary=N status=I state=VALID **address4**: primary=no value status=A state=VALID,	O
address1: primary=Y status=A state=VALID	**address2**: primary=Y status=A state=VALID **address3**: primary=Y status=A state=INVALID **address4**: primary=Y status=I state=VALID **address5**: primary=Y status=I state=INVALID		**address1**: primary=N status=A state=VALID **address2**: primary=Y status=A state=VALID **address3**: primary=N status=A state=INVALID **address4**: primary=N status=I state=VALID **address5:** primary=N status=I state=INVALID	T
address1: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	**address3**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=VALID		**address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=N status=I state=VALID **address4**: primary=N status=I state=VALID	V

In Network	Change submitted	Summary of Data	Results	Workflow Example
address1: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID	**address3**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=VALID **address5**: primary=no value status=A state=VALID	**address2**: primary=N status=A state=VALID source=SAP source rank=1 **address5**: primary=no value status=A state=VALID source=Concur source rank=2	**address1**: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID source=SAP source rank=1 **address3**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=VALID **address5**: primary=no value status=A state=VALID source=Concur source rank=2	U
address1: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID	**address1**: primary=Y status=I state=INVALID **address3**: primary=Y status=A state=INVALID **address4**: primary=Y status=A state=INVALID	**address3**: primary=Y status=A state=INVALID source=SAP source rank=1 **address4**: primary=Y status=A state=INVALID source=Concur source rank=2	**address1**: primary=N status=I state=INVALID **address2**: primary=no value status=A state=VALID **address3**: primary=Y status=A state=INVALID **address4**: primary=N status=A state=INVALID	X

In Network	Change submitted	Summary of Data	Results	Workflow Example
address1: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID **address3**: primary=no value status=A state=VALID	**address1**: primary=Y status=I state=VALID **address4**: primary=Y status=I state=VALID **address5**: primary=Y status=I state=VALID **address6**: primary=no value status=A state=VALID	**address2**: primary=no value status=A state=VALID, source=SAP source rank=1 **address3**: primary=no value status=A state=VALID source=Concur source rank=2 **address6**: primary=no value status=A state=VALID source=MedPro source rank=3	**address1**: primary=N status=I state=VALID **address2**: primary=no value status=A state=VALID **address3**: primary=no value status=A state=VALID **address4**: primary=N status=I state=VALID **address5**: primary=N status=I state=VALID **address6**: primary=no value status=A state=VALID	W

Option 3 - The record state of the primary address is INVALID or DELETED

When only this option is selected:

- Network calculates primary only if the address is invalid. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **One source primary only, no Network primary** (J, L)
- **One source, non-matching Network primary** (Q)

In Network	Change submitted	Summary of Data	Results	Workflow Example
	address1: primary=Y status=A state=INVALID		**address1**: primary=N status=A state=INVALID	L
	address1: primary=Y status=I state=VALID		**address1**: primary=Y status=I state=VALID	J

In Network	Change submitted	Summary of Data	Results	Workflow Example
address1: primary=Y status=A state=INVALID **address2**: primary=N status=A state=VALID	**address3**: primary=Y status=A state=INVALID **address4**: primary=no value status=A state=VALID	**address2**: primary=N status=A state=VALID source=SAP source rank=1 **address4**: primary=no value status=A state=VALID source=MedPro source rank=2	**address1**: primary=N status=A state=INVALID **address2**: primary=Y status=A state=VALID **address3**: primary=N status=A state=INVALID **address4**: primary=no value status=A state=VALID	Q

Understanding how Network calculates primary for OpenData updates

Network's primary calculation when addresses are downloaded from or synced with Veeva OpenData depend on the options that you have selected for a primary address field. Any combination of options can be selected.

Review the sections below to understand how primary is calculated when addresses are added or updated using the following actions:

- Downloading records from Veeva OpenData (using OpenData subscriptions or the **Ad Hoc Download** or **Download from OpenData** buttons).
- Syncing a record with Veeva OpenData (using the **Sync with OpenData** button).

No options selected

If you choose not to select any of the primary options, you control which address is primary. After you define the primary, it will not move unless you explicitly move it. Network will not calculate a primary if a primary is not defined on a record.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **Veeva OpenData Sync** (A)

Your Network instance before sync	Veeva OpenData master instance	Your Network instance after sync	Workflow Example
	hcp1: John Smith **address1**: status=A state=VALID **address2**: status=A state=VALID	hcp1: John Smith **address1**: primary=no value status=A state=VALID **address2**: primary=no value status=A state=VALID	A
hcp1: John Smith **address1**: primary=no value status=A state=VALID **address2**: primary=no value status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID	hcp1: John Smith **address1**: primary=no value status=A state=VALID **address2**: primary=no value status=A state=VALID	A

Option 1 - The record DOES NOT have a primary address

When only this option is selected:

- You can control what address is primary. You can define the primary on any address (active, valid, inactive, invalid, deleted, and so on).
- Network calculates primary only if a record does not have a primary defined. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **Veeva OpenData Sync** (B, C, D)

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
	hcp1: John Smith **address1**: status=A state=VALID **address2**: status=A state=VALID	**address1**: status=A state=VALID ordinal=1 **address2**: status=A state=VALID ordinal=2	hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID	B

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID	**address1**: status=A state=VALID ordinal=1 **address2**: status=A state=VALID ordinal=2 **address3**: status=A state=VALID ordinal=3	hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=no value status=A state=VALID **address3**: primary=no value status=A state=VALID	B
hcp1: John Smith **address1**: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address1**: status=I		hcp1: John Smith **address1**: primary=N status=I state=VALID **address2**: primary=Y status=A state=VALID	B
hcp1: John Smith **address1**: primary=N status=A state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address1**: state=INVALID		hcp1: John Smith **address1**: primary=N status=A state=INVALID **address2**: primary=Y status=A state=VALID	B
hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID		hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=A state=VALID	C

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
hcp1: John Smith **address1**: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID		hcp1: John Smith **address1**: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=A state=VALID	D

Option 2 - The status of the primary address is INACTIVE

When only this option is selected:

- Network calculates primary only if the address is inactive. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **Veeva OpenData Sync** (E, F)

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
hcp1: John Smith **address1**: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID	hcp1: John Smith **address3**: status=A state=VALID	hcp1: John Smith **address1**: primary=N status=I state=VALID **address2**: primary=Y status=A state=VALID **address3**: primary=no value status=A state=VALID	F

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
hcp1: John Smith **address1**: primary=Y status=I state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address1**: status=A **address3**: status=A state=VALID		hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID **address3**: primary=no value status=A state=VALID	E
hcp1: John Smith **address1**: primary=Y status=A state=VALID **address2**: primary=N status=A state=VALID	hcp1: John Smith **address1**: status=I **address3**: status=A state=VALID	**address2**: status=A state=VALID ordinal=1 **address3**: status=A state=VALID ordinal=2	hcp1: John Smith **address1**: primary=N status=I state=VALID **address2**: primary=Y status=A state=VALID **address3**: primary=no value status=A state=VALID	F

Option 3 - The record state of the primary address is INVALID or DELETED

When only this option is selected:

- Network calculates primary only if the address is invalid. Only valid and active addresses are considered.

