



Veeva Network

Veeva Network 23R3.0.1 Release Notes

December 2023



Contents

About these Release Notes 8

 Subscribe to release notifications 8

 Software releases and maintenance 8

 Release Notes and Data Governance documents 8

Browser requirements 8

Release Note updates 8

What's new 9

Hierarchy Explorer 12

 Directory view 12

 View all key networks 12

 Navigate the directory view 13

 Directory view configuration 14

 Accessing Summary View 15

 Summary View enhancements 16

 HCP Summary View 16

Data Change Requests 17

 Attachments 17

 Supported methods 17

 Turn on the feature 18

 Add attachments to DCRs 19

 View attachments on tasks 20

 Attachments for OpenData DCRs 22

 Reporting 23

 Network API 23



- Search..... 27**
 - Additional data in search results..... 27
 - Access related data..... 27
 - Custom objects..... 31
- Inbox 32**
 - Auto refresh 32
 - Last refresh time..... 32
 - Refresh manually..... 32
 - Filters..... 33
 - Sort order 33
 - Apply filters..... 33
 - Cancel filters 34
 - Filter highlighting..... 34
 - Reset filters..... 35
 - Task ID column 35
 - Default Inbox view 36
 - Default columns..... 36
 - Default sorting..... 37
 - Reset column layout..... 37
 - Select pane 37
- Survivorship..... 38**
 - Time-based survivorship rules 38
 - Supported objects 38
 - About survivorship 39
 - Supported actions..... 39



Create a time-based survivorship rule..... 40

Example - Updating data 41

Data loading considerations 43

Example - Merging records..... 45

Inactive fields..... 47

Data model 48

Network address inheritance 48

 Data model field 48

 Updating the field 48

 Reports 48

 Network API..... 49

Cluster management..... 50

Formatted name 50

 New name calculation 50

Data maintenance subscriptions 51

Data deduplication..... 51

 Enable matching to OpenData instances..... 51

 Match settings 52

 Job limits..... 52

 Reviewing the job outcome 53

 Match log updates 53

Job validation rules 53

 Job validation rules 54

 Apply job validation rules 55

 Failed rules 55



- OpenData subscriptions 56**
 - Opening records by Veeva ID 56
 - Veeva ID links 56
 - Pharmacy Operating License subscription 58
 - Data model field 58
 - Enable the subscription 58
 - Enable the field 58
 - Pharmacy Operating License updates 58
- Source subscriptions 59**
 - Simulating data updates..... 59
 - About simulation mode 59
 - Simulated data..... 60
 - Reviewing simulated data 60
 - Running a job in simulation mode 61
 - Job Details..... 63
 - View simulated output files 64
 - Review the files..... 65
 - Considerations for simulated output..... 66
 - Report on simulated data 67
 - Identify jobs that ran in simulation mode 70
 - Source Subscriptions view 70
 - Data flow view 71
 - Considerations for Veeva IDs..... 71
 - Duplicate custom keys..... 71
 - Advanced properties 72



Running jobs using the API 72

Match logs 73

 Match + Data group analysis log 73

 Data group analysis log 73

Subscription jobs 74

 Job notifications 74

 Notification details 74

 Impact..... 75

Integrations 76

 Transformation rules..... 76

 Benefits..... 76

 Process overview 76

 Veeva CRM integration..... 77

 Create a rule 78

 Target subscriptions 81

 Clone rules 83

 Network API..... 83

 Hashtag considerations 85

 Example transformation rules 85

Security..... 86

 SSL certificate update..... 86

 veevanetwork.com certificate 86

 Intermediate CA certificate 87

 Expiry 87

 View updated certificates..... 87



API.....	88
Version Update	88
Updates in v31.0.....	88



About these Release Notes

These Release Notes describe all features that are included in Veeva Network 23R3.0.

SUBSCRIBE TO RELEASE NOTIFICATIONS

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

Software releases and maintenance

- [Veeva Trust Site](#)

At the top of the page, click **Subscribe to Veeva Trust Site** and subscribe to the Veeva Network component.

Release Notes and Data Governance documents

The documents are posted in the following locations:

- Veeva Connect - Join the [Network Community](#).

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

- Veeva Product Support Portal

Follow the [Network Release Notes](#) section to be notified when release documents are posted.

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

Browser requirements

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

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

Veeva Network is not supported on mobile devices.

Release Note updates

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

- **Subscription jobs** - Notifications clearly state Completed, Canceled, or Failed so you can identify which emails require your immediate attention.

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 23R3.0 major release.

			ST	DS	DM	AD
Hierarchy Explorer widget						
Directory view	The directory displays all key networks/IDNs in your Network instance.	23R3.0	●	●	●	●
Accessing Summary View	A button displays beside each record so you can view the record hierarchy in a pop-up.	23R2.1	●	●	●	●
Summary View enhancements	The view is updated to include additional details on ancestor records and the ability to export groupings.	23R2.1	●	●	●	●
HCP Summary View	A summary view is now available for HCP records.	23R2.1	●	●	●	●
Data Change Requests						
Attachments	Image files can be attached when you submit add and change requests.	23R3.0	●	●	●	●
Search						
View data	Use the View Data button beside a record in the search results to quickly search its hierarchy and review related data components.	23R3.0	●	●	●	●
Inbox						
Auto-Refresh	Users can set the Inbox to automatically refresh every five minutes.	23R3.0		●	●	●
Filters	Several usability changes have been applied to filter behaviors.	23R3.0		●	●	●
Task ID column	This column is added to all Inbox views.	23R3.0		●	●	●
Default view	A predefined view is standardized for all users.	23R3.0		●	●	●
Select pane	The pane remains fixed when you scroll through the columns so you can easily select tasks.	23R3.0		●	●	●
Survivorship						
Time-based rules	Record level rules can be created to ensure that the most recent information wins survivorship.	23R2.1	●	●	●	●



			ST	DS	DM	AD
Data Model						
Network Address Inheritance	The copied address now stores the Veeva ID of the parent HCO that the address was copied from.	23R3.0			●	●
Cluster management	This feature now supports cluster data from Insight Health for Austria and Germany.	23R3.0			●	●
Formatted name	The custom calculation has been updated for Malaysia.	23R3.0			●	●
Data maintenance subscriptions						
Data deduplication	Administrators can choose to find matches with records not yet downloaded from OpenData.	23R3.0			●	●
Job validation rules	Use rules to ensure that records are not mistakenly deleted or unsubscribed.	23R2.1			●	●
Veeva OpenData subscriptions						
Veeva records	Records that haven't been downloaded from OpenData instance can be opened using the Veeva ID.	23R3.0	●	●	●	●
Pharmacy operating license	Pharmacy license data is available as a new field subscription for Germany.	23R3.0			●	●
Source subscriptions						
Simulating updates	Run jobs in simulation mode so you can preview the outcome before committing the data.	23R2.1			●	●
Match logs						
Match + data group analysis log	Updated columns clarify when records are matched by custom key.	23R3.0			●	●
Data group analysis logs	New columns indicate how groups are performing for matches.	23R3.0			●	●
Subscription. jobs						
Job emails	Job notifications clearly indicate Completed, Canceled, or Failed job statuses.	23R3.0			●	●
Integrations						
Transformation rules	Create rules to transform field values (ex. override OpenData values) in the APIs and in files exported to Veeva CRM and other downstream systems.	23R2.1				●



ST DS DM AD

Security			
SSL certificates	Customers who explicitly download and install certificates must update the certificate for veevanetwork.com.	23R3.0	
API			
Version update	The Network API is updated to v31.0.	23R3.0	Developers

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

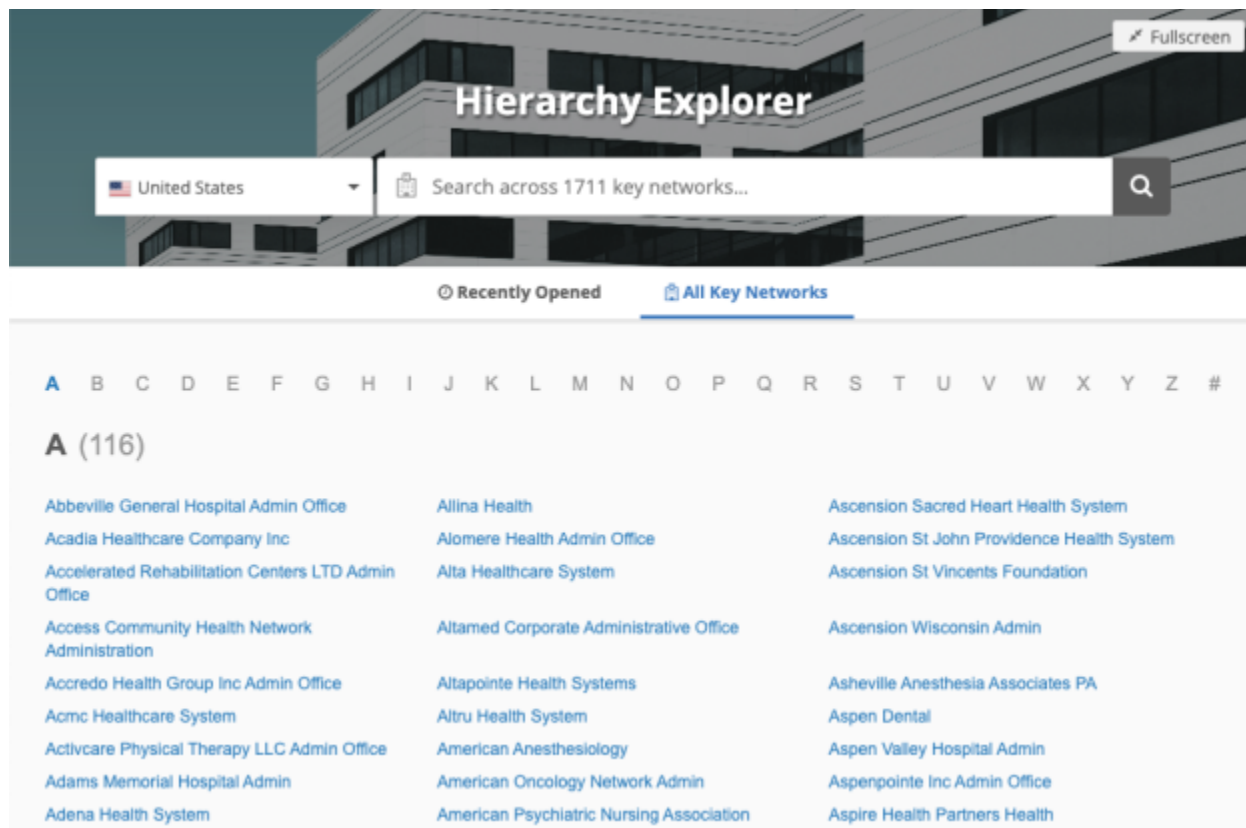
Data Governance - Specific updates for fields and reference data are provided in the *Veeva Network Data Governance* release notes for every minor and major Network release.



Hierarchy Explorer

DIRECTORY VIEW

A new view displays all HCOs that are defined as key networks/IDNs in your Network instance.



This feature is on by default if the Hierarchy Explorer is enabled for your Network instance.

View all key networks

By default, when you open Hierarchy Explorer, the **Recently Opened** tab displays. Click **All Key Networks** to view all the HCOs that are defined as key networks in your Network instance.

The key networks/IDNs are organized in alphabetical order by name. Click a letter to view the key networks that begin with that letter.

The letter that you are currently viewing is highlighted in blue in the directory. A count of key networks displays beside the opened letter.



☰ Recently Opened 📁 All Key Networks

A B C D E F G H I **J** K L M N O P Q R S T U V W X Y Z #

J (13)

Jackson County Memorial Hospital Admin	Jersey Community Hospital Admin Office
Jackson Health System	John Fitzgibbon Memorial Hospital Inc Admin Office
Jackson Hospital And Clinic Inc Admin Office	John Muir Health System
Jacobson Memorial Hospital Care Center Admin	Johns Hopkins Health System
Jane Todd Crawford Hospital Admin Office	Jps Health Network
Jefferson Health System	Jupiter Medical Center Admin
Jefferson Regional Medical Center Admin	

[Previous](#) [Next](#)

Key network/IDN names that do not begin with a letter (A-Z), display when you click the # symbol.

☰ Recently Opened 📁 All Key Networks

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z **#**

(2)

21st Century Oncology Inc	360 Physical Therapy LLC Admin Office
---------------------------	---------------------------------------

[Previous](#) [Next](#)

Navigate the directory view

- Click the letters in the heading to view the key networks that begin with that letter.
- Use the **Previous** or **Next** links at the bottom of the page to move between letters.
- Click **Scroll to Top** to return to the top of the page.



Directory view configuration

The directory view uses the existing settings that Administrators define in the Hierarchy Explorer configuration (**Widgets & Portal**).

Tab name

The directory view name (for example, **All Key Networks**) uses the label defined for the **Top Parent** in the widget configuration.

Labels

WIDGET TITLE
Define the text that displays beside the logo in the widget header.

Language	Label
English	Network Hierarchy Explorer

TOP PARENT
Define the label to refer to Top Parent HCOs.

Language	Singular Label	Plural Label
English	Key Network	Key Networks

Key networks / IDNs

The directory view displays the HCOs that meet the requirements of a key network/IDN that are defined in the **Top Parent Mappings** section.

Top Parent Mappings

Define the top parent HCO for each country in the Hierarchy Explorer.

United States
✕

FIELD	CONDITION	VALUE	
IDN?	In	Yes/True ✕	✕

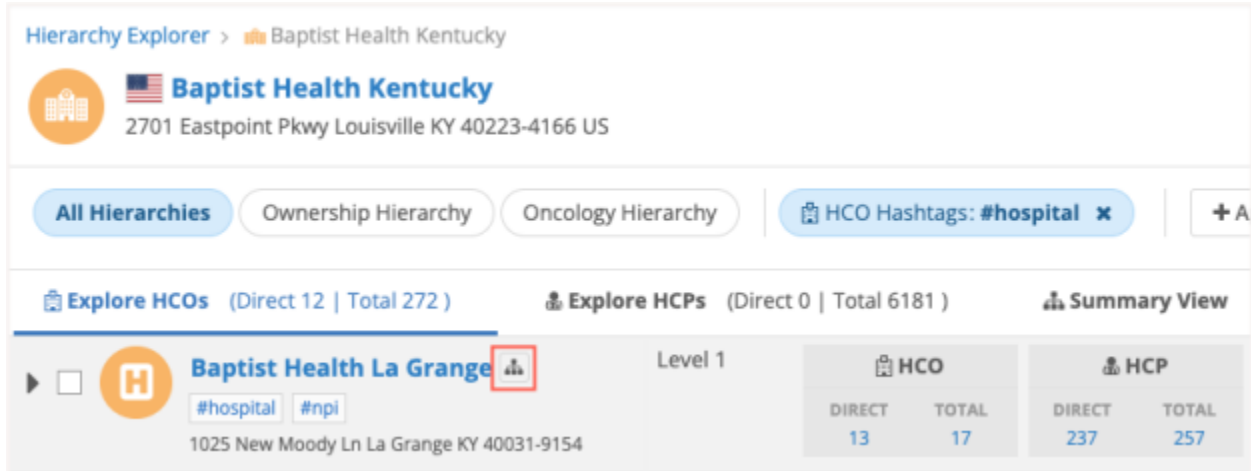
[+ Add Condition](#)



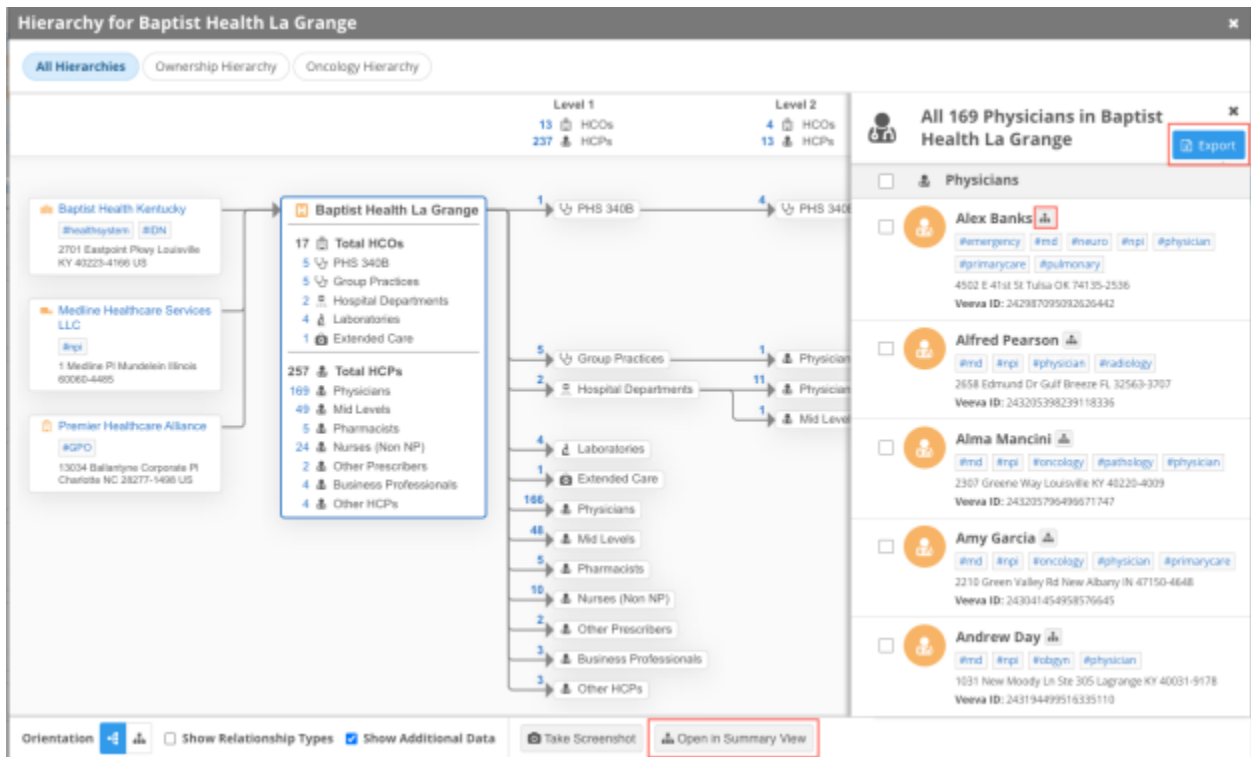
ACCESSING SUMMARY VIEW

23R2.1

A **Hierarchy** icon displays beside each record so you can quickly access the data to keep exploring and understanding the organization.



The Summary View opens in a pop-up, instead of the tab, with that record in focus.



Click on any of the group counts to open a pane and view the list.

All the functionality in the Summary View tab is available in the pop-up except HCO/HCP filters. If you want to filter the accounts, use the **Open in Summary View** button to display the hierarchy in the tab.



SUMMARY VIEW ENHANCEMENTS

23R2.1

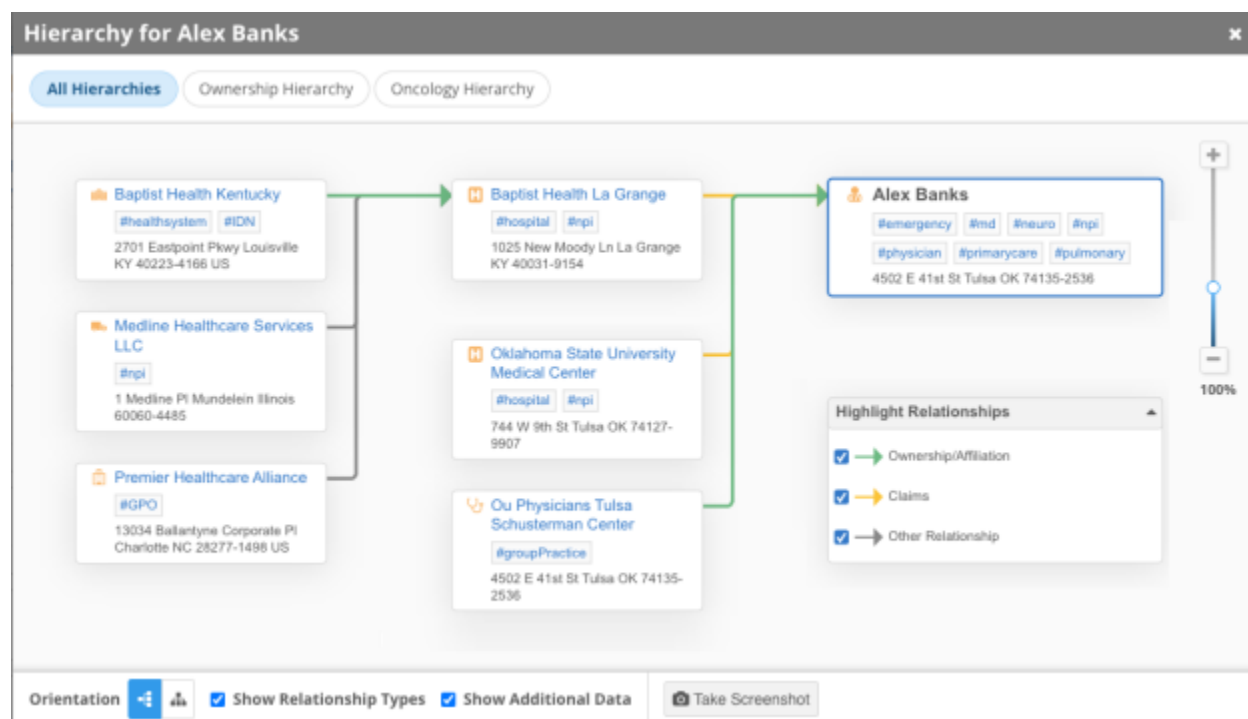
The following updates are available in the Summary View tab and the Summary View popup.

- **Export** - The **Export** button is available when you click any of the HCP or HCO group counts so you can download the list.
- **Ancestors** - Hashtags and addresses display on the ancestor nodes to provide more information about these HCOs. These details are available when the **Show Additional Data** setting is on. The setting is on by default.

HCP SUMMARY VIEW

23R2.1

A summary view is now available for HCP records so you can see a diagram of the associated HCOs.



Tip: Use the custom hierarchies or **Show Relationship Types** settings to understand the different relationships for the HCP.

Click an HCO name to open the Summary View for that HCO.

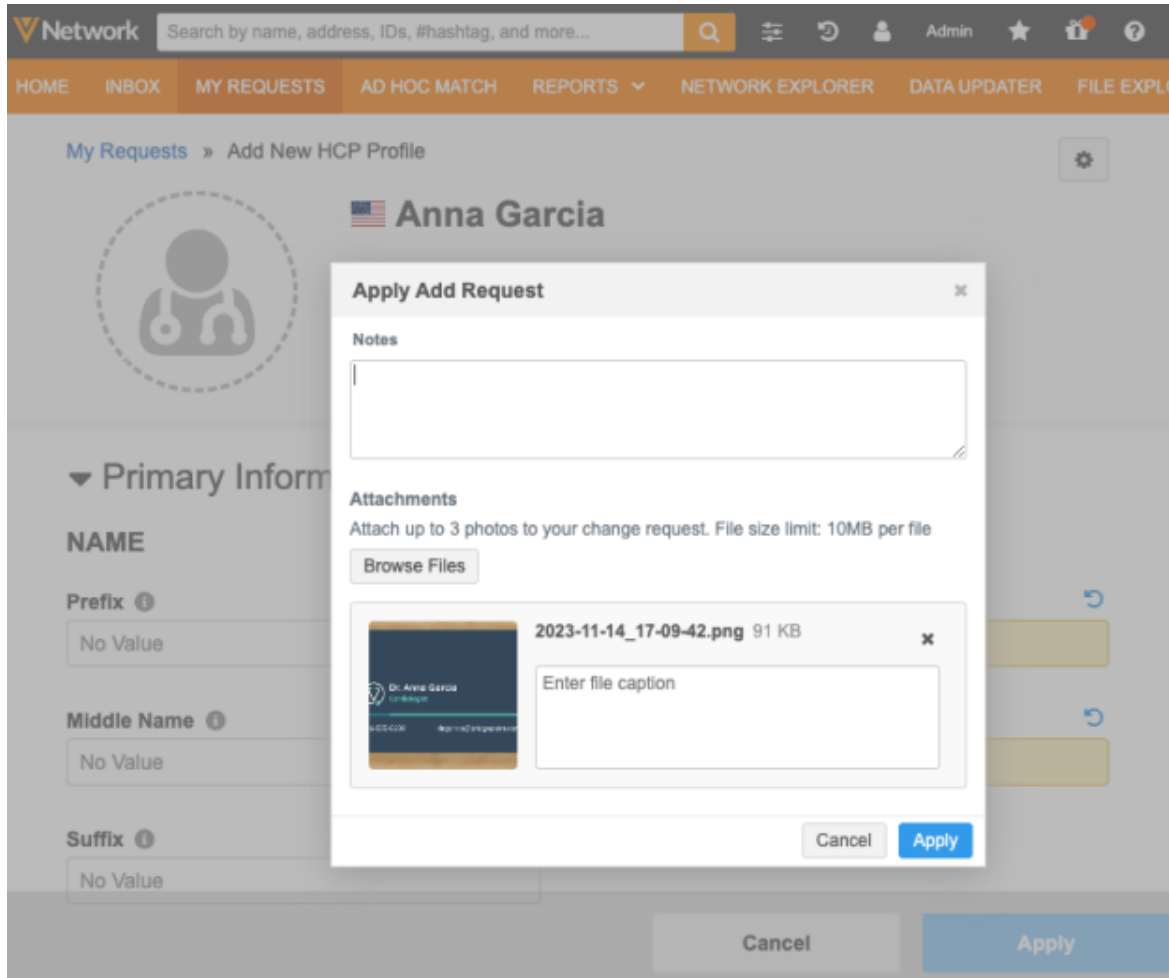


Data Change Requests

ATTACHMENTS

23R3

Include attachments on add and change requests to provide supporting information or evidence that Data Stewards can use to quickly validate the requests.



This feature is available in your Network instance by default. Administrators can configure support for attachments for each object in the Workflow Settings.

Supported methods

Attachments can be added when DCRs are submitted from the following:

- Network UI - Profile page
Add requests, change requests, and when local Data Stewards route add request to OpenData (Send to OpenData).
- Network API - Change Request API
Create Change Request, Retrieve Change Request, and Batch Retrieve Change Request API calls.



Turn on the feature

The feature is available in your Network instance, but attachments are not supported on DCRs for any object by default. Administrators can configure it for each object.

HCPs and HCOs

To allow attachments on DCRs for HCPs and HCOs:

1. In the Admin console click **Settings > Workflow settings**.
2. In the **Allow Attachments on Add Request and Change Request Submissions**, define the permission on HCP and HCO requests.
 - **Do not allow for all HCPs** - The option to add attachments will not display on add and change requests. (selected by default).
 - **Allow for all HCPs** - The option to add attachments will display on all add and change requests.
 - **Allow for defined HCP types** - The option to add attachments displays only for the defined HCPs.
Choose the fields and values to filter the attachment option for specific HCPs.
3. **Save** your change.

▼ Allow Attachments on Add Request and Change Request Submissions

HCP

Do not allow for all HCPs

Allow for all HCPs

Allow for defined HCP types

HCO

Do not allow for all HCOs

Allow for all HCOs

Allow for defined HCO types

FIELD	VALUE
HCO Type	5 items selected

[+ Add Field](#)

Custom objects

To allow attachments on DCRs for custom objects in your Network instance:

1. In the Admin console click **Settings > Custom Object Workflow Settings**.
2. Select a custom object.
3. Click **Edit**.
4. In the **Allow Attachments on Add Request and Change Request Submissions**, select the custom object.
5. **Save** your change.

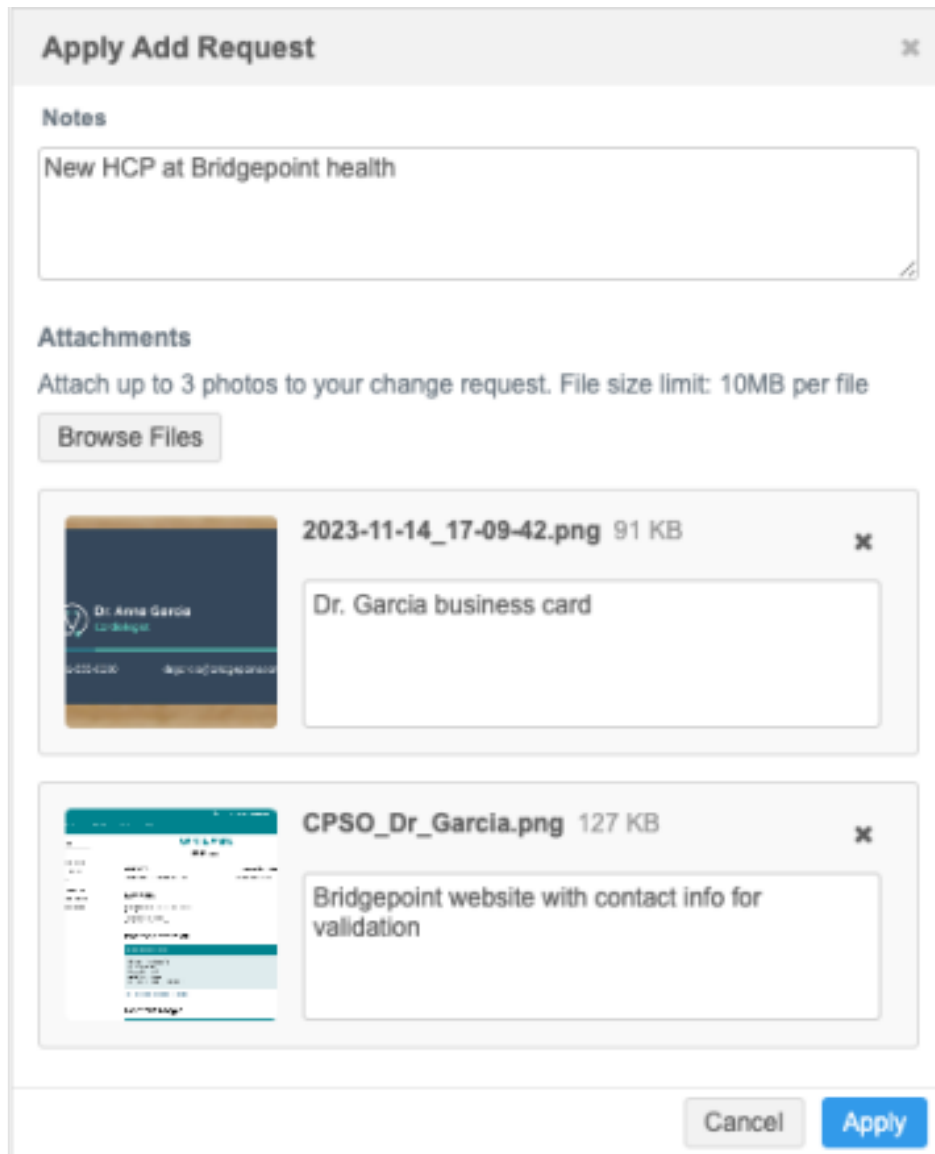


Add attachments to DCRs

Adding attachments is optional. This supporting information can help Data Stewards to know where to validate the data.

Attachments can be added when you create an add request or change a record on the profile page.

1. Click **Apply** to submit the add request or change request.
The dialog contains an **Attachments** section.
2. Click **Browse Files** to find images and add them to the request.
3. Add a description for the attachment (optional).





Supported files

- **File types** - All image file types are supported.
 - BMP
 - GIF
 - HEIF (supported on Apple® devices only)
 - JPG/JPEG
 - PNG
 - TIF/TIFF
- **Number of files** - A maximum of three attachments can be added to each DCR.
- **File size** - 10MB maximum for each file.

View attachments on tasks

Add request and change request tasks now contain an **Attachments** tab. The tab displays by default if attachments are included in the request.

The screenshot displays the 'Add Request' form for Anna Garcia. The form includes sections for Primary Information, Personal Information, and Custom Fields. The Primary Information section contains fields for First Name (Anna), Last Name (Garcia), HCP Type (Doctor), Specialty 1 (Cardiovascular Disease), and Status (Active). The Personal Information section shows Primary Country as Canada. The Custom Fields section shows Cholecap Decile as 5. The Attachments tab shows two files: '2023-11-14_17-09-42.png' (81 KB) and 'CPSO_Dr_Garcia.png' (127 KB).

Field	Add Request
Primary Information	
First Name *	Anna
Last Name *	Garcia
HCP Type	Doctor
Specialty 1	Cardiovascular Disease
Status	Active
Personal Information	
Primary Country	Canada
Custom Fields	
Cholecap Decile	5

Attachments (2)

- 2023-11-14_17-09-42.png**
81 KB • 2023-11-14 22:14:33 GMT
Dr. Garcia business card
[Preview](#) [Download](#)
- CPSO_Dr_Garcia.png**
127 KB • 2023-11-14 22:14:33 GMT
Bridgepoint website with contact info for validation
[Preview](#) [Download](#)



Details

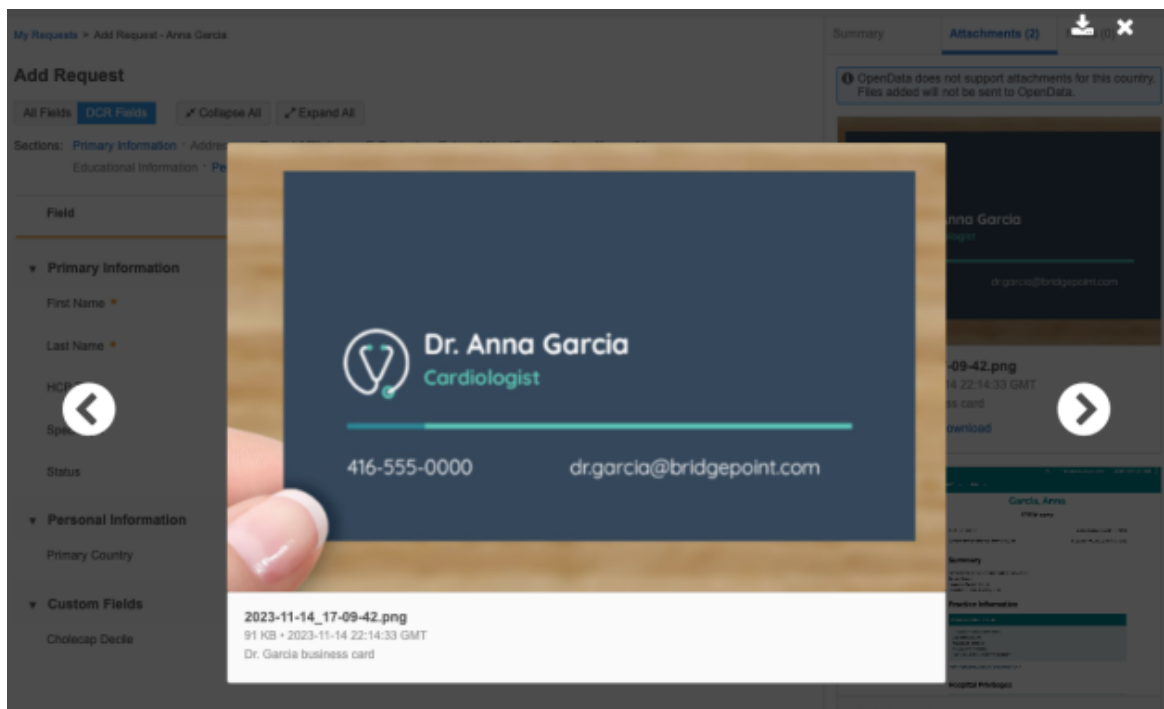
The following details display for each attachment:

- thumbnail
- file name
- image size
- date and time that the attachment was added
- description that the requester added before submitting the DCR

Actions

- **Preview** - Click to expand the image on the page. Click the **Arrow** icon to move to the next attachment.