Examples

Review the examples in the table below to understand when a primary is calculated if this option is selected or not. In the examples, **address1**, **address2**, and so on represent different addresses.

These examples refer to the following diagrams in the **Workflows** section below:

- **Veeva OpenData Sync** (G, H)

Your Network instance before sync	Veeva OpenData master instance	Summary of data source = OpenData source rank = 1 time = 3pm	Your Network instance after sync	Workflow Example
hcp1: John Smith address1: primary=Y status=A state=VALID address2: primary=N status=A state=VALID	hcp1: John Smith address1: status=I address3: status=A state=VALID		hcp1: John Smith address1: primary=Y status=I state=VALID address2: primary=N status=A state=VALID address3: primary=no value status=A state=VALID	G
hcp1: John Smith address1: primary=Y status=I state=VALID address2: primary=N status=A state=VALID address3: primary=no value status=A state=VALID	hcp1: John Smith address1: state=INVALID address3: status=A state=VALID	address2: status=A state=VALID ordinal=1 address3: status=A state=VALID ordinal=2	hcp1: John Smith address1: primary=N status=A state=INVALID address2: primary=Y status=A state=VALID address3: primary=no value status=A state=VALID	H

Understanding how Network calculates primary for merge and unmerge

Merge

A primary is calculated if neither the merge winner nor the loser contributed a primary and the **The record DOES NOT HAVE a primary address** option is enabled.

If the winning record contributes a primary address, the winner's address remains primary. However, a primary is calculated in the following situations:

- An inactive address is primary on the winning record and the following option is on: **The status of the primary address is INACTIVE**.
- An invalid address is primary on the winning record and the following option is on: **The status of the primary address is INVALID or DELETED**.

Unmerge

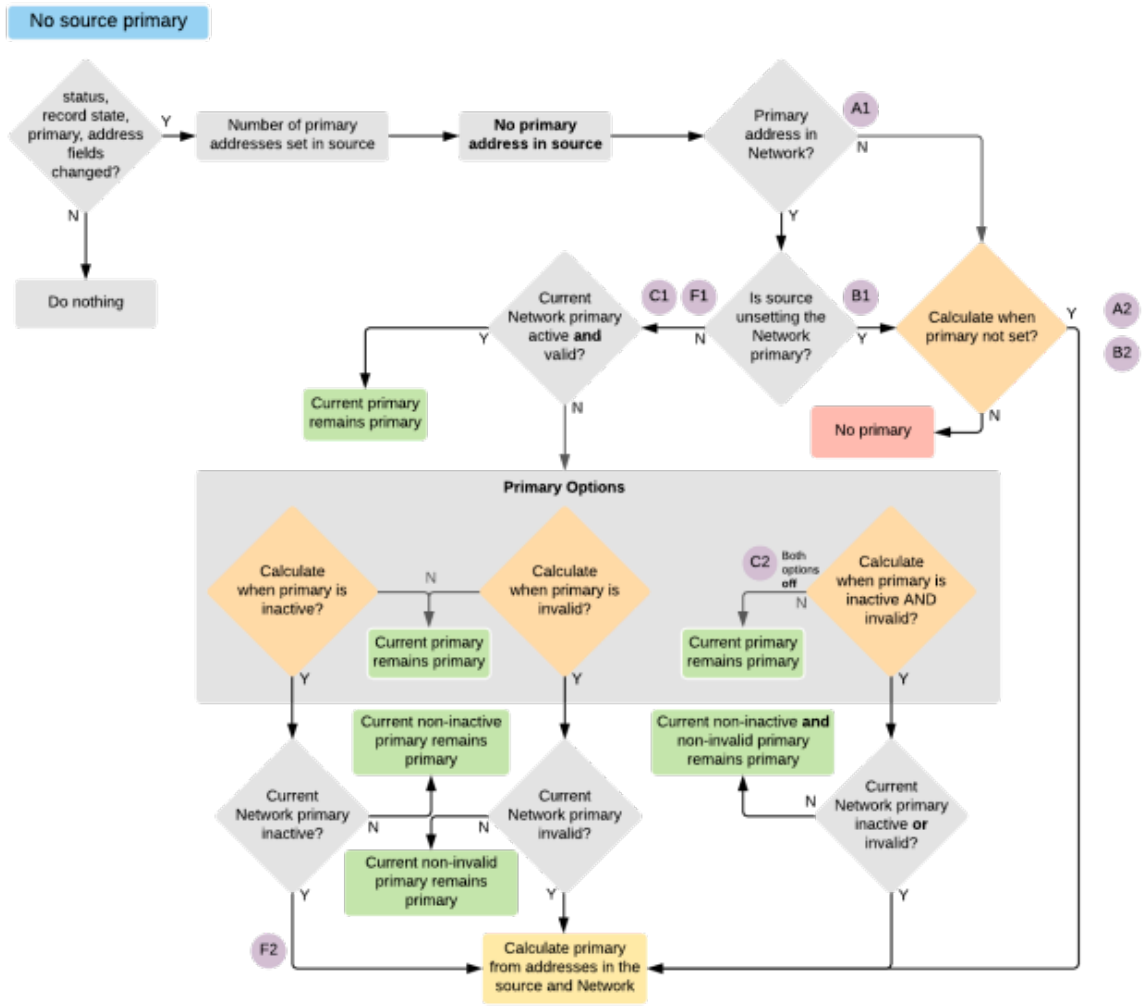
When records are unmerged from each other, any fields that were set as primary on the original records are recovered.

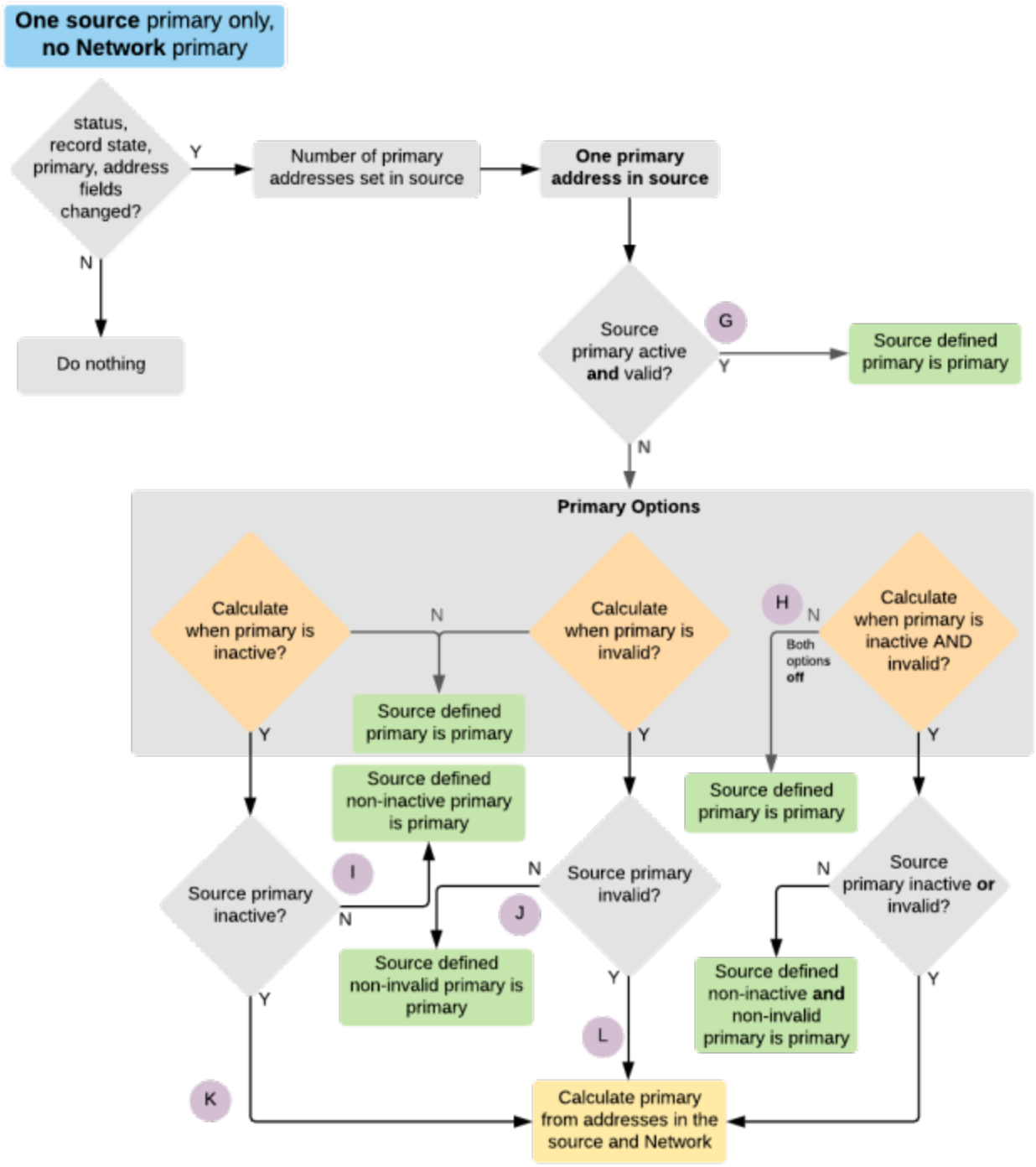
A primary is calculated in the following situations:

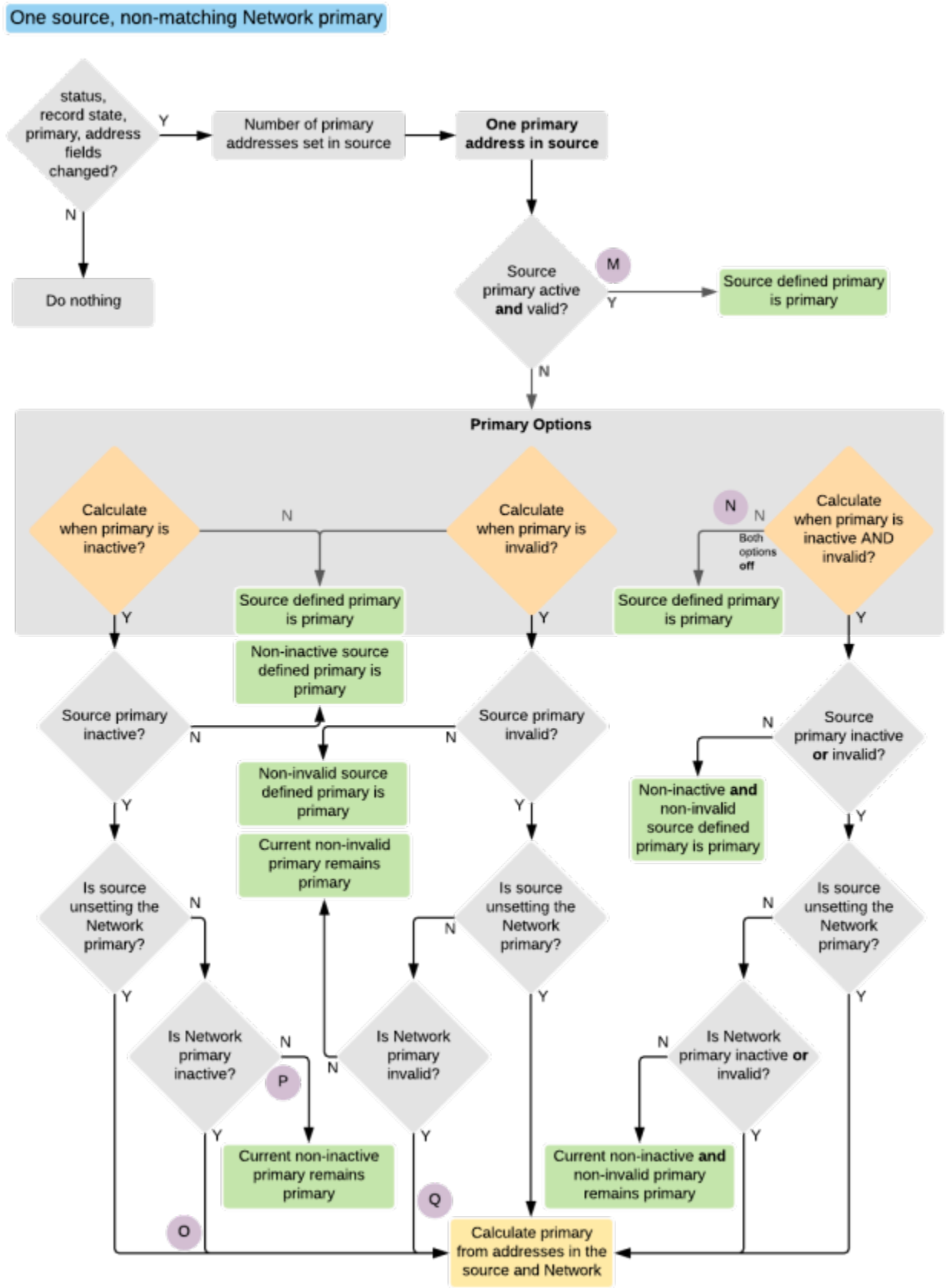
- None of the source views contributed a primary and the following option is on: **The record DOES NOT HAVE a primary address**.
- An inactive address is primary in the source views and the following option is on: **The status of the primary address is INACTIVE**.
- An invalid address is primary in the source views and the following option is on: **The status of the primary address is INVALID or DELETED**.