You can also download the image in preview mode.



If the file cannot be previewed, this link does not display.

- **Download** - Save the image locally on your computer.



Attachments for OpenData DCRs

By default, this feature is on for all countries in all Veeva OpenData instances. Veeva OpenData can decide to turn off the feature for specific countries.

If OpenData turns off the feature for a country, a banner displays when you apply a DCR for that country. The banner displays the following message: OpenData does not support attachments for this country. Files added will not be sent to OpenData.

Apply Change Request ✕

Notes

Attachments

ⓘ OpenData does not support attachments for this country. Files added will not be sent to OpenData.

Attach up to 3 photos to your change request. File size limit: 10MB per file

Browse Files

Cancel **Apply**

Adding attachments is still supported. They will not be included on the DCR for OpenData, but they are available to local Data Stewards for review.

The banner also displays when you view the submitted task (**My Requests**).

Note: When the feature is not on for a country, OpenData Data Stewards will not see or know if you have added attachments to a DCR for that country.



Reporting

A new column, **Has Attachments**, is added to the change_request reporting table so you can report on DCRs with attachments. The column value is True/False.

Example

The screenshot shows a query interface with a SQL query: `select * from change_request`. Below the query, there is a status bar indicating 'Query Valid' and a checkbox for 'Include only VALID and UNDER_REVIEW records in results.' The main area displays 'Report Results (101 records)' with a table of data. The table has columns: CREATED DATE, CREATED BY, COMPLETED DATE, COMPLETED BY, JOB ID, and HAS ATTACHMENTS. The 'HAS ATTACHMENTS' column is highlighted with a red border. The data rows are as follows:

CREATED DATE	CREATED BY	COMPLETED DATE	COMPLETED BY	JOB ID	HAS ATTACHMENTS
2021-05-11 15:13:46	admin@verteo.com				TRUE
2023-11-16 12:04:07	admin@verteo.com	2023-11-16 13:13:52	data@verteo.com		TRUE
2021-05-11 19:05:18	admin@verteo.com				FALSE
2023-11-16 13:09:10	admin@verteo.com				TRUE

Network API

Attachments are supported in change request API calls. This is supported for Network API v31 and later.

Create Change Request API

Attachments are sent through the API using base64 encoding.

POST data

The following data and details are added to support this feature.

- **attachments**
 - file_name - The image name and extension (for example, image1.png)
 - file_caption - A description of the image (*optional*)
 - file_content_type - The type of file. For example, image/jpeg.
 - format - Defaults to base64 if not specified.
 - file_source_id - An ID for external integration use. (*optional*)
 - file_data - The base64 encoding for the image.



Example request

In this example, two attachments are added.

```
{
  "metadata": {
    "creator": "admin@verteo.veeva.com",
    "system": "null",
    "note": "test",
    "source": "Veeva CRM"
  },
  "entity_type": "HCP",
  "vid_key": "Network:HCP:214065474881717253",
  "entity": {
    "licenses_v": [{
      "address_vid_key": "Network:Address:210909264435217422",
      "attribute 1": "Value 1",
      "attribute 2": "Value 2",
      " ... ": " ... "
    }]
  },
  "attachments": [{
    "file_name": "196.heif.png",
    "file_caption": "HCP1",
    "file_content_type": "image/heif",
    "format": "base64",
    "file_source_id": "1688665744000",

    "file_data": "LDJ9NC1DNFkpnN20y4tLmM0JVBERi0xLjQNCjUgMCFvYmoNCjw8DQovVHlwZSAv
WE9iamVjdA0KL1N1YnSAwIFlVrSW5mbyAxMjYgMCFvYmoNCjw8DQovVHlwZSAvWE9iamVj
dA0KL1N1YnR5cGUgMSA"
  }, {
    "file_name": "243.heif",
    "file_caption": "HCP2",
    "file_content_type": "image/heif",
    "format": "base64",
    "file_source_id": "1688665758000",
    "file_data":
    "bm5gLDJ9NC1DNFkpnN20y4tLmM0JVBERi0xLjQNCjUgMCFvYmoNCjw8DQovVHlwZSAvWE9iamVj
dA0KL1N1YnR5cGUgMSA"
  }]
}
```

Example response

```
{
  "responseStatus": "SUCCESS",
  "change_request_id": 542116772438868992
}
```




Example response - image error

```
{
  "responseStatus": "PARTIAL SUCCESS",
  "change_request_id": 542116772438868992,
  "errors": [
    {
      "type": "Attachment Failure",
      "message": "Unsupported file type."
    },
    {
      "type": "Attachment Failure",
      "message": "Exceeded the maximum number of attachments for this
DCR."
    }
  ]
}
```

Retrieve / Batch Retrieve Change Request

New parameter

- "includeAttachment Info":"true"

Example

```
https://<DNS>/api/v31.0/change_request/943700690834537631?includeAttachment
Info=true
```



Example response

```

"responseStatus": "SUCCESS",
"change_requests": [
  {
    "change_request_id": "943805201030581407",
    "status__v": "CHANGE_PARTIALLYPROCESSED",
    "result__v": "CHANGE_PARTIAL",
    "entity_type": "HCP",
    "vid_key": null,
    "vid__v": "943805210273580639",
    "metadata": {
      "creator": "admin@verteo.veeva.com",
      "note": "test",
      "source": "Entity Profile Editor",
      "system": null
    },
    "attachments": [
      {
        "file_name": "196.heif",
        "file_caption": "HCP1",
        "file_content_type": "image/heif",
        "file_source_id": "1688665744000",
        "file_status": "SUCCESS",
        "name": "943805201003187359",
        "file_size": 2593013,
        "timestamp": 1700190526000,
        "can_send_attachment_to_opendata": true
      },
      {
        "file_name": "243.heif",
        "file_caption": "HCP2",
        "file_content_type": "image/heif",
        "file_source_id": "1688665758000",
        "file_status": "SUCCESS",
        "name": "943805201006660767",
        "file_size": 2465548,
        "timestamp": 1700190526000,
        "can_send_attachment_to_opendata": true
      }
    ]
  }
]

```

Response

The following details are returned in the response:

- file_name - The image name and extension (for example, image1.png)
- file_caption - A description of the image (*optional*)
- file_content_type - The type of file. For example, image/jpeg.
- file_source_id - An ID for external integration use. (*optional*)
- file_status - The status of the image received.
- name - The Veeva ID of the attachment.
- file_size - The size of the file.
- timestamp - The time that the attachment was added.
- can_send_attachment_to_opendata - Indicates if the OpenData country accepts the attachment (true/false).



Search

ADDITIONAL DATA IN SEARCH RESULTS

23R3

You can now access hierarchy data and business reports for records directly from the search results. A **View Data** button displays beside records so you can quickly access this related data.

The screenshot shows a search results page for 'Ascension'. At the top, it says 'Search results for: Ascension' and 'Add Record'. Below that, it says 'Didn't find what you were looking for? Try Advanced Search.' and 'Displaying 1 to 10 of 2,860 (0 Selected)'. The main content area shows three search results. The first result is 'Ascension Health (@AscensionHealth)' with a 'View Data' dropdown menu open. The dropdown menu has the following options: 'Open Profile', 'Add to Starred', 'Copy Veeva ID to clipboard', 'Hierarchy Records' (with sub-options: 'Direct Child Records', 'Parent Records', 'All Records in the Hierarchy'), and 'Data Reports' (with sub-options: 'Adds to the Hierarchy', 'Drops in the Hierarchy', 'Missing Records in OpenData Hierarchy', 'Physicians and Mid Levels', 'Top Parent Info').

This feature is enabled by default in your Network instance.

Access related data

The **View Data** menu contains several options for accessing parent and child affiliations and data components that are available for the record.

- **Open Profile** - Open the record profile in a new browser tab.
- **Add to Starred** - Mark the record as a favorite.
- **Copy Veeva ID to clipboard** - Copy the VID so you can quickly share it.
- **Hierarchy Records** section (available for HCOs and HCPs only)

Click an option to search for records in this hierarchy. Search results display for records in your Network instance and from OpenData.





Note: To view search results from the OpenData database, your user account and Network instance must have permission. For more details, see [Search against OpenData records](#) in the *Veeva Network Online Help*.

- **Direct Child Records** (HCOs only) - New search results display all child records for the HCO.

Sort by Relevance Show 10 < 1 of 1 >



Direct Child Records of:


  **Catskill Regional Medical Center Harris Campus** ☆

[#hospital](#) [#medicare](#) [#npi](#)



Multi Specialty Practice
68 Harris Bushville Rd Monticello NY 12701-3027


Displaying 1 to 2 of 2 (0 Selected)


  **Violet Ames** View Data

[#md](#) [#npi](#) [#pathology](#) [#physician](#) 

Health Care Professional
Anatomic/Clinical Pathology
281 Lincoln St Med Staff Svcs Worcester Massachusetts 01605-2138

  **Marta Cruz** View Data

[#emergency](#) [#midLevel](#) [#npi](#) [#obgyn](#) [#urology](#) 

Health Care Professional
Urology, General Surgery, Obstetrics & Gynecology, Emergency Medicine
707 E Main St Middletown NY 10940-2650
Key Network:  [Garnet Health](#) (@GarnetHealth)



- **Parent Records** - New search results display all parent affiliations.

Sort by Relevance Show 10 of 1

Parent Records for:

- Catskill Regional Medical Center Harris Campus** ☆
#hospital #medicare #npi
Multi Specialty Practice
68 Harris Bushville Rd Monticello NY 12701-3027
- Cardinal Health Inc Corporate Office** View Data
Health Care Organization
Unspecified specialty
7000 Cardinal PI Dublin OH 43017-1091
HCO Type: Distributor, General
Alt Key: HCO-100008649
- Greater Hudson Valley Health System (@GarnetHealth)** View Data
#healthsystem #IDN
Health Care Organization
Unspecified specialty
707 E Main St Middletown NY 10940-2650
HCO Type: Organization, Health System
Alt Key: HCO-100016674

Displaying 1 to 2 of 2 (0 Selected)

- **All Records in the Hierarchy** (IDNs/key networks only) - New search results for all HCPs and HCOs in the hierarchy.

Note: If this option does not display, the record is not configured for the key network search feature. For more information, see [Key HCO network search](#) in the Veeva Network Online Help.



Sort by Relevance Show 10 of 120

Search results for: @TrinityHealth Add Record

FILTERS: @TrinityHealth Clear Filters | Edit Filters

Displaying 1 to 10 of 1,198 (0 Selected)

Amy Fallon View Data

#md #npi #physician #primarycare

Health Care Professional
 Family Medicine (Formerly FP)
 6024 Hoover Rd Grove City OH 43123-8133
 Alt Key: HCP-100010004
 Key Networks: [Trinity Health System \(@TrinityHealth\)](#) | [Ohiohealth \(@Ohiohealth\)](#)

Alfredo Jiminez View Data

#md #npi #obgyn #physician

Health Care Professional
 Obstetrics & Gynecology
 418 E Polk St Washington IA 52353-1237
 Alt Key: HCP-100011072
 Key Network: [Trinity Health System \(@TrinityHealth\)](#)

Scott Woods View Data

#emergency #md #npi #physician #primarycare

Health Care Professional
 Emergency Medicine, Family Medicine (Formerly FP)
 2501 Pierce St Sioux City IA 51104-3725
 Alt Key: HCP-100001194
 Key Network: [Trinity Health System \(@TrinityHealth\)](#)

- **Data Reports** section

This displays if there are data components applied to the record. Salesforce® and Reporting data components display.

Click a data component to open it as a Network table (previously called *smart table*) in a new browser tab.

All the Network table capabilities are available; you can add fields, filter, sort, and download the table. If the data component contains sections, they display as tabs at the bottom of the table. Click the tabs to review each section.



Calls Reza Minhaj View Original File Download Add Fields

6 Rows No Filters Applied

Call Date	Address	Call Type	CRM User
2023-09-12	10535 Hospital Way, Mather, C...	Detail Only	Sarah Jones
2023-09-12	10535 Hospital Way, Mather, C...	Call Only	Scott Woods
2023-09-12	10535 Hospital Way, Mather, C...	Detail Only	Sarah Jones
2023-07-13	10535 Hospital Way, Mather, C...	Detail Only	Sarah Jones
2023-06-12	10535 Hospital Way, Mather, C...	Detail Only	Sarah Jones
2022-12-13	10535 Hospital Way, Mather, C...	Detail Only	Sarah Jones

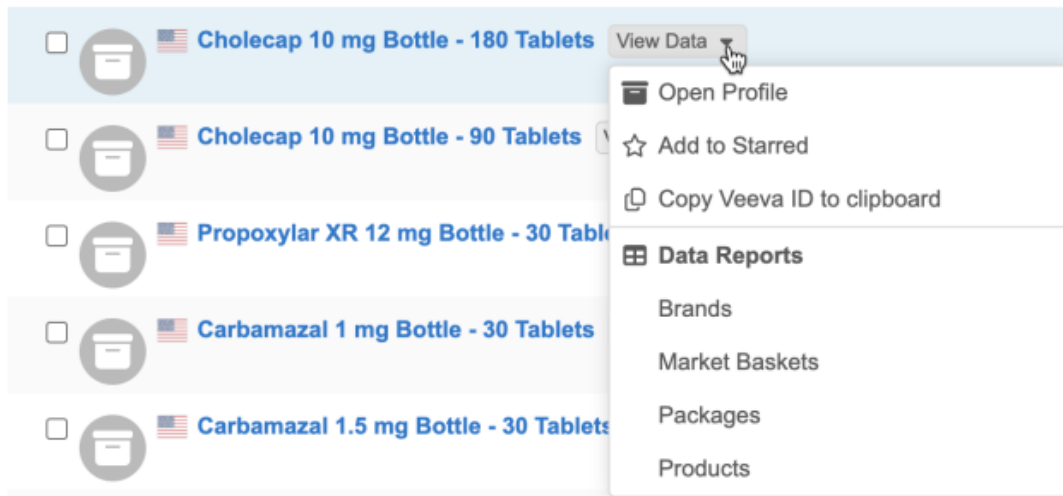
Calls Cholecap Calls Restolar Calls

To share the Network table, click the **Copy** icon to copy the link to your clipboard.

Custom objects

The **View Data** options are available for custom objects in search results.

Note: The **Hierarchy Records** section does not display for custom objects.





Inbox

Several changes have been made to improve the usability of the Inbox page.

These enhancements are on by default in your Network instance.

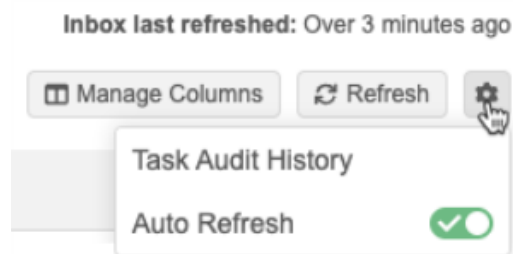
AUTO REFRESH

23R3

You can set the Inbox to automatically refresh so you always have the most current data. When the **Auto-Refresh** setting is on, the Inbox refreshes every five minutes.

To enable the setting:

1. At the top of the Inbox, click the **Options** ⚙️ menu.
2. Toggle the **Auto Refresh** setting on.

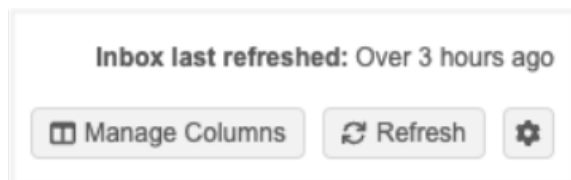


Previously, the **Auto Refresh** setting was on by default and refreshed the Inbox every 90 seconds.

Last refresh time

The **Inbox Last Refreshed** indicates how much time has passed since the Inbox updated.

- **Auto Refresh** on - Use this time to know when the next refresh will occur.
- **Auto Refresh** off - Use the time to identify that the data needs to be manually refreshed.



Refresh manually

To manually refresh the page, click **Refresh**.



FILTERS

23R3

The following changes are applied to filters to improve Inbox performance.

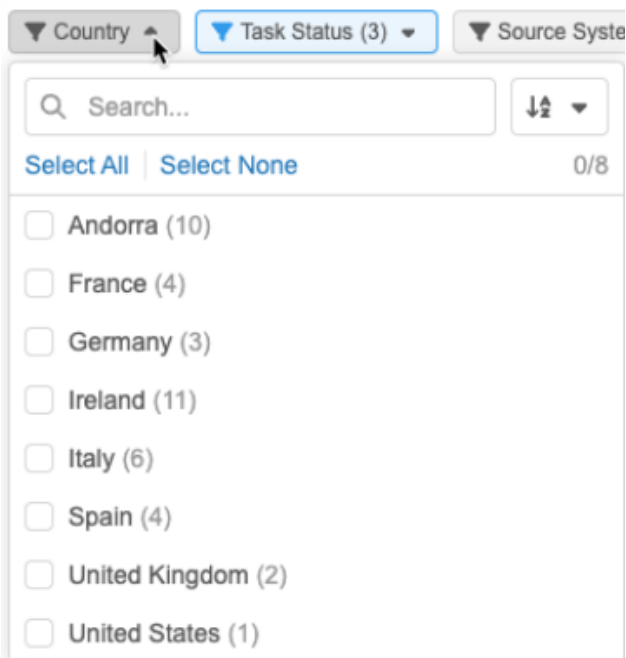
Sort order

The **Country**, **Task Status**, and **Source Systems** filters are now sorted alphabetically in ascending order(A-Z). Previously, the filters were sorted by count (highest to lowest). The task counts are calculated after the filter opens.

- To change the sort order, click the **Sort** icon.

Sort options

- **Sort By Name (Ascending)** - Sort alphabetically from A-Z. (Default sort order).
- **Sort By Name (Descending)** - Sort alphabetically from Z-A.
- **Sort By Count (Ascending)** - Sort from highest to lowest count.
- **Sort By Count (Descending)** - Sort from lowest to highest count.