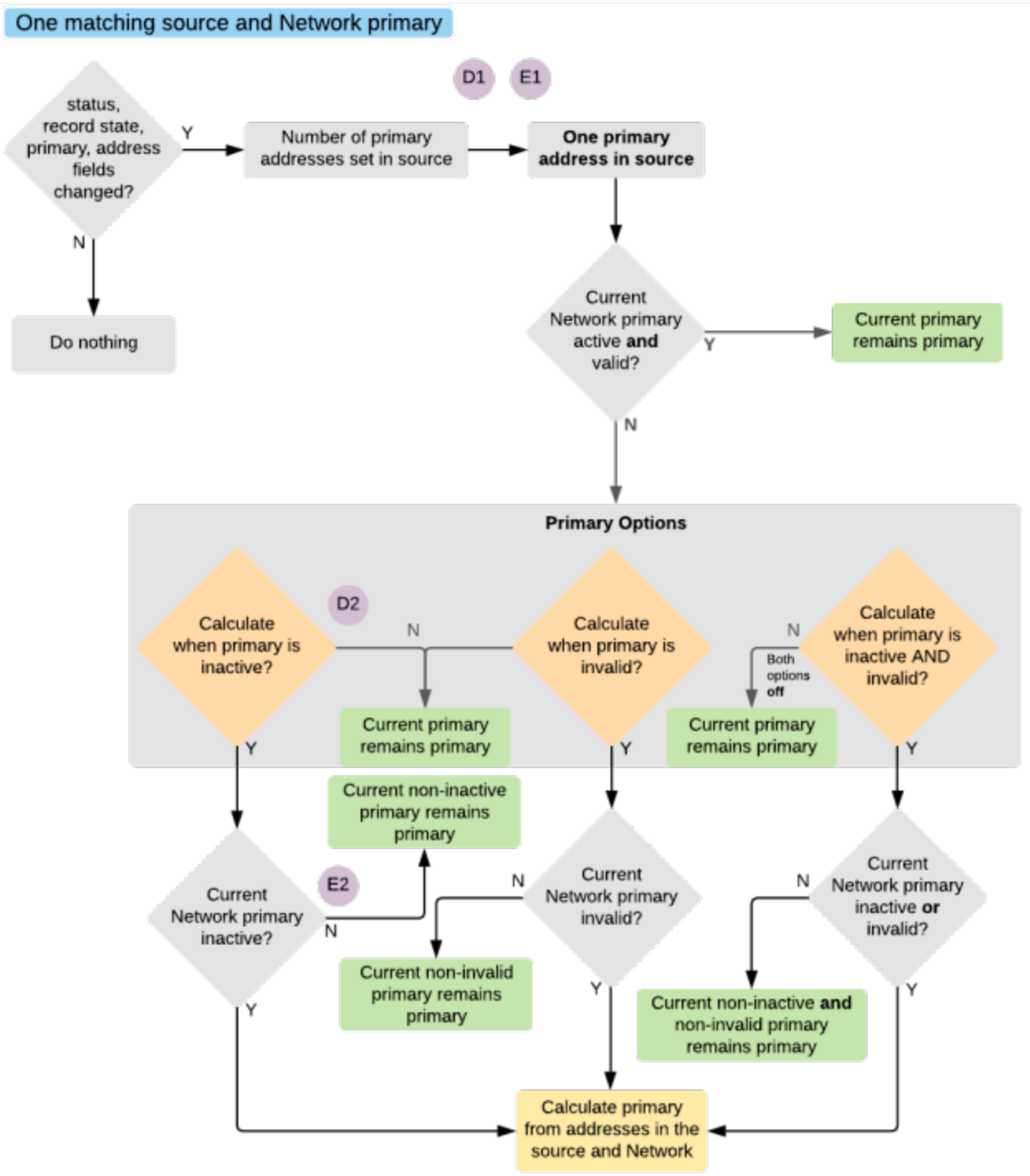
Workflows

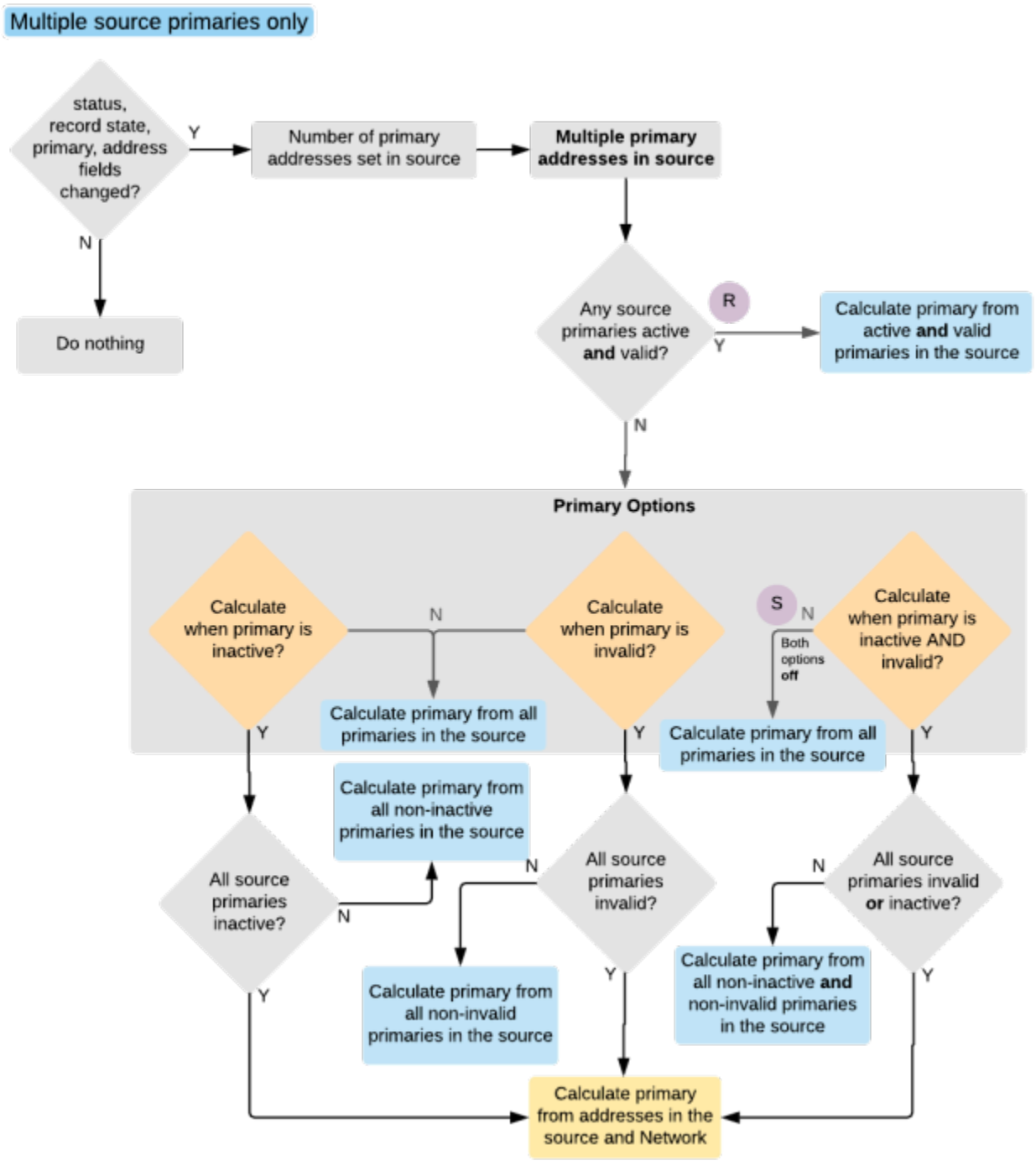
These workflows illustrate how Network determines if a primary should be calculated based on the addresses and the options that you have selected for the primary field. The letters in the purple circles; for example, K, correspond to the examples in the tables above, so you can follow the decision points.

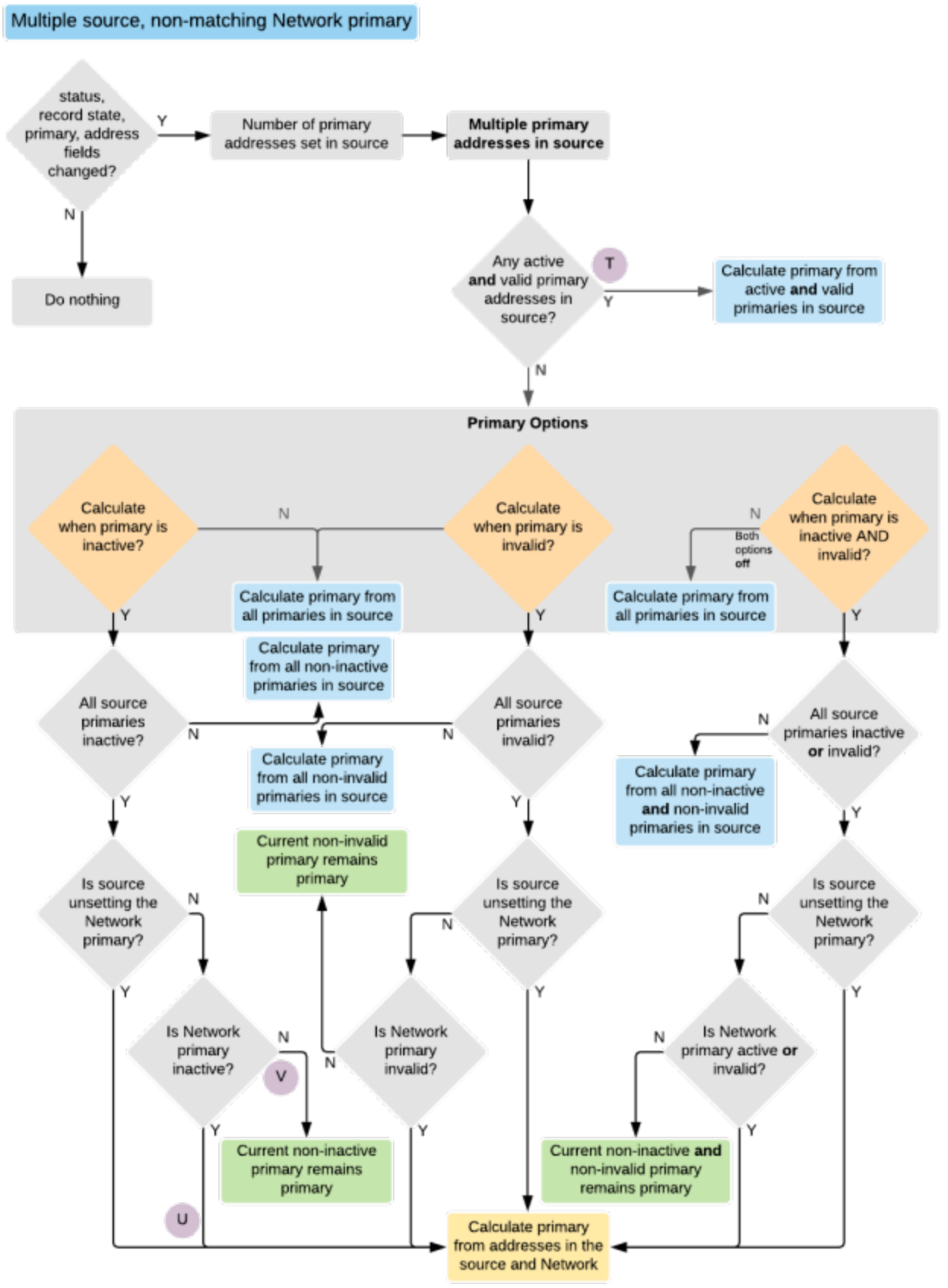


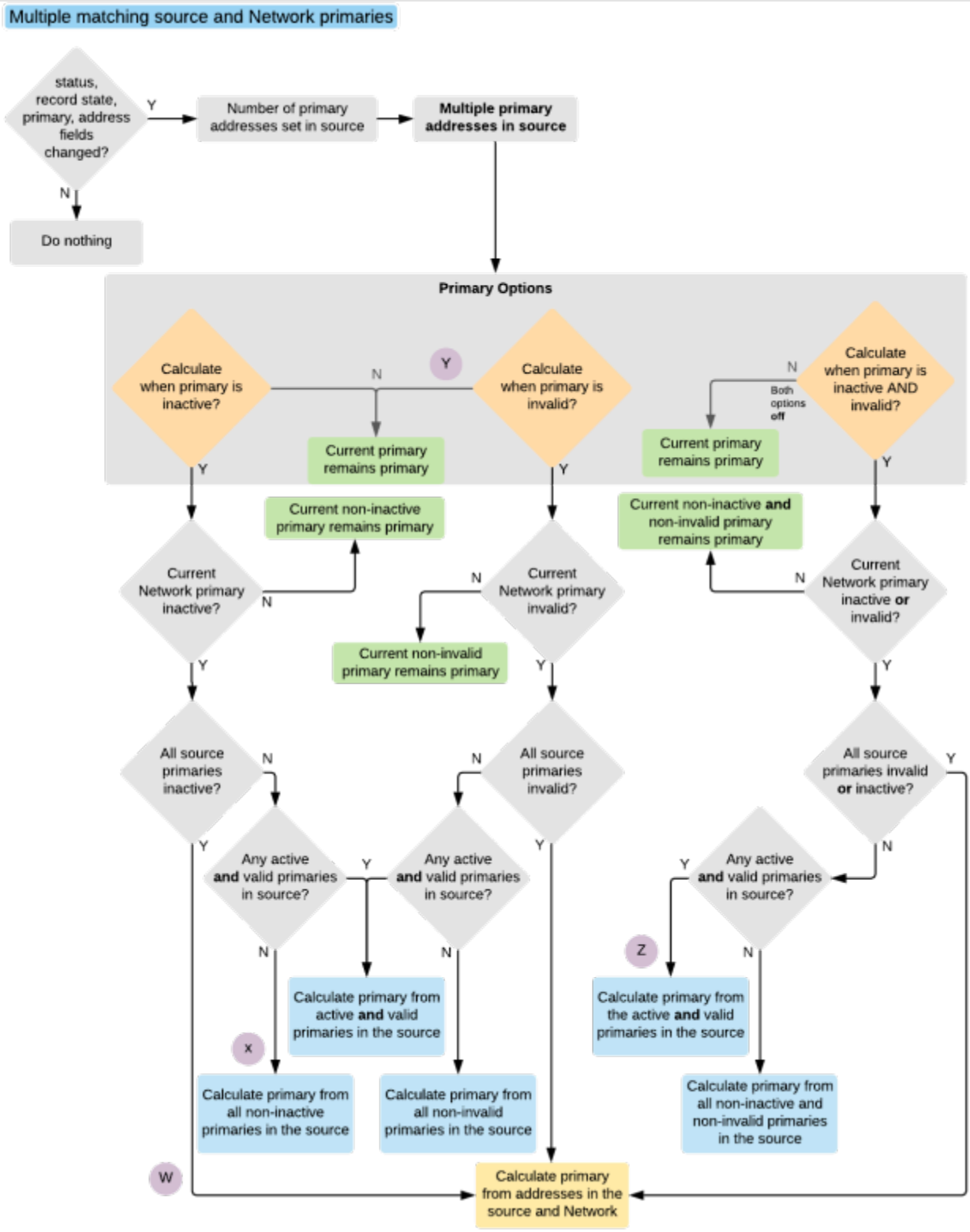

One source primary only, no Network primary
status, record state, primary, address fields changed?
Y
N
Do nothing
Number of primary addresses set in source
One primary address in source
Source primary active and valid?
G
Y
Source defined primary is primary
N
Primary Options
Calculate when primary is inactive?
N
Source defined primary is primary
Y
Calculate when primary is invalid?
Y
H
N
Both options off
Calculate when primary is inactive AND invalid?
Y
Source defined primary is primary
Source defined non-inactive primary is primary
I
N
N
Source primary inactive?
Y
J
Source defined non-invalid primary is primary
Source primary invalid?
Y
L
N
Source primary inactive or invalid?
Y
Source defined non-inactive and non-invalid primary is primary
K
Calculate primary from addresses in the source and Network


One source, non-matching Network primary
status, record state, primary, address fields changed?
Y
N
Do nothing
Number of primary addresses set in source
One primary address in source
Source primary active and valid?
M
Y
Source defined primary is primary
N
Primary Options
Calculate when primary is inactive?
N
Source defined primary is primary
Y
Calculate when primary is invalid?
Y
N
N
Both options off
Source defined primary is primary
Calculate when primary is inactive AND invalid?
Y
Source primary inactive?
N
Non-inactive source defined primary is primary
Y
Source primary invalid?
N
Non-invalid source defined primary is primary
Y
Current non-invalid primary remains primary
N
Non-inactive and non-invalid source defined primary is primary
Source primary inactive or invalid?
Y
Is source unsetting the Network primary?
N
Y
Is source unsetting the Network primary?
N
Y
Is source unsetting the Network primary?
N
Y
Is Network primary inactive?
N
P
Y
Current non-inactive primary remains primary
Is Network primary invalid?
N
Y
Is Network primary inactive or invalid?
N
Y
Current non-inactive and non-invalid primary remains primary
Q
O
Calculate primary from addresses in the source and Network