Apply filters

Multiple filters can now be selected before they are applied. Previously, each filter was applied separately and the Inbox would automatically update, requiring you to wait before you could apply another filter.

Now, when you select one or more filters, a banner displays at the bottom of the Inbox so you can apply the changes.



TASK ID	ENTITY	COUNTRY	TYPE	SUMMARY	ASSIGNEE
943705873193176223	Nottingham Children's Hospit...	United Kingdom	Change Request	Change Market Access? and ...	
943705869734775967	The Royal Marsden Hospital ...	United Kingdom	Change Request	Change # of MDs and DOs a...	
943705852764425375	Clinica Omega Diaz	Spain	Change Request	Change URL 1 and 7 other fi...	pm.manager@eumaster.vdr
943705846734720159	Hôpital Saint-Eloi / Service : ...	France	Change Request	Change Degree 1 and 4 other...	
943705841296018591	Comité de Ética de la Invest...	Spain	Change Request	Change Corporate Name and...	pm.manager@eumaster.vdr
943705833191443615	Ospedale Di Summa - Perin...	Italy	Change Request	Change Birth Year and 3 othe...	
943705818985362975	CH de Rambouillet / Service ...	France	Change Request	Change # of MDs and DOs a...	
943705815443967135	Hôpital Saint-Eloi / Service : ...	France	Change Request	Change URL 1 and 4 other fi...	pm.manager@eumaster.vdr

After you add a filter, the counts in subsequent filters reflect that selected filter. For example, if you select "United States" in the **Country** filter, the counts in the **Task Status** or **Source Systems** filter will reflect only the tasks for the United States.

When you apply filters, the Inbox refreshes and resets the last refresh time.

Cancel filters

If you select one or more filters and then click **Cancel**, the Inbox returns to the state it was in before you selected the filters.

This could return the Inbox to unsaved changes that you have made to the view.

Example

If you added a column to the view but did not save the changes and then immediately added filters, if you click **Cancel** to remove the filters, the new column remains on the unsaved view.

Filter highlighting

The **Country**, **Task Status**, and **Source Systems** filters and the Inbox column headers are the color gray by default.

The following colors are used to indicate the filter status:

- **Yellow** - The filter is selected but has not been applied.
- **Blue** - The filter is applied to the Inbox.



All DCRs This view has been updated. [Save changes.](#)

Country Task Status (3) Source Systems [Reset Filters](#)

TASK ID	ENTITY	TYPE	SUMMARY	ASSIGNEE
943705873193176223	Nottingham Children's...	Change Request	Change Market Access? an...	
943705869734775967	The Royal Marsden ...	Change Request	Change # of MDs and DOs ...	
943705852764425375	Clinica Omega Diez	Change Request	Change URL 1 and 7 other ...	pm.manager@eumaster.vd...
943705846734720159	Dr. Pere Gascón Vila...	Change Request	Change Degree 1 and 4 oth...	
943705841296018591	Comité de Ética de la...	Change Request	Change Corporate Name a...	pm.manager@eumaster.vd...

Reset filters

The **Reset Filters** button returns the Inbox back to the default filtering. By default, the Inbox is filtered by the **Task Status** (New, Pending Review, Processing) and **Assignee** (Me and my groups) columns.

If your Inbox has the default filtering applied, **Reset Filters** is dimmed because there is nothing to reset.

TASK ID COLUMN

23R3

To help Data Stewards and Data Managers quickly open a task, the **Task ID** column is now added to all Inbox views.

All DCRs This view has been updated. [Save changes.](#) Inbox last refreshed: Les

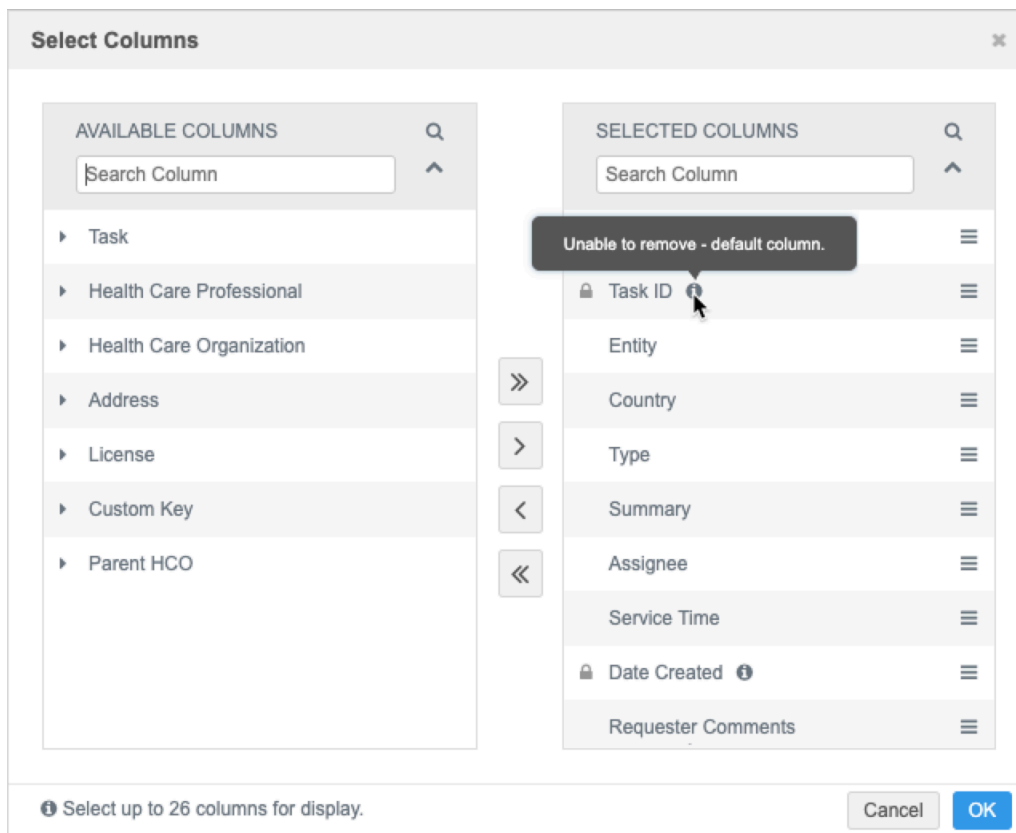
Country Task Status (3) Source Systems [Reset Filters](#) DCR Cleanup Enter Task ID Go to Task + Add Record Manage Columns

TASK ID	ENTITY	COUNTRY	TYPE	SUMMARY	AS
943705873193176223	Nottingham Children's Hospit...	United Kingdom	Change Request	Change Market Access? and ...	
943705869734775967	The Royal Marsden Hospital ...	United Kingdom	Change Request	Change # of MDs and DOs a...	
943705852764425375	Clinica Omega Diez	Spain	Change Request	Change URL 1 and 7 other fle...	pm
943705846734720159	Ospedale Di Summa - Perrin...	Spain	Change Request	Change Degree 1 and 4 other...	
943705841296018591	Comité de Ética de la Investil...	Spain	Change Request	Change Corporate Name and...	pm

Task ID displays as the first column in all views for all users by default, but it can be moved to a different position.

To move the column, click **Manage Columns > Select Columns**. Use the **Handle** icon to move the column to a different position.

The **Task ID** column is locked and cannot be removed from the Inbox view.



Because this column is added, Inbox views now support 26 columns. Previously, 25 columns were supported.

DEFAULT INBOX VIEW

23R3

A predefined view is standardized for all users. If it is your first time using the Inbox or if you have not created any saved views, the default view displays.

Default columns

The following columns display:

- Task ID
- Entity
- Type
- Summary
- Assignee
- Service Time
- Date Created
- Requester Comments



Default sorting

The default Inbox view is filtered by the **Task Status** and **Assignee** columns.

- **Task Status** - New, Pending Review, Processing
- **Assignee** - Assigned to me and my groups

Reset column layout

If you filter or sort the Inbox or add columns, you can return to the default view using the **Reset Column Layout** setting in the **Manage Columns** menu.

SELECT PANE

23R3

The pane at the left side of the Inbox remains fixed so you can easily select a task as you scroll through the columns.

The screenshot shows the Veeva Network inbox interface. At the top, there is a filter bar with 'All DCRs' selected, a notification 'This view has been updated. Save changes.', and filter dropdowns for 'Country', 'Task Status (3)', and 'Source Systems'. Below the filters is a table with columns: TYPE, SUMMARY, ASSIGNEE, SERVICE ..., and DATE CREATED. The TYPE column has a dropdown menu with '1 Option Selectr' selected. The SUMMARY column has a search input with 'Keyword'. The ASSIGNEE column has a dropdown menu with '1 Option Selectr' selected. The SERVICE ... column has a range selector with 'H', '-', and 'T' buttons. The DATE CREATED column has 'Star' and 'End' buttons. The table contains 10 rows of 'Change Request' tasks. A red box highlights the left side of the table, including the checkboxes and the first column header, indicating the fixed selection pane. At the bottom, it says 'Displaying 1 to 10 of 20 (0 Selected)'.

TYPE	SUMMARY	ASSIGNEE	SERVICE ...	DATE CREATED
1 Option Selectr	Keyword	1 Option Selectr	H - T	Star - End
<input type="checkbox"/> Change Request	Change Market Access?...		181 hours	2023-10-30 14:08:24 GMT
<input type="checkbox"/> Change Request	Change # of MDs and D...		181 hours	2023-10-30 14:07:31 GMT
<input type="checkbox"/> Change Request	Change URL 1 and 7 ot...	pm.manager@eumaster...	181 hours	2023-10-30 14:03:12 GMT
<input type="checkbox"/> Change Request	Change Degree 1 and 4...		181 hours	2023-10-30 14:01:40 GMT
<input type="checkbox"/> Change Request	Change Corporate Nam...	pm.manager@eumaster...	181 hours	2023-10-30 14:00:17 GMT
<input type="checkbox"/> Change Request	Change Birth Year and 3...		181 hours	2023-10-30 13:58:14 GMT
<input type="checkbox"/> Change Request	Change # of MDs and D...		181 hours	2023-10-30 13:54:37 GMT
<input type="checkbox"/> Change Request	Change URL 1 and 4 ot...	pm.manager@eumaster...	181 hours	2023-10-30 13:53:43 GMT
<input type="checkbox"/> Change Request	Change Graduation Sch...	pm.manager@eumaster...	181 hours	2023-10-30 13:52:49 GMT
<input type="checkbox"/> Change Request	Change Hierarchy Type ...	pm.manager@eumaster...	181 hours	2023-10-30 13:47:21 GMT



Survivorship

TIME-BASED SURVIVORSHIP RULES

23R2.1

Administrators can define custom rules that determine survivorship based on the most recent update. This can simplify survivorship when the most recent information is the most valuable and should win; for example, when you are tracking HCP channel consent.

These record-level rules are applied to data updates (from source subscriptions only) and merges. They override all source rankings and merge rules that are defined in your Network instance.

The screenshot shows the 'Custom Survivorship Rules' interface. At the top, there are tabs for 'Field Level Rules' and 'Record Level Rules'. Below the tabs is a search bar with the text 'Search rules...' and a magnifying glass icon. To the right of the search bar, it says '1 Items selected' with a dropdown arrow. Further right, there is a checkbox labeled 'Show Disabled Rules' and a link 'Reset filters'. Below this is a blue button labeled 'Add Rule'. The main part of the interface is a table with the following columns: 'RULE NAME', 'ENTITY', 'FIELD USED TO DETERMINE SURVIVORSHIP', 'WINNING CONDITION', 'COUNTRIES', and 'STATUS'. There is one row in the table with the following data: 'Consent_survivorship', 'Consent', 'Capture Date', 'Most recent date wins', 'Brazil, France', and 'ENABLED' (with a green checkmark icon).

This feature is on by default. Administrators and Data Managers can create rules for your Network instance.

Supported objects

Record level rules can be applied to all sub-objects and relationship objects that are enabled in your Network instance.

Main objects and custom keys are not supported.

Requirements

Rules are based on custom date or date/time fields. The dates are compared between records to determine survivorship.

- Sub-objects and relationships objects must have a custom field of this type so that record level rules can be created.
- Sources must use these custom fields to specify when the record was last updated.



About survivorship

Survivorship in Network is typically applied using the following methods:

- **Source rankings** - Survivorship is determined by the highest ranked source. Source systems can be ranked at the instance level, object level, and field level.
- **Merge instructions** - Survivorship is determined by one of the following instructions:
 - Exclusive merge - Field values are retained from the winning record unless the winner has no value.
 - Inclusive merge - Source rankings are used to determine which value should win.

Used when merges occur through suspect match tasks, Find Suspect Match and in data updates or bulk merge using source subscriptions.

- **Custom merge rules** - Custom field-level rules that override regular survivorship rules. They are applied only to merges; they are not applied during data load.

When these time-based record level rules are applied, they override all these survivorship methods listed above.

Supported actions

Record level survivorship rules are applied when records are updated using source subscriptions or when records are merged.

- **Updating records** - The date/time is compared between the incoming data and the existing record in Network.

Survivorship scenario	Update Dropped or Accepted
Data in the source feed is more recent than what Network currently has	Accepted
Data in Network is more recent than the data in the source feed	Dropped
Data in the source feed and the current date are the same	Accepted

Rules do not apply to updates from change requests or to edits made directly on the Profile page.

- **Merging records** - When two records (Veeva IDs) are merged, the data with the most recent date survives the merge.

Example: If the data with the most recent date/time is on the losing record, it is added to the winning record.

Note: Record level survivorship is typically based on the recentness of the data, but there is an option to choose the oldest date as the winner.



Create a time-based survivorship rule

Add a rule to determine survivorship based on the date or time of the field value.

Prerequisite

Record level rules support the following types of custom fields: **Date (no time)** and **Date and time**. Ensure that the sub-object or relationship object has a custom field of this type so you can create the rule.

Add the rule

- In the Admin console, click **Data Model > Custom Survivorship Rules**.
Previously, this tab was called **Custom Merge Rules**.
- Select the **Record Level Rules** tab.
The **Field Level Rules** tab contains any custom merge rules that were previously created in your Network instance.
- Click **Add Rule** and define the details for the rule.

Custom Survivorship Rules

Create optional rules to override Network's survivorship rules based on [Source Rankings](#).

Field Level Rules | Record Level Rules

Record Level Rules > New Rule [Cancel] [Delete] [Save]

Rule Name * Consent_survivorship

Entity * Consent

Field used to determine survivorship * Capture Date (consent_capture_datetime__c)

Winning Condition * Most recent date wins

Countries * Brazil × France ×

Status ENABLED

Filters	FIELD	CONDITION	VALUE	AND/OR
	Entity Type (entity_type__v)	Equals	Health Care Professional	AND

+ Add Filter

- Rule Name** - Define a name.
Supported characters: alphanumeric (a-z, A-Z, 0-9), hyphens (-), and underscores (_). The name cannot contain spaces.
- Entity** - Choose the sub-objects or relationship object that the rule applies to.
- Field used to determine survivorship** - Select the custom field that will be used to determine survivorship. Only custom date and date/time fields display.



7. **Winning Condition** - Choose either **Most recent date wins** or **Oldest date wins** .
8. **Countries**- Select the applicable countries.
9. **Status** - The rule is on by default.
10. **Filters** - Add filters to the rule if you want it to apply to selected records only.
 - **Field** - Choose the field for this filter. The fields in the drop-down list apply to the object selected for this rule.
 - **Condition** Choose one of the available conditions.
 - **Value** - If the **Condition** that you chose requires a value, type the value. The value might be free text (for example, type a name) or a list of options.
 - **And/Or** - Choose the operator if there is more than one filter.
11. **Save** your changes.

The rule will run when records that include that sub-object are updated or merged.


Rules can be edited or deleted.

Example - Updating data

In this example, a Consent custom sub-object stores HCP channel consent. A source subscription is loading updates for the Consent object for three HCP records. When records are updated, we want the most recent consent information to survive.


Example consent record

▼ Consents (1 active)



VEEVA ID 943387558022415968
STATUS Active

Veeva ID ⓘ	Status ⓘ
943387558022415968 🔒	Active
Capture Date ⓘ	Channel value ⓘ
2023-08-20 19:39:00	john.smith@verteo.com
Consent Status ⓘ	
Opt-In	

 [Consent Field Revisions](#)



Records in Network - Current consent information for the HCPs

These records were originally loaded to Network using the Salesforce Marketing Cloud (SFMC) source system. Note that Record 3 currently has no Consent record.

Record	HCP Email	Consent Capture Date	Consent Status	Source System
1	alvin.li@verteo.com	2023-08-20 19:39:00	Opt-In	SFMC
2	vivian.kay@verteo.com	2023-08-20 19:39:00	Opt-In	SFMC
3	jim.davis@verteo.com	NULL	NULL	NULL

Source file - Updates to consent information of the HCP

A source file from Veeva CRM contains updates to the Consent status for Records 1 and 2 and contains new consent records for Record 3.

Note: In this example, the SFMC system is ranked higher than the CRM system.

	entity_vid_v	consent_capture_date	consent_channel_valu...	consent_opt_type_c	consent_source_id_c	consent_source_syste...	consent_status_c
1	750151743525897300	2023-08-19T10:39:00	alvin.li@verteo.com	OPTOUT	123	CRM	A
2	750152253687481350	2023-08-21T10:39:00	vivian.kay@verteo.com	OPTOUT	456	CRM	A
3	750152629513896977	2023-08-19T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A
	750152629513896977	2023-08-27T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A
	750152629513896977	2023-08-22T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A
	750152629513896977	2023-08-21T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A
	750152629513896977	2023-08-18T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A
	750152629513896977	2023-08-15T10:39:00	jim.davis@verteo.com	OPTIN	456	CRM	A

Results - Updates to the consent information of the HCPs

Record-level survivorship rules determine the Consent Status value based on the most recent Consent Capture Date. The source rankings are overruled.