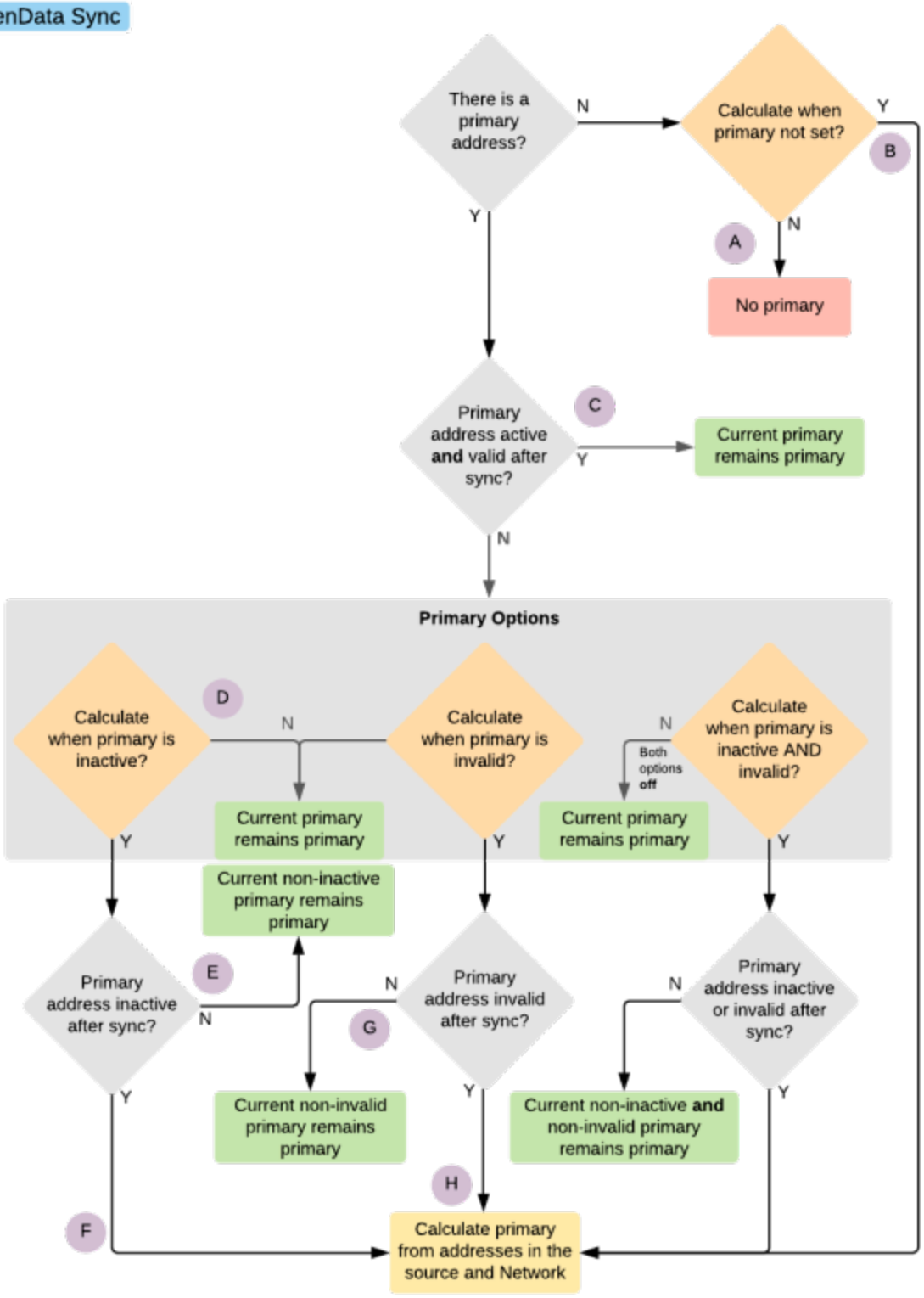

One matching source and Network primary
D1
E1
status, record state, primary, address fields changed?
Y
Number of primary addresses set in source
One primary address in source
N
Do nothing
Current Network primary active and valid?
Y
Current primary remains primary
N
Primary Options
Calculate when primary is inactive?
D2
N
Calculate when primary is invalid?
N
Both options off
Calculate when primary is inactive AND invalid?
Y
Current primary remains primary
Y
Current primary remains primary
Y
Current non-inactive primary remains primary
Current Network primary inactive?
E2
N
N
Current Network primary invalid?
N
Current Network primary inactive or invalid?
Y
Current non-invalid primary remains primary
Y
Current non-inactive and non-invalid primary remains primary
Y
Calculate primary from addresses in the source and Network


Multiple source primaries only
status, record state, primary, address fields changed?
Y
Number of primary addresses set in source
Multiple primary addresses in source
N
Do nothing
Any source primaries active and valid?
R
Y
Calculate primary from active and valid primaries in the source
N
Primary Options
Calculate when primary is inactive?
N
Calculate when primary is invalid?
S
N
Both options off
Calculate when primary is inactive AND invalid?
Y
Calculate primary from all primaries in the source
Y
Calculate primary from all primaries in the source
Y
Calculate primary from all non-inactive primaries in the source
All source primaries inactive?
N
N
All source primaries invalid?
N
All source primaries invalid or inactive?
Y
Calculate primary from all non-invalid primaries in the source
Y
Calculate primary from all non-inactive and non-invalid primaries in the source
Y
Calculate primary from addresses in the source and Network


Multiple source, non-matching Network primary
status, record state, primary, address fields changed?
Y
Number of primary addresses set in source
Multiple primary addresses in source
N
Do nothing
Any active and valid primary addresses in source?
T
Y
Calculate primary from active and valid primaries in source
N
Primary Options
Calculate when primary is inactive?
N
Calculate when primary is invalid?
N
Both options off
Calculate when primary is inactive AND invalid?
Y
Calculate primary from all primaries in source
Y
Calculate primary from all primaries in source
Y
Calculate primary from all non-inactive primaries in source
All source primaries inactive?
N
N
All source primaries invalid?
N
All source primaries inactive or invalid?
Calculate primary from all non-invalid primaries in source
Calculate primary from all non-inactive and non-invalid primaries in source
Y
Y
Y
Current non-invalid primary remains primary
Is source unsetting the Network primary?
N
Is source unsetting the Network primary?
N
Is source unsetting the Network primary?
N
Y
Y
Y
Is Network primary inactive?
N
V
N
Is Network primary invalid?
N
Is Network primary active or invalid?
Y
Y
Y
Current non-inactive primary remains primary
Current non-inactive and non-invalid primary remains primary
U
Calculate primary from addresses in the source and Network


Multiple matching source and Network primaries
status, record state, primary, address fields changed?
Y
Number of primary addresses set in source
Multiple primary addresses in source
N
Do nothing
Primary Options
Calculate when primary is inactive?
N
Y
Calculate when primary is invalid?
N
Both options off
Calculate when primary is inactive AND invalid?
Current primary remains primary
Y
Y
Current non-inactive primary remains primary
Current non-inactive and non-invalid primary remains primary
Current Network primary inactive?
N
N
Current Network primary invalid?
N
Current Network primary inactive or invalid?
Current non-invalid primary remains primary
Y
Y
Y
All source primaries inactive?
N
N
All source primaries invalid?
All source primaries invalid or inactive?
Y
Y
Y
Any active and valid primaries in source?
Y
Any active and valid primaries in source?
Y
Any active and valid primaries in source?
N
N
N
Z
Calculate primary from active and valid primaries in the source
Calculate primary from the active and valid primaries in the source
x
Calculate primary from all non-inactive primaries in the source
Calculate primary from all non-invalid primaries in the source
Calculate primary from all non-inactive and non-invalid primaries in the source
W
Calculate primary from addresses in the source and Network