Record	HCP Email	Consent Capture Date	Consent Status	Source System
1	alvin.li@verteo.com	2023-08-20 19:39:00	Opt-In	SFMC
2	vivian.kay@verteo.com	2023-08-21 10:39:00	Opt-Out	CRM
3	jim.davis@verteo.com	2023-08-27 10:39:00	Opt-In	CRM



- **Record 1 - Update dropped:** The incoming consent capture date was older than the current consent capture date.
- **Record 2 - Update accepted:** The incoming consent capture date was more recent than the current consent capture date.
- **Record 3 - Record created:** The consent data from the source feed is used to create the consent record on the HCP.

The source feed contained multiple consent records with the same email address. This can be very typical for data extracted from Veeva CRM when the consent status is updated several times creating multiple records in the Veeva CRM database.

These records were deduplicated during data load; the **Source Dedup** setting was on in the subscription for the Consent object.

Job details

You can see the outcome of the updates in the **Job Summary Section**.

In this example, one Consent record was added (Record 3) and one Consent record was updated (Record 2).

Note: The consent update that was dropped for Record 1 is not recorded. Updates that are dropped for record level survivorship are not logged in the job details.

▼ Job Result Summary									
ENTITY	TOTAL	ADDED	CANDIDATES ADDED	UPDATED	MERGED	INVALIDATED	NOT LOADED	REJECTED	
Brand	0	0	0	0	0	0	0	0	0
Health Care Organization	0	0	0	0	0	0	0	0	0
Health Care Professional	3	0	0	3	0	0	0	0	0
Market Basket	0	0	0	0	0	0	0	0	0
Address	0	0	0	0	0	0	0	0	0
Consent	2	1	0	1	0	0	0	0	0
Indication	0	0	0	0	0	0	0	0	0

Data loading considerations

Timezones

It is highly recommended to specify the timezone when loading data.

Record level survivorship rules always compare the incoming date/time with the current date/time on the record to determine whether to accept or drop the incoming update.



In the Network database, all date timestamps are stored in Coordinated Universal Time (UTC). For example: 2023-03-25T19:30:00Z. This can be different from the timezone that displays on record profiles. On the Profile page, the date/time reflects the time zone of your local machine.

Example: If your local computer is set to Central European Summer Time (UTC+02:00) and data is loaded at 2023-03-25T19:30:00Z (UTC), the date and time that displays on the profile page is 2023-03-25T21:30:00Z (UTC+02:00).

Examples

Review these examples to understand if the incoming update will be accepted or rejected based on the defined timezone.

Current Date/Time in Network	Incoming Date/Time	Result	Details
2023-03-25T-19:30:00Z (UTC)	2023-03-25T-19:15:00-04:00 EDT (UTC -04:00)	Accepted	2023-03-25T-19:15:00 EDT equals 2023-03-25T-23:15:00 UTC. The incoming date/time is more recent than the current date/time.
2023-03-25T-19:30:00Z (UTC)	2023-03-25T-21:15:00+02:00 CEST (UTC +02:00)	Dropped	2023-03-25T-21:15:00 CEST equals 2023-03-25T-19:15:00 UTC. The incoming date/time is less recent than the current date/time.
2023-03-25T-19:30:00Z (UTC)	2023-03-25T-19:35:00	Accepted	No timezone was specified in the incoming update, so UTC is the default. The incoming and current date/time are in the same timezone and the incoming date/time is more recent than the current date/time.

Note: The timezone offset from UTC time must be specified in the source feed to indicate the different timezone. For example, if the data reflects Central European Summer Time (UTC+02:00), the date in the source file must include **+02:00**.

Source dedupe

Always enable the **Source Dedupe** setting for the object to ensure that duplicate records are not created.

In most cases, the record level survivorship rules will ensure that only one record survives. However, if an initial load contains duplicates in the source feed, duplicate records will be created if the **Source Dedupe** setting is not on.



Null values

Record level survivorship rules are based on date fields. If the date field in Network or an incoming data feed is empty or null, survivorship is handled using the following behavior:

Date in Feed	Date in Network	Result	Details
2023-03-04T-09:00:00Z	2023-03-04T-09:00:00Z	Accepted	The incoming and existing date/time is the same.
2023-03-04T-09:00:00Z	empty/null	Accepted	The incoming update has a date/time so it wins survivorship over the value in Network that has no date/time.
empty/null	2023-03-04T-09:00:00Z	Dropped	The incoming record did not specify a date/time so the date/time defined in Network wins survivorship.
empty/null	empty/null	Accepted	The incoming record wins survivorship because neither record has a date/time defined.

Example - Merging records


Records can be merged in several ways; for example, using Find Suspect Match, through the Data Updater, and bulk merge using Source subscriptions. Merges can also occur when records are merged by OpenData. When merges performed by OpenData are pushed down to your Network instance, record-level survivorship rules apply only to data managed in custom objects.

In this example, two locally managed HCP records will be merged using the Data Updater feature. The HCP records include consent data. A record level survivorship rule is applied to the Consent object to ensure that the latest consent capture date wins survivorship.

Records being merged

The losing record has the most recent consent Capture Date, so that consent information should survive on the winning record.

Losing Record



Fr. Adie Debus ☆

#pulmonary

FULL ADDRESS Robert-Koch-Str. 20 München 80538 Bayern

Prescriber, Respiratory Care Therapy

Primary Information

Addresses

Consents

Parent Affiliations

E-Contacts

Educational Information

Personal Information

External Identifiers

Licenses

Custom Fields

Record Information

▼ Consents (1 active)

VEEVA ID 943387896489248352

STATUS Active

Vevea ID	Status
943387896489248352	Active
Channel value	
adie.debus@verteco.com	


Capture Date

2023-08-27 19:39:00

Consent Status

Opt-Out

Winning Record



Fr. Adler Debus ☆

#pulmonary

FULL ADDRESS Robert-Koch-Str. 20 München 80538 Bayern

Prescriber, Respiratory Care Therapy

Primary Information

Addresses

Consents

Parent Affiliations

E-Contacts

Educational Information

Personal Information

External Identifiers

Licenses

Custom Fields

Record Information

▼ Consents (1 active)

VEEVA ID 943387896489248351

STATUS Active

Vevea ID	Status
943387896489248351	Active
Channel value	
adie.debus@verteco.com	

Capture Date

2023-06-19 19:39:00

Consent Status

Opt-In



Data Updater job

A **Merge Option** must be defined for each job. In this example, we'll select **Winner Priority** instruction; this means all values from the winning HCP record will win during the merge unless the winner does not have a value. However, for the Consent object, the record level survivorship rule will override the **Winner Priority** instruction to ensure that the most recent consent information survives.

Merge Records Cancel

Merge records in bulk by uploading a file of Network Entity IDs.

1 Upload File
2 File Summary
3 Merge Records

Select Object Health Care Professional

Merge Option Survivorship: Use source rankings to determine which value should win during the merge.

Winner Priority: Take the value from the winner unless the winner does not have a value.

File Upload Required Column Headers: vid_loser, vid_winner. Other columns will be ignored

Tip: To remove a value from a field, set the value to null_v

[See Example](#)

Drag file here (.csv or .xlsx)

or

Upload File

Results: When the merge completes, the most recent consent data from the merge loser is moved to the winning record.

Fr. Adler Debus #pulmonary

FULL ADDRESS Robert-Koch-Str. 20 München 80538 Bayern
Prescriber, Respiratory Care Therapy

Primary Information

Addresses

Consents

Parent Affiliations

E-Contacts

Educational Information

Personal Information

External Identifiers

Licenses

Custom Fields

Record Information

Consents (1 active)


VEEVA ID 943387896489248351

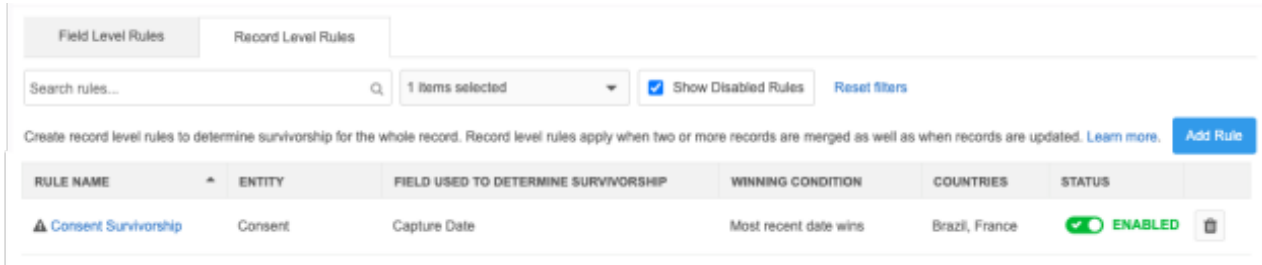
STATUS Active



<p>Veeva ID 943387896489248351</p> <p>Capture Date 2023-08-27 19:39:00</p> <p>Consent Status Opt-Out</p>	<p>Status Active</p> <p>Channel value adie.debus@verteo.com</p>
---	---



Inactive fields

When a field that is used in a record level survivorship rule is deactivated, an **Alert**  icon displays beside the rule name on the **Record Level Rules** tab.



RULE NAME	ENTITY	FIELD USED TO DETERMINE SURVIVORSHIP	WINNING CONDITION	COUNTRIES	STATUS
 Consent Survivorship	Consent	Capture Date	Most recent date wins	Brazil, France	 ENABLED

On the rule configuration, the field is highlighted and the message "This field is inactive" displays.



Record Level Rules > Consent_survivorship

Rule Name *

Code consent_survivorship__c

Entity *

Field used to determine survivorship *  This field is inactive

Winning Condition *

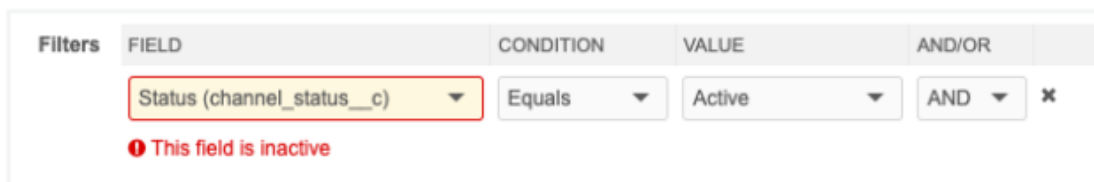
Rule behavior



The rule will not be applied when the field is inactive. Survivorship is determined by the usual methods.

Filter behavior

If a field that is used in a rule filter is deactivated, the rule will be applied but the filter condition will not apply.

For example, when a rule filter specifies that the `channel_status__c` field value must be Active but that field is deactivated, the rule will apply to all Consent records regardless of their value for the `channel_status__c` field.



Filters	FIELD	CONDITION	VALUE	AND/OR
	<input type="text" value="Status (channel_status__c)"/>  This field is inactive	<input type="text" value="Equals"/>	<input type="text" value="Active"/>	<input type="text" value="AND"/> 



Data model

NETWORK ADDRESS INHERITANCE

23R3

Network Address Inheritance applies the address of the parent HCO to its child HCO or HCP record. In this release, a new field is added to store the Veeva ID of the Parent HCO on the copied address. Use the field to quickly identify where the address was copied from.

This enhancement is enabled by default in your Network instance.

Data model field

Previously, copied addresses had two fields:

- `parent_address_vid__v`
- `parent_address_sync__v`

A new data model field is added to the Address object to support this enhancement:

- `parent_address_entity_vid__v`

The field is enabled by default if Network Address Inheritance is enabled in your Network instance.

Updating the field

The `parent_address_entity_vid__v` field is read-only.

On existing records, the field is populated whenever the record is changed. Changes to any field (HCP, HCO, or sub-object field) will trigger the `parent_address_hco_vid__v` field to be populated.

Refresh job

You can also use the **Refresh Job** on the Network Address Inheritance page (**Data Model**) to update the field on existing synced addresses.

Reports

The `parent_address_entity_vid__v` field is the Network reporting tables so you can use it in SQL queries.

Example query

Use this SQL query to report on records that have the Parent Address Entity VID field populated.

```
SELECT
    vid__v,
    parent_address_entity_vid__v
FROM
    address
WHERE
    parent_address_entity_vid__v IS NOT NULL
```




Example results

```
1 SELECT
2   vid_v,
3   parent_address_entity_vid_v
4 FROM
5   address
6 WHERE
7   parent_address_entity_vid_v IS NOT NULL
```

VEEVA ID	PARENT ADDRESS ENTITY VID
943752649226847839	732736849688237061
943644302848165471	732736849688237061
943752892511487583	242977063491863552

Network API

This field is also available in Search and Retrieve API calls.

If you search for a record with a synced address, you will see the parent_address_entity_vid_v field in the response.

```
{
  "modified_date__v": "2023-11-07T12:24:09.000-08:00",
  "record_state__v": "VALID",
  "vid__v": "943752649226847839",
  "parent_address_sync__v": "S",
  "entity_vid__v": "935519182154697594",
  "postal_code__v": "10065-4870",
  "parent_address_entity_vid__v": "732736849688237061",
  "administrative_area__v": "US-NY",
  "address_verification_status__v": "05",
  "address_status__v": "A",
}
```



CLUSTER MANAGEMENT

23R3

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

- Austria - Insight Health™
- Germany - Insight Health

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

FORMATTED NAME

23R3

The custom calculation has been updated for the `formatted_name__v` field for Malaysia. The formatted name uses values from several name fields to display a complete name for an HCP.

This update is enabled by default in your Network instance.

New name calculation

HCP names for Malaysia are now calculated using these Veeva fields in the following order:

```
first_name__v + middle_name__v + last_name__v
```

Previously, the name calculation was the following:

```
first_name__v + last_name__v
```

The formatted name displays on the profile page.

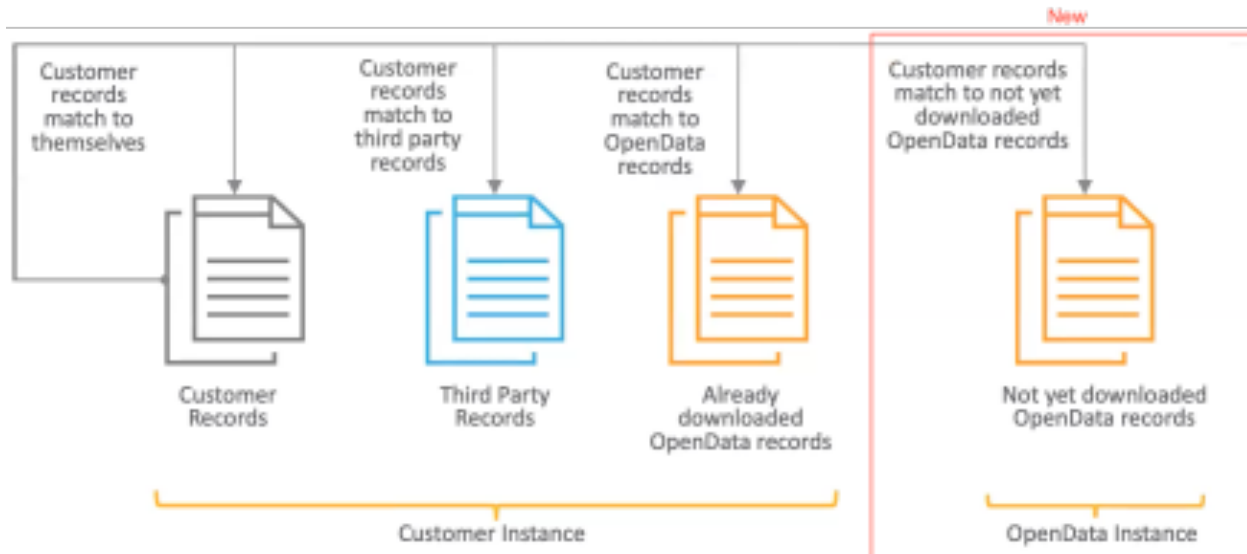


Data maintenance subscriptions

DATA DEDUPLICATION

23R3

Data deduplication subscriptions try to match existing locally managed records with other records in your Network instance. Now, Administrators can configure the subscription to look for duplicates with OpenData records that have not yet been downloaded to your Network instance.



If a strong (ACT) match is found to an OpenData record during the job, the record is downloaded and the local record is merged into it.

This feature is available by default in your Network instance. Administrators can enable the setting in the data deduplication subscription.

Enable matching to OpenData instances

To enable the setting:

1. Create or open a Data Deduplication subscription (**System Interfaces > Data Maintenance Subscriptions**).
2. In the **Match Settings** section, click the **Match & Download from OpenData** setting.

When this setting is enabled, the job will try to match the existing locally managed record to a record in the related OpenData instance.

If strong (ACT) matches are found, the job will download the record from OpenData and the locally managed record will be merged.

Tip: To ensure that the highest ranked match is found, enable the **Consider records in OpenData Instances** setting (**General Settings**). The match process will continue looking for a superior match in the OpenData instance even if a match has already been found in your Network instance. For more information, see [Match & Download from OpenData](#) in the *Veeva Network Online Help*.



Match settings

In addition to adding the **Match & Download from OpenData** setting in this release, the **Allow in Matching** setting has been extracted into individual options to give you more control over the records that can be matched during the job. Previously, this was one setting called **Previously Unmerged/Pending & Rejected Suspect Match Records**.

MATCH SETTINGS

Allow in Matching

- Records in pending suspect match tasks ?
- Records in previously rejected suspect match tasks ?
- Previously unmerged records ?

Match & Download from OpenData ?

Select all options that you want the job to consider for potential matches.

- **Records in pending suspect match tasks**
- **Records in previously suspected match task**
- **Previously unmerged records**

If an existing subscription had this setting enabled, then all the new **Allow in Matching** options are selected.

Job limits

Existing limits on Data Deduplication jobs and for downloading records from OpenData apply when the **Match and Download from OpenData** setting is enabled.

Existing Data Deduplication job limits

- **Suspect match task - record limit** - Each task that is created by the job is limited to 20 records. If the limit is exceeded, the job completes with errors.
- **Suspect match task - number of tasks** - Each job can produce a maximum of 200 suspect match tasks. If the limit is exceeded, the job completes with errors.
- **Number of matches** - Each job can produce a maximum of 20 million matches. If the limit is exceeded, the job fails.

Existing Match and Download from OpenData limits

- **Downloaded records limit** - A maximum of 5000 records can be matched and downloaded from OpenData in each job. If the job tries to download more than 5000 records, the job will fail.

This limitation applies to customers that purchase OpenData per record for a country. It applies when records are matched and downloaded from OpenData in source subscriptions and data deduplication subscriptions.

It does not apply to customers that purchase all records for a country.



Reviewing the job outcome

Use the existing **Job Action** options to review the job outcome before downloading and merging records.

To pause the job and review the outcome, choose **Review before Merge**.

When this setting is on, the job will stop before any changes are committed. Export the match logs so you can review the potential merges and records that will be downloaded from OpenData.

Match log updates

The Match+Data-Group-Analysis log for Data Deduplication jobs are updated to indicate when matches are found in OpenData instances.

- **Mode** column - The **OpenData Deduplication** value is added.
- **Match Id** column - The OpenData instance ID is added to the beginning of the column value. (This is the same behavior for source subscription logs).

data_maintenance__v-HCP-MATCH+DATA-GROUP-ANALYSIS-2023-11-06T08-35-0800-job-40601.csv

3 Rows No Filters Applied

Mode	Source Archive Id	Source Type	Source Id	Source Country	Match Id	Numeric Match Id	Instance
Master Deduplication	v 941827118225229407	Data Dedupe		US	v 243155868449768452	243155868449768452	307
OpenData Deduplication	v 942177731229910623	Data Dedupe		US	i 301 v 243047811921216514	243047811921216514	301
Master Deduplication	v 943745990698796639	Data Dedupe		US	v 243223525786125313	243223525786125313	307

JOB VALIDATION RULES

23R2.1

Job validation rules can now be applied to selected data maintenance subscriptions to ensure that critical updates occur as expected. Use the rules to check if a job is unintentionally inactivating or deleting a lot of records. This is particularly helpful if you have automated the process for unsubscribing or soft-deleting records.

Validation rules can be applied to the following data maintenance subscriptions:

- Delete Locally Managed HCP/HCO
- Delete Custom Object Records
- Unsubscribe OpenData Records

Tip: Unsubscribe from Third Party Records jobs already support job validation rules because these jobs are run using NEX rules in source subscriptions.

This enhancement is on by default in your Network instance.



Job validation rules

A set of default validation rules are provided for Veeva standard objects (**System Interfaces > Job Validation Rules**). These rules are on by default.

For data maintenance subscriptions, the applicable default job validation rules are the rules that check for records being deleted. For example, if job validation rules are applied, the **HCPsDeleted** rule will fail a **Delete Locally Managed HCP/HCO** job if the job tries to delete 100 or more HCP records.

▼ Health Care Professional (7 enabled rules)

OBJECT

Rule Name	Description	Status
▼ HCPsDeleted		✔ Enabled

Rule Name

Code

Error Message

Description

Threshold

Reject Records Below Threshold

▼ **CONDITIONS**

Field

Old Value

New Value

[+ Add Condition](#)

Entity HCP

Cancel Copy Delete Save

Create rules

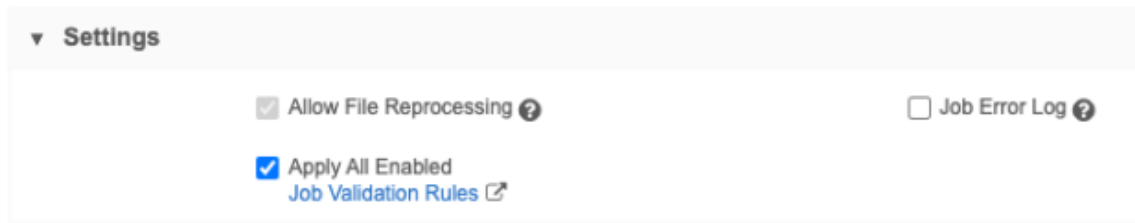
Rules can be added for Veeva objects and for custom objects that are enabled in your Network instance.

For details, see [Job validation rules](#) in the *Veeva Network Online Help*.



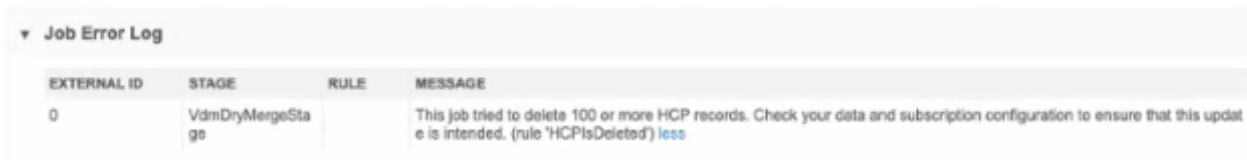
Apply job validation rules

The supported data maintenance subscriptions contain a new setting called **Apply All Enabled Data Validation Rules**. Select the setting to apply job validation rules to the job.



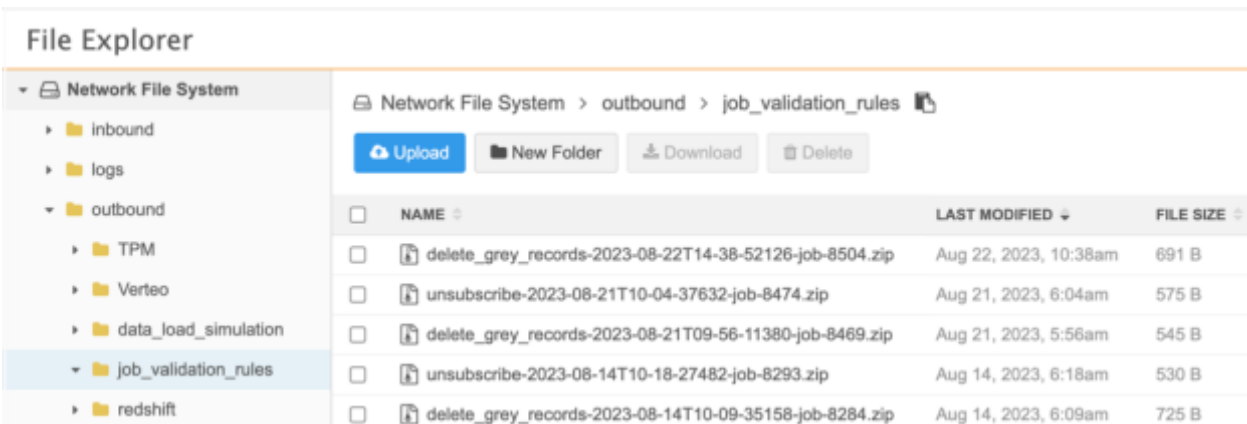
Failed rules

If a job validation rule threshold is met, the data maintenance job fails and no changes are made to the data. Open the Job Details page to see an error and the rule name in the **Job Error Log**.



Logs

When job validation rules are applied to data maintenance subscriptions, log files are created. View the log files in the **outbound > job_validation_rules** directory in File Explorer. A .zip file is created for each job.



Open the .zip file to review the .csv file for the job.

The .zip file and .csv file have the following naming convention: <subscription_name><timestamp>-job-<job ID>.



Example job log

In the file, you can review the changes that the job tried to make and the rule that was used to detect the change.

← delete_grey_records-2023-08-22T14-38-52126-job-8504.csv View Original File Download Add Fields

28 Rows | No Filters Applied

VID	Type	Parent VID	Parent Type	Native Key	Rule Name	Rule ID	Old Value(s)	New Value(s)
940908537368086111	HCP	940908537368086111	HCP		HCPisDeleted	HCPisDeleted_c	record_state_v\VALID	record_state_v\DELETED
940908537371559533	ADDRESS	940908537368086111	HCP		AddressisDeleted	AddressisDeleted_c	record_state_v\VALID	record_state_v\DELETED
940908537369089174	PARENTHCO	940908537368086111	HCP		ParentHCOisDelete	ParentHCOisDeleted_c	record_state_v\VALID	record_state_v\DELETED
940908537369593467	HCP	940908537369593467	HCP		HCPisDeleted	HCPisDeleted_c	record_state_v\VALID	record_state_v\DELETED
94090853737394548	ADDRESS	940908537369593467	HCP		AddressisDeleted	AddressisDeleted_c	record_state_v\VALID	record_state_v\DELETED

OpenData subscriptions

OPENING RECORDS BY VEEVA ID

23R3

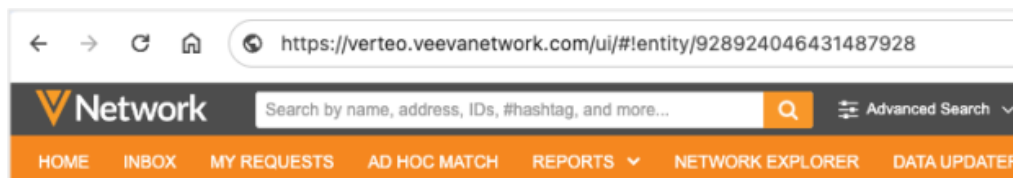
Veeva OpenData records that haven't been downloaded to your Network instance can now be viewed using the Veeva ID (VID) link in your Network instance. Previously, when the VID was used to open a record, the **Lock** icon displayed on the page with a permission error. Now, the profile displays as expected.

This enhancement is enabled by default in your Network instance.

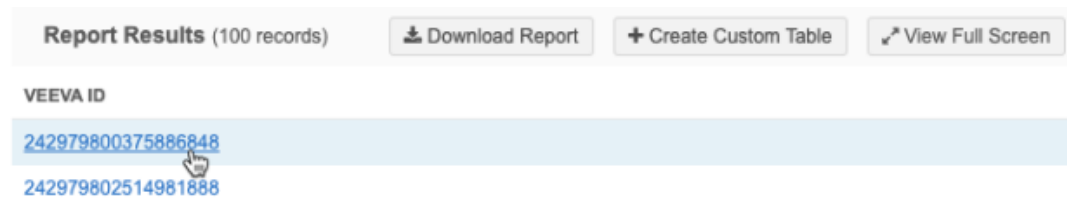
Veeva ID links

This update applies to not yet downloaded records when you try to open them using a VID in the following ways:

- Adding a VID to the Network URL



- Clicking a VID in a report result





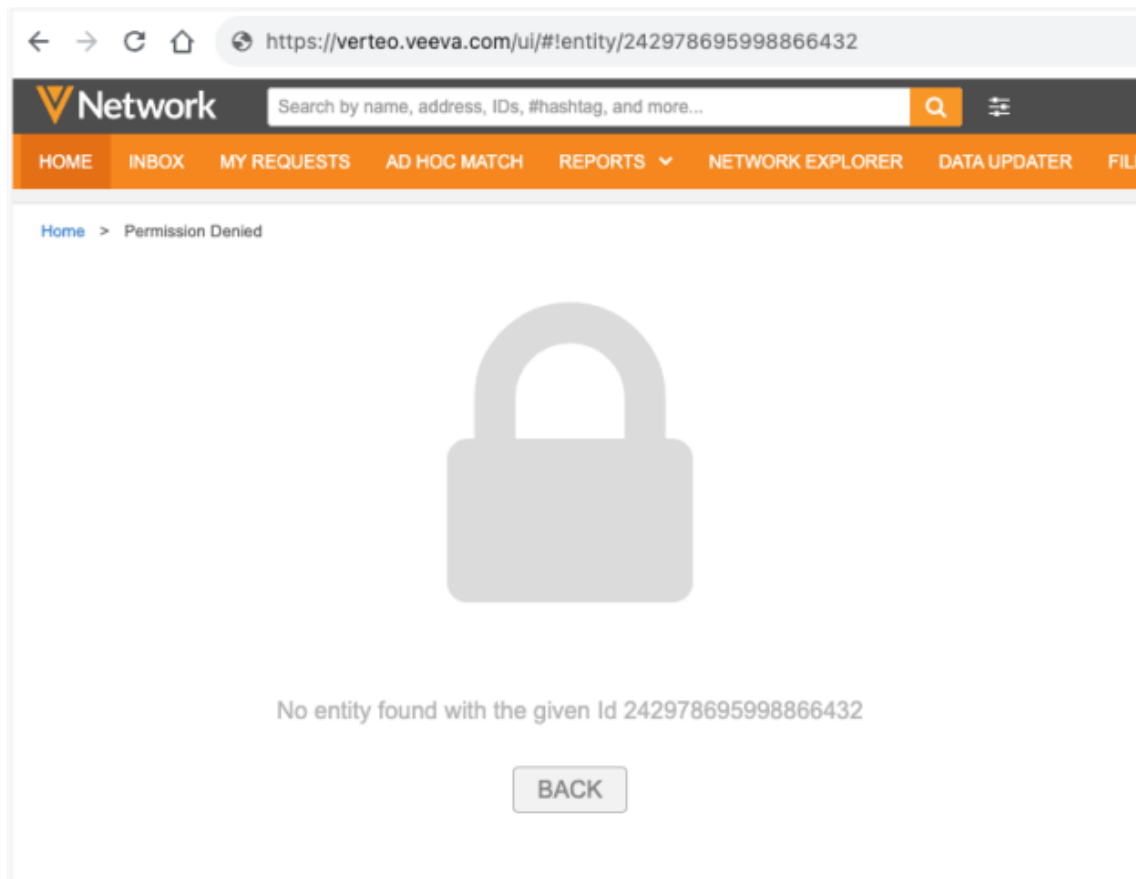
- Clicking a VID in a Network table (previously called *smart table*) in File Explorer

← download_data.csv

1916 Rows No Filters Applied

entity_vid__v	entity_type__v
243104146775868419	HCP
243104262 243104146775868419	HCP

Previously, if you tried to open a record the record using the VID, the locked page displayed.





PHARMACY OPERATING LICENSE SUBSCRIPTION

23R3

A new field subscription is available for OpenData subscriptions for Germany. The Pharmacy Operating License subscription identifies if a pharmacy HCO has the permit to receive and distribute prescription and pharmacy-only drugs.

This subscription is not enabled by default.

The Pharmacy Operating License subscription is a separate product from Veeva OpenData in Germany. To subscribe to this data, contact a Veeva OpenData representative.

Data model field

The following HCO field is added to the data model to support this subscription:

- `pharmacy_operating_license__v`

This field is enabled by default in new Network instances. It can be enabled in existing instances.

If you do not subscribe to the Pharmacy Operating License subscription, you can use this field for local data.

Enable the subscription

If you have subscribed to Pharmacy Operating License through your OpenData representative, enable the subscription in your Network instance so the data can be downloaded from OpenData.

To enable the subscription:

1. In the Admin console, click **System Interfaces > Veeva OpenData Subscriptions**.
2. Select **Germany**.
3. In the **Field Level Subscriptions** section, select **Pharmacy Operating License**.

If the subscription is dimmed and cannot be selected, contact your Veeva OpenData representative.

4. **Save** your changes.

Enable the field

If this is an existing Network instance, enable the field for the HCO object (**Data Model > Customer Master** domain).

Pharmacy Operating License updates

When you subscribe to field-level subscriptions like Pharmacy Operating License, the data is not immediately downloaded into your Network instance the next time your OpenData subscription runs.

The Pharmacy Operating License data will only be included in the OpenData delta export if the record has been changed in any way by OpenData.



Instead of waiting for the data to trickle into your Network instance through delta exports, you can request updates to specific HCO records to quickly receive this data. For more information, see Request updates to OpenData records.

Data refresh

OpenData will refresh this field data twice a year in batch loads.

Source subscriptions

SIMULATING DATA UPDATES

23R2.1

Administrators and Data Managers can now test data updates in their Production instance. Source subscription jobs can be run in simulation mode so you can preview the outcome before committing the data to the database. This ensures that you have more control and confidence over the quality of your data operations.

New Source Subscription Advanced Mode Cancel Save

Job Run Outcome

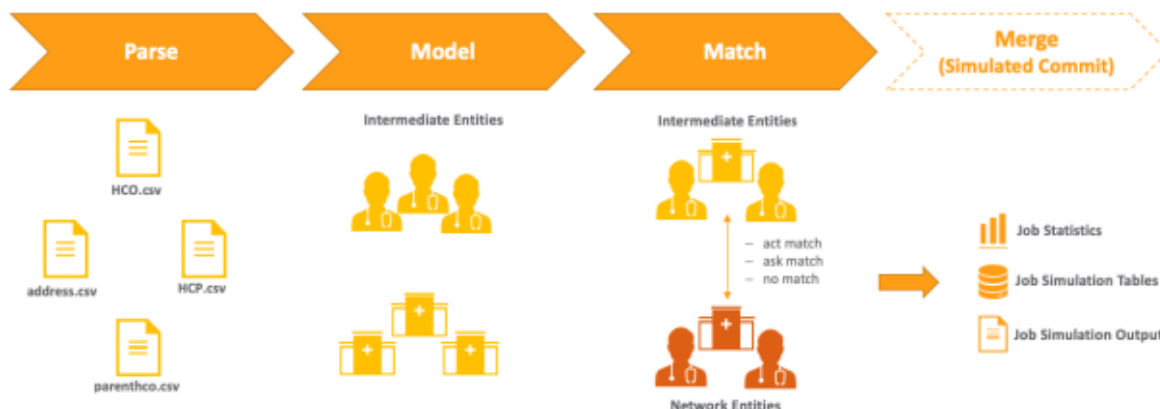
- Save Changes to the Database ?
- Run Job in Test Mode ?
- Enable Simulation Mode ?

This feature is enabled by default in your Network instance.

About simulation mode

Previously, data loading jobs could be tested if the **Apply Updates & Merges** setting was not enabled for a subscription. The job stopped after the match stage, so the data wasn't committed in the merge stage (the last stage of the job). Some statistics were available on the Job Details to provide an idea of what the job would do.

Now, when you run a job in simulation mode, the data is simulated during the merge stage. You can preview the results without committing any data to the database.