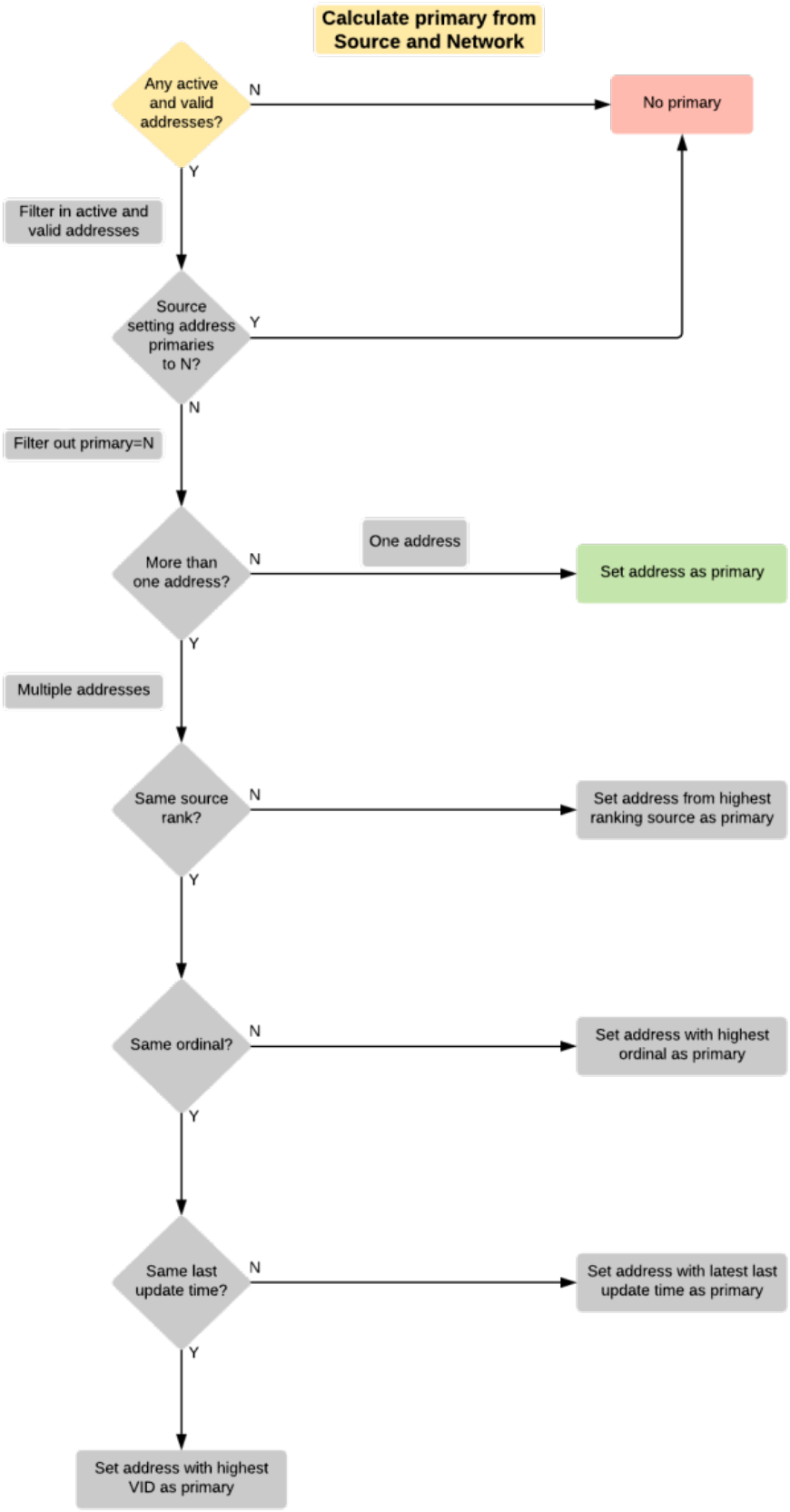
Veeva OpenData Sync



Calculating primary

If Network has to calculate primary, only active and valid addresses on the record are considered in the calculation. Addresses where the primary flag is set to "N" in the current change are filtered out from the calculation. If there are multiple addresses to consider, the following criteria are used as tie-breakers until one primary can be found:

1. Source rank
2. Address rank
3. Latest time that the primary was last updated. This is stored internally.
4. Highest Network entity ID (VID)


Calculate primary from Source and Network
Any active and valid addresses?
N
No primary
Y
Filter in active and valid addresses
Source setting address primaries to N?
Y
N
Filter out primary=N
More than one address?
One address
N
Set address as primary
Y
Multiple addresses
Same source rank?
N
Set address from highest ranking source as primary
Y
Same ordinal?
N
Set address with highest ordinal as primary
Y
Same last update time?
N
Set address with latest last update time as primary
Y
Set address with highest VID as primary

API

VERSION UPDATE

The Network API is updated to v17.0. Currently, there are no changes from v16.0. As with all version updates, integration users should continue to use v16.0 until there is a change for v17.0 that they want to apply.

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

CREATE UNVERIFIED RECORDS

The `create_unverified` parameter is now supported for the Change Request API. Integration users can specify which DCR API calls create unverified records. This API call overrides the Network workflow settings defined for HCPs, HCOs, addresses, and parent HCOs.

The parameter can either allow or prevent an unverified record from being created.

- If the parameter value is *true*, it will create an unverified record even if the Network workflow setting is set to false.
- If the parameter value is *false*, it will prevent an unverified record from being created, even if the Network workflow setting is set to true.
- If the value is not specified, the Network workflow settings determine whether an unverified record is created.

```
{
  "create_unverified": true,
  "metadata": {
     "creator": "crmuser@pharma.com",
     "system": "VCRM",
     "note": "John Smith is a new doctor in the Network Hospital",
     "source": "Veeva CRM"
  },
  "entity_type": "HCP",
  "entity": { … }
 }
```

This enhancement can be used for Network, but it also supports the Veeva CRM feature called Create Unverified Account by Record Types. For more information about this feature, see the *Veeva CRM 19R1.0 Release Notes*.