Simulated data

Examples of outcomes that you can test with simulated data:

- **Changes to critical fields** - For example, address status, relationship type, HCO/HCP type, and so on.
- **Rejected records** - Learn about records that will be dropped from the feed because of data issues. Records that are rejected are not included in the simulation output, but an error displays in the **Job Error Log** so you can investigate the issue. For example, if a reference code is not mapped to Network, a message displays in the log so you can fix the issue. Job errors for rejected records do not display in **Test Mode**.
- **Network expression rules** - Test NEX rules in the simulated data to ensure the outcome is expected before committing it to the database. All rule points are supported for simulation mode.
- **Network Address Inheritance** - Review addresses that are synced from Parent HCOs in the output.
- **Repointing relationships**
- **Bulk merging entities**

Reviewing simulated data

Use simulation mode to preview the updates before committing the data to the database.

Simulated data can be reviewed in the following areas:

- **Job statistics** - Counts for added and updated records display in the **Job Summary Report** section on the Job Details page. When the job is run in **Test Mode**, statistics are not available for the **Job Summary Report**.
- **Files** - A .zip file is created in the Network file system. It contains a .csv file for each object impacted by the data. For example, if the feed contains updates for HCPs, a .csv file is created for the HCP object and for each of its sub-objects and relationships. The files for all simulation jobs are archived in the FTP folder.
- **Reporting tables** - The simulation output is available as reporting tables. Use the tables to compare the simulated data with production data. Only the tables for the last run simulation job are available. Each time a simulation job starts, the previous simulation tables are replaced.

If you identify issues, you can fix them and prevent unintended data updates from being loaded into your Network instance. When the job outcome is working as expected, run the job again using the **Save Changes to the Database** option to commit the changes to the production database.



Running a job in simulation mode

Source subscription configurations now include a section called **Job Run Outcome** at the top of the page.

import_hcps Details [Advanced Mode] [Clone] [Start Job] [Cancel] [Save]

Job Run Outcome

- Save Changes to the Database ?
- Run Job in Test Mode ?
- Enable Simulation Mode ?

▼ Details

Name: import_hcps

System: adhoc

Code: import_hcps_c ?

Description: Import HCPs with license

Status: Enabled Disabled

Data Flow View

You can run a job using any of the three options:

- **Save Changes to the Database** - Commit the data updates to the database. This option replaces the **Apply Updates & Merge** option that was previously in the **General Settings** section.
- **Run Job in Test Mode** (Default) - Stop the job after the matching stage so no changes will be applied to the database. You can review the job statistics on the Job Details page.

This behavior is the same as when the **Apply Updates & Merge** option was not selected.

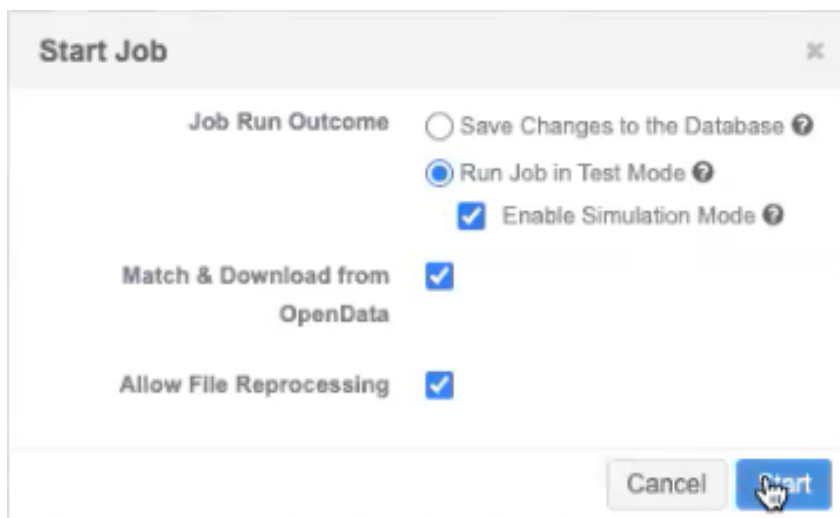
- **Enable Simulation Mode** - Preview the changes to the production data. No changes are committed to the database.



Run a job

To ensure that the source subscription job does not create any data issues, test it in simulation mode. The data is loaded to a restricted area where you can preview the results using reporting.

1. Open a source subscription (**System Interfaces > Source Subscriptions**).
2. In the **Job Run Outcome** section, choose **Run Job in Test Mode** and **Enable Simulation Mode**.
3. Click **Start Job**.
4. In the **Start Job** confirmation dialog, the **Job Run Outcome** options display again in case you want to change them.



The image shows a 'Start Job' dialog box with the following options:

- Job Run Outcome**
 - Save Changes to the Database ?
 - Run Job in Test Mode ?
 - Enable Simulation Mode ?
- Match & Download from OpenData**
- Allow File Reprocessing**

At the bottom right, there are two buttons: 'Cancel' and 'Start' (with a mouse cursor over it).

5. Click **Start**.

Tip: If you are running the job using the API, you can use the `mode` parameter to specify the job outcome. The parameter value will override the configuration outcome only for the job started by the API call.



Job Details

After the job completes, review the statistics on the Job Details page and the simulated data output.

The following sections on the page are updated to support simulation mode.

Job Settings Summary

The **Merge Settings** heading identifies the **Job Run Outcome** setting values that were applied to the job.

Job Settings Summary	
PROCESSING SETTINGS	VALUE
Allow File Reprocessing	✔ Activated
Allow Auto-Archive	✘ Deactivated
MATCH SETTINGS	VALUE
Action for Unmatched & Suspect Match	✔ Create Valid Records
Match & Download from OpenData	✔ Activated
Source Dedupe	✘ Deactivated
MERGE SETTINGS	VALUE
Save Changes to the Database	✘ Deactivated
Run Job in Test Mode	✔ Activated
Enable Simulation Mode	✔ Activated
LOG SETTINGS	VALUE
Export Data Group Analysis	✘ Deactivated



Job Result Summary

This section is populated with the simulated statistics of the job after the merge stage. A banner displays to assure you that the data is simulated and that no changes were committed to the database.

Example

In this job, if the data had been committed to the database, one HCP would have been added as a local record, and two HCPs would have been updated.

▼ Job Result Summary

ⓘ This job ran in simulation mode. All counts below refer to the simulation output. No changes were committed to the database.

ENTITY	TOTAL	ADDED LOCALLY	ADDED FROM OPENDATA	CANDIDATES ADDED	UPDATED ⓘ	MERGED	IN
Health Care Organization	0	0	0	0	0	0	
Health Care Professional	3	1	0	0	2	0	
Address	5	5	0	0	0	0	1
License	0	0	0	0	0	0	0
Parent HCO	7	0	0	0	0	7	0
Custom Key	17	17	0	0	0	0	0

Note: When a job is set to **Test Mode**, it stops the job after the match stage so, job statistics display only in the **Data Load Summary**, **Processed Data Summary**, and **Match Summary**. The **Job Result Summary** section is not updated on the Job Details page.

View simulated output files

In Network Explorer, a new folder in the **outbound** directory, **data_load_simulation**, contains the output files for all simulation jobs.

Access to these files is not restricted; if you have access to the folder in the File Explorer, you can view the output files.



Each simulation job creates a .zip file with the following naming convention: <system>-<subscription_name>-data-load-simulation-<timestamp>-job<ID>.zip.



The .zip file contains a .csv file for each entity that was updated or that has new records. The complete entity is included in the output, for example, if HCPs were updated or new HCPs were added (either in the data feed or they were matched and downloaded from OpenData), all the sub-object and relationship data is added to the simulation output.

NAME	LAST MODIFIED	FILE SIZE
ADDRESS.csv	Aug 22, 2023, 4:48pm	5 KB
CUSTOMKEY.csv	Aug 22, 2023, 4:48pm	3 KB
HCP.csv	Aug 22, 2023, 4:48pm	7 KB
PARENTHCO.csv	Aug 22, 2023, 4:48pm	4 KB

Note: If the simulation job does not create records or change any records, an empty .zip file is created.

Review the files

Reviewing the files can help you to see what might have gone wrong during the data load.

1. In the **data_load_simulation** directory, click the **Download** icon to save the .zip file locally.
2. Extract the .csv files. A file is created for each entity that has updates or has new records. If an entity was not touched during the job, a file is not created.
3. Open a .csv file to review the simulated data.

The field values can help you to quickly identify the changes that occurred. For example, in the Address file, you can spot addresses that were inactivated or that were copied (synced) from a parent address through Network Address Inheritance.

address_line_1_v	address_line_2_v	address_line_3_v	address_ordinal_v	address_status_v	address_type_v	address_verification_status_v	administrative_area_v
Bergmannstr. 5-7	Kreuzberg	10961 Berlin	2	I	P		DE-BE
Engeldamm 35	Mitte	10179 Berlin	1	A	P		DE-BE
Kochstraße 8	Mitte	10969 Berlin	1	A	P		DE-BE
Lindenalle 14	Mitte	10177 Berlin	2	A	P		DE-BE

Tip: You can also view the .csv files as smart tables in Network.



Considerations for simulated output

Records matched and downloaded from OpenData

If the **Match & Download from OpenData** setting was on in the source subscription configuration, records that matched will display in the simulated output.

- **Job details** - Records in the source file that are matched with OpenData records display in the **Job Result Summary**.

Example

if the data would have been committed to the database, one HCP record would have been created and two HCP records would have been downloaded from OpenData.

▼ Job Result Summary

ⓘ This job ran in simulation mode. All counts below refer to the simulation output. No changes were committed to the database.

ENTITY	TOTAL	ADDED LOCALLY	ADDED FROM OPENDATA	CANDIDATES ADDED	UPDATED ⓘ	MERGED	IN
Health Care Organization	0	0	0	0	0	0	
Health Care Professional	3	1	2	0	0	0	
Address	5	3	2	0	0	1	
License	0	0	0	0	0	0	
Parent HCO	7	0	7	0	0	0	
Custom Key	17	17	0	0	0	0	

- **Simulated output files**

For records that matched with OpenData records and would have been downloaded, the simulated files contain the data from OpenData as well as the data included in the source file.

Simulated alternate keys

If new records are created with an alternate key, the key counter is not incremented in simulation mode. Placeholder characters are used to reflect the key format.

Examples

In the simulated output, the alternate keys reflect the key format only; an alternate key is not generated.

- **Alpha-numeric keys**: The uppercase letter X is used as a placeholder: If the alternate key format is USZJF-RQK-NKB, the simulated output displays XXXXX-XXX-XXX.
- **Numeric keys** - The number 9 is used as a placeholder. If the alternate key format is 00000-0006, the simulated output displays 99999-9999



Report on simulated data

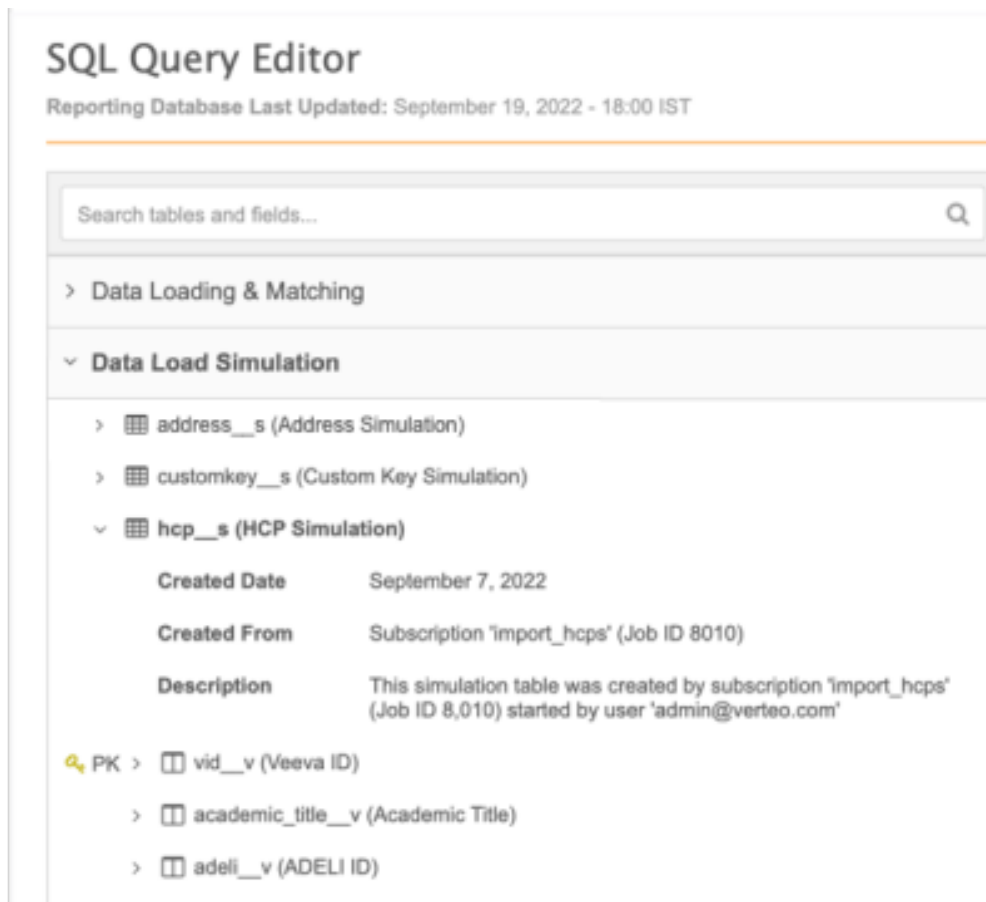
Reporting tables are created for the simulated data in the SQL Query Editor (**Reports**). Use the tables to generate reports so you can compare the simulated data to the production data in order to understand which changes the job would have made to your data.

If you have access to the SQL Query Editor, you can view the simulated tables and data. There are no access restrictions; for example, data visibility profiles, field restrictions, and dynamic access control do not apply.

To view the tables:

- In the SQL Query Editor, expand the **Data Load Simulation** category. The simulated files are created as tables with the `__s` suffix.

Note: Only the tables from the last run simulation job display; the tables are replaced each time a simulation job is run. Reporting tables are not created if a simulation job does not create any new or changed records; the tables from the last job that produced changes are retained.



- Expand a table to view the metadata and the fields. The metadata includes the subscription name, the job ID, and the user that created the simulation output.

Important: The tables include all data model fields for each entity so they have the same structure as production tables. This makes it easier to write the queries and compare the data.



Example queries

Create SQL queries to compare the simulated data with the production data.

Tip: Use left joins to join a simulation table with the production table because you might have new records that do not exist in the production table yet.

Example 1 - HCP query

This query compares specific fields between a simulated HCP table with the production data.

```
SELECT
    sim.vid__v,
    sim.first_name__v AS "sim first name",
    curr.first_name__v AS "curr first name",
    sim.last_name__v AS "sim last name",
    curr.last_name__v AS "curr last name",
    sim.phone_1__v AS "sim phone 1",
    curr.phone_1__v AS "curr phone 1"
FROM
    hcp__s sim LEFT JOIN hcp curr
        ON sim.vid__v = curr.vid__v
```

Example results

In these results, you can see that the first row makes changes to an existing record and the second row creates a new record.

The screenshot shows a query execution interface with the following components:

- Navigation:** Sample Queries, My Recent Queries, Query Helper, Keywords, Operators, Format Query.
- SQL Query:**

```
1 SELECT
2     sim.vid__v,
3     sim.first_name__v AS "sim first name",
4     curr.first_name__v AS "curr first name",
5     sim.last_name__v AS "sim last name",
6     curr.last_name__v AS "curr last name",
7     sim.phone_1__v AS "sim phone 1",
8     curr.phone_1__v AS "curr phone 1"
9 FROM
10    hcp__s sim LEFT JOIN hcp curr
11        ON sim.vid__v = curr.vid__v
```
- Status:** Query Valid, Include only VALID and UNDER_REVIEW records in results.
- Report Results (2 records):**

VEEVA ID	SIM FIRST NAME	CURR FIRST NAME	SIM LAST NAME	CURR LAST NAME	SIM PHONE 1	CURR PHONE 1
941292469379270257	Carla	Barbara	Wiesner	Wiesner	+49 030/2815982	+49 030/94802112
941304837833033311	Julia		Schneider		+49 030/2807455	
- Footer:** Displaying 1 to 2 of 2, Show 25, 1 of 1



Example 2 - Address query

This query compares the data in the address simulation table to production data.

```

SELECT
    sim.vid_v AS "Simulated Address VID",
    sim.address_ordinal_v AS "Simulated Address Ordinal",
    sim.is_primary_address_c AS "Simulated Primary Address Flag",
    sim.address_status_v AS "Simulated Address Status",
    curr.vid_v AS "Address VID",
    curr.address_ordinal_v AS "Address Ordinal",
    curr.is_primary_address_c AS "Primary Address Flag",
    curr.address_status_v AS "Address Status",
    sim.entity_vid_v
FROM
    address_s sim LEFT JOIN address curr
        ON sim.vid_v = curr.vid_v

```

Example results

The results can tell you when ordinals are recalculated because addresses are inactivated.

The screenshot shows a query execution interface with a SQL editor at the top containing the query from the previous block. Below the editor, a status bar indicates "Query Valid" and a checkbox for "Include only VALID and UNDER_REVIEW records in results." is checked. The results section is titled "Report Results (4 records)" and contains a table with the following data:

SIMULATED ADDRESS VID	SIMULATED ADDRESS ORDINAL	SIMULATED PRIMARY ADDRESS FLAG	SIMULATED ADDRESS STATUS	ADDRESS VID	ADDRESS ORDINAL	PRIMARY ADDRESS FLAG	ADDRESS STATUS	VEEVA ID OF OWNER
941292469381629550	2	No/False	Inactive	941292469381629550	1	Yes/True	Active	941292469379270257
941304837833295455	1	Yes/True	Active					941292469379270257
941304837833295457	1	Yes/True	Active					941304837833033311
941304837833295458	2	No/False	Active					941304837833033311

At the bottom of the results section, it says "Displaying 1 to 4 of 4" and "Show 25" with navigation arrows.



Identify jobs that ran in simulation mode

Use the `merge_simulation` column in the **job (Job Details)** table to identify source subscription jobs that ran in simulation mode.

The column value is either True or False.

Example

```

1 SELECT
2   merge_simulation
3 FROM
4   job
5 WHERE
6   job_id = 507
    
```

Query Valid Include only VALID and UNDER_REVIEW records in results.

Report Results (1 record) Download Report Create Custom Table View Full Screen

SIMULATION JOB
True

Displaying 1 to 1 of 1 Show 25 1 of 1 < >

Source Subscriptions view

The Source Subscriptions page (**System Interfaces**) identifies the current configuration for each subscription.

NAME	DATA SOURCE	SCHEDULE	LAST JOB TIME	LAST JOB STATUS	SAVE CHANGES	SIMULATION MODE	STATUS
import_company	adhoc	Manual	2022-08-25 15:46:24 IST	COMPLETE	Disabled	Enabled	Enabled
import_hcps	adhoc	Manual	2022-09-07 14:20:09 IST	COMPLETE	Disabled	Enabled	Enabled
import_payer	adhoc	Manual	2022-04-26 11:11:54 IST	COMPLETE	Disabled	Disabled	Enabled
import_payer_plan	adhoc	Manual	2021-09-17 10:03:05 IST	FAILED	Disabled	Disabled	Enabled

Save Changes

- Enabled - The subscription is configured to commit changes to the database.
- Disabled - The subscription is configured to run in test mode. No changes will be committed to the database.



Simulation Mode

- Enabled - The subscription is configured to simulate the job output. No changes will be committed to the database.
- Disabled - The subscription is configured to run in test mode. No changes will be committed to the database.

Data flow view

After a source subscription is saved, the **Data Flow View** displays on the configuration page.

The setting values that are applied to the current job display in the **Import Files** stage.

The screenshot displays the 'import_hcp: Data Flow View' configuration page. It features a workflow diagram with four stages: 'Start', 'Files In Inbound Folder', 'Import Files', and 'End'. Below the diagram, the 'Import Files' stage is expanded to show detailed configuration options. The 'Import Options' section is highlighted with a red box and includes the following settings:

- Allow File Reprocessing: Yes
- Save Changes to the Database: No
- Run Job in Test Mode: Yes
- Enable Simulation Mode: Yes
- Action for Unmatched & Suspect Match: Create Valid Records
- Match & Download from OpenData: No

Considerations for Veeva IDs

When incoming records are not matched to existing records in Network, new records are created for the simulated data. Veeva IDs that are generated for these new records are used only for the simulated output. If you run the subscription again to commit the data to the Network database, new Veeva IDs are generated for the records.

Duplicate custom keys

If you load an entity with a custom key and that key already exists for a different entity in the production data, an error will display in the **Job Error Log**. You can fix the issue before you commit the data.

When different entities have the same custom key in an incoming data load, the duplicate keys cannot be detected in the simulated output. These types of duplicates can be detected, but only when the production database is updated.



Advanced properties

Some properties that are used for simulated jobs are read-only to ensure that the values do not change if they are copied and pasted between subscriptions.

The following properties are read-only:

- `job.match.skipMerge`
- `job.immutable`
- `job.simulation`

These properties cannot be changed in **Advanced Mode**.

Running jobs using the API

When jobs are triggered externally using the API, use the `mode` parameter to control the subscription job outcome. This is helpful because you can easily toggle between the different job modes without always having to update the subscription settings.

Note: Using this parameter controls the specific job that is started by the API call; it does not change the subscription configuration.

Supported endpoints

- `api/{version}/systems/{system_name}/{subscription_type}/{subscription_name}/job`
- `api/{version}/subscription/{subscription_name}/job`

Possible parameter values

These values can be used for the `mode` parameter.

- **default** - Run the subscription job using the current subscription configuration.

When one of the following parameter values are used, it overrides the configuration saved in the subscription for this job only.

- **save_changes** - The changes are saved to the database.
- **test_mode** - The job runs in test mode only.
- **simulation_mode** - The job runs in simulation mode.

Example request

```
api/{version}/systems/{system_name}/{subscription_type}/{subscription_name}/job?mode=simulation_mode
```




Match logs

The following enhancements have been made to the match logs and data group analysis logs that are available for source subscriptions and Data Deduplication data maintenance jobs.

These enhancements are enabled in your Network instance by default.

MATCH + DATA GROUP ANALYSIS LOG

23R3

Updates have been made to columns to clarify when records are matched by custom key.

Custom keys are typically comprised of the following: source system, item value, external ID, or key. The columns in the Match+Data-Group-Analysis log are updated to reflect these values so it is easier to understand and identify key matches that occur during jobs.

The following changes have been made:

- **Source ID** column is renamed to **Source Value**. This change reflects that this is the source system value of the key.
- The **Source Item Type** column is added. Including this element of the key can help you to identify the exact key that matched.
- The value returned in the **Source ID/Value** column is the value of the matching key. Previously, it was the value of the first key that was loaded in the file.

DATA GROUP ANALYSIS LOG

23R3

Columns have been added to this log to help you understand how the data groups are performing. Use this information to see which groups produced matches and which ones did not.

New columns:

- **Search Time** - The time it took to create the data groups. You can see which blocks are taking a long time to create to help you know if you should reconfigure your data groups.
- **Number of entities matched by this group** - Displays the number of matches that were found by the group.
- **Number of entitles belonging to this group but without a winning match** - Matches were found for these groups, but the records weren't matched within in the group.
- **Number of entities not belonging to this group** - Displays the groups that are not finding matches. Use this information to understand which data groups are the least helpful.

Example

data_maintenance__v-HCP-DATA-GROUP-ANALYSIS-2023-11-06T08-35-0800-job-14

Key Attributes	Search Time (ms)	Number of entities matched by this group	Number of entities belonging to this group but without a winning match	Number of entities not belonging to this group
is_externally_mastered__v, primary_country__v, drg_hcp_id__v	6	0	1	2
is_externally_mastered__v, npi_num__v, primary_country__v	14	2	1	0
first_name__v, is_externally_mastered__v, primary_country__v	14	3	0	0
is_externally_mastered__v, licenses__v, license_number__v, primary_country__v	6	0	1	2
first_name__v, is_externally_mastered__v, last_name__v, primary_country__v	14	1	2	0
is_externally_mastered__v, last_name__v, primary_country__v	30	1	2	0



Using the data in this log, we can make the following conclusions about the groups:

- The first data group didn't take long to create but it didn't find any matches. It is not a useful group.
- The middle rows indicate multiple data groups found matches. Not all of them may be required.
- The last data group took a much longer time to create and didn't yield any matches. It should be removed.

Subscription jobs

JOB NOTIFICATIONS

23R3

Notifications about subscription jobs now clearly state Completed, Canceled, or Failed so you can identify which emails require your immediate attention.

This enhancement is enabled by default in your Network instance.

Notification details

Job notifications contain the following details in the subject:

- Status – Completed, Canceled, or Failed
- Subscription name
- Instance name - For example, *Verteo Dev* or *Verteo*.
- Job ID

Example email subject - Desktop

<input type="checkbox"/>		FAILED JOB: ServiceCloud - Verteo - Job ID: 523 - ServiceCloud (Target Subscription) job 523 FAILED on Verteo (instance ID: 307) Clic...	4:56 PM
<input type="checkbox"/>		FAILED JOB: CRM - Verteo - Job ID: 522 - CRM (Target Subscription) job 522 FAILED on Verteo (instance ID: 307) Click here to review th...	4:56 PM
<input type="checkbox"/>		COMPLETED JOB: SalesData - Verteo - Job ID: 521 - SalesData (Source Subscription) job 521 is ready for review on Verteo (instance ID:...	4:56 PM

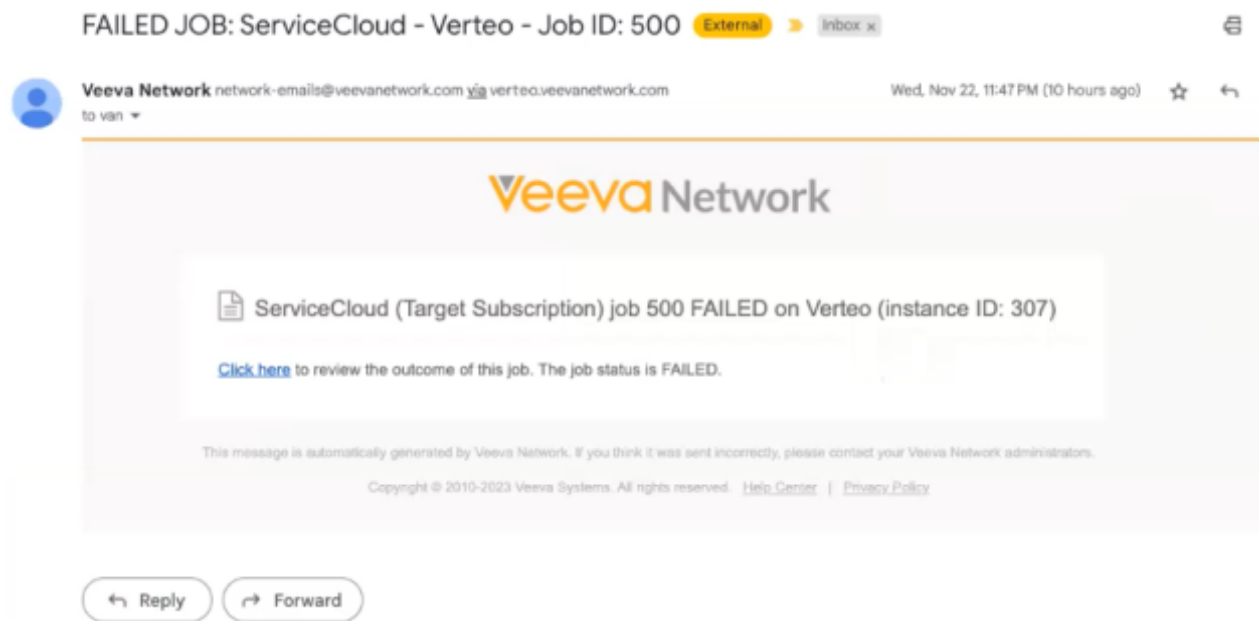
Example email subject - Mobile

	FAILED JOB: ServiceCloud - Verteo... ServiceCloud (Target Subscription) job...	4:56 p.m.	
	FAILED JOB: CRM - Verteo - Job ID:... CRM (Target Subscription) job 522 FAIL...	4:56 p.m.	
	COMPLETED JOB: SalesData - Vert... SalesData (Source Subscription) job 52...	4:56 p.m.	

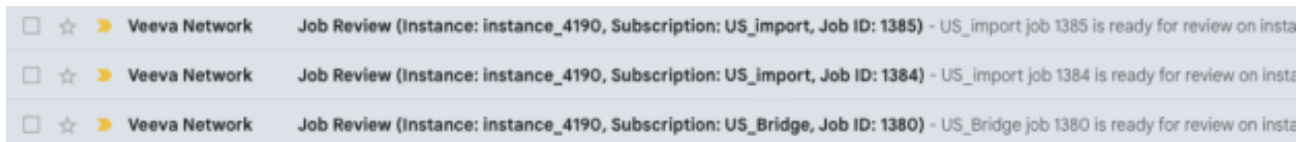


The Network instance ID is available in the email text when you open the notification.

Example email text



Previously, emails contained the same subject for all job statuses.



Impact

You might need to reapply any email filters or rules that you have created for Network job emails.



Integrations

TRANSFORMATION RULES

23R2.1

Administrators can create rules to transform field values in the APIs and in export files for downstream systems. You can also use transformation rules to override OpenData values before records are pushed to Veeva CRM.

Example use cases:

- Remove specific address types from Veeva CRM, for example, mailing addresses.
- Display only the Ownership Hierarchy in Veeva CRM (remove the noise of relationships for reps in CRM).
- Set fields (for example, Specialty or Medical Degree) with no value to a custom value.
- Limit the `postal_code__v` field to only five digits for US addresses.
- Hide OpenData addresses in Veeva CRM if they have an ordinal greater than 10.
- Change all corporate names to uppercase characters.
- Override OpenData's retired HCP status based on a target flag.

Note: Transformation rules can be applied to locally managed records and records managed by OpenData and third-party data providers.

This feature is on by default in your Network instance.

Benefits

- Retain original data in Network but transform the data output for your downstream system.
- Each system can have its view of the data. Rules are assigned to specific systems, so you can customize data for different systems.
- Flexible integrations with Veeva CRM and other downstream systems. Using transformation rules reduces the need to create customizations for other systems.
- Network API support. Data can also be transformed using transformation queries in target subscriptions, but transformation queries are not supported for API requests.

Process overview

- Define a rule or set of rules for a specific source system. Rules are created using Network Expressions for a specific object and field.
- Apply the rules to target subscriptions or the API.
- Run the job to transform the data and then export it to the downstream system.



Veeva CRM integration

Use transformation rules to customize the data that is pushed to CRM.

By applying transformation rules on target subscriptions and to the integration user, the rules can then be applied when data is pushed to Veeva CRM.

This includes the following processes in CRM:

- Network Account Search
- DCR Inbound Process
- Network Bridge subscription

Filtering child account and address records pushed to Veeva CRM

Leveraging transformation rules, you can identify the addresses and parent affiliations that should be set to Inactive Veeva CRM. CRM functionality can then remove these Inactive records so they do not display in CRM.

Example

To ensure that Mailing type addresses are not pushed to CRM, create a NEX rule that changes the status of all mailing addresses to Inactive. Then, the CRM settings will delete those inactive addresses so they do not display on accounts in CRM.

To do this, use the following CRM settings and values:

- FILTER_INACTIVE_NETWORK_RECORDS_VOD - Set to 1
- NETWORK_ADDRESS_DELETION_PROCESS_VOD - Set to 2

For detailed information about the settings, see [Handling Inactive Network Records](#) in the *Veeva CRM Online Help*.

CRM considerations

- **Picklist values**

If a transformation rule is applied to filter specific values from CRM, for example, remove mailing addresses or display the ownership hierarchy, then it is recommended to remove those values from being selected by users in CRM.

Examples

- If you are filtering out mailing addresses, ensure that Mail Only addresses cannot be selected by users in the picklists.
- If you are filtering to only display the Ownership hierarchy (Ownership,Affiliation), ensure that Claims relationship types cannot be selected.

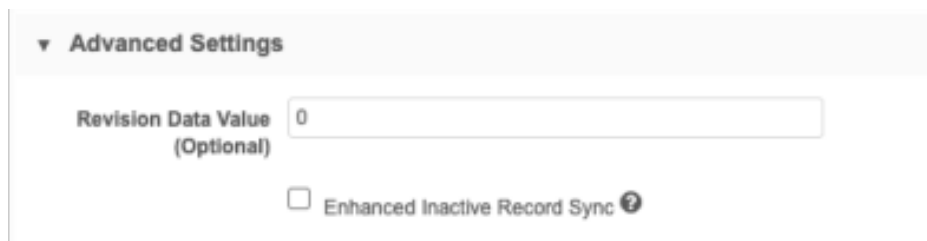


- **Network Bridge updates**

After transformation rules are applied to the target subscription, run a Network Bridge job to ensure CRM is in sync.

Options

- **Update all records** - Run a full Bridge job. In the Network Bridge configuration, set the **Revision Data Value** setting to 0 to update all records.



- **Update affected records** - If you know the records that need to be updated in CRM, add the Veeva IDs (HCP/HCO) to the **Export by VID** option in the target subscription. When the next Bridge job runs, it updates those records.

For example, if you know which HCPs records contain Mail Only addresses, add those VIDs to the **Export by VID** job so your next Bridge job removes those addresses.

Create a rule

To add a transformation rule:

1. In the Admin console, click **System Interfaces > Transformation Rules**. Click **New Rule**.
2. Type a **Name** and **Description**.
Names cannot contain spaces.
3. Select a **System**. All rules are associated to a specific source system.
The system cannot be changed after the rule is saved.

Tip: If you make a mistake, you can clone the rule and change the system.



New Transformation Rule

Cancel Save

▼ Details

Name * CRM_data_rules

System VCRM

Description * Rules for data that will be sent to Veeva CRM

ⓘ For Veeva CRM, ensure that you apply the rules on the following:

- The Target Subscription used for CRM, and
- To the Search and Retrieve API for your CRM integration user

Veeva CRM considerations

If this rule will be used to transform data before it is exported to CRM, ensure that the following settings are applied:

- System - Define the system for CRM.
- Target subscription - Choose the subscription used for CRM.
- API - Choose your CRM integration user.

4. In the **NEX Rules** section, add the rules.

For each NEX rule, define the following:

- **Object** - All objects (except custom keys) are supported.
- **Field** - The field. The list is filtered for the selected object.
- **Code Description** - Define a meaningful description. This description will also display in associated target subscriptions.
- **NEX Rule** - Type the Network Expression for transforming the data. The NEX function must return a value for the transformed data.

Expand the field if you need additional space. Click **Verify** to validate the NEX syntax. A message displays at the top of the page to indicate the validation status.

See a list of examples in the *Example rules* section below. For help with creating network expressions, see the [NEX functions](#) and [NEX operators](#) topics in the *Veeva Network Online Help*.

To create another rule for this system, click **Add Rule**.

Tip: Use the **Handle** ≡ icon to reorder the rules if the sequence of the rules matters. For example, you can chain together several rules to transform data for a specific field.



ORDER	OBJECT	FIELD	CODE DESCRIPTION	NEX RULE	STATUS
≡	Address	address_status__v	Mail only addresses are inactivated	<code>!(address_type__v == 'M', 'I', address_status__v)</code> Verify	ENABLED
≡	Parent HCO	parent_hco_status__v	Ownership Hierarchy in CRM	<code>!(not relationship_type__v in ['2','7366','12'], 'Y', parent_hco_status__v)</code> Verify	ENABLED
≡	Address	postal_code__v	Postal Code is 5 digits	<code>!(country__v == 'US', left(postal_code__v,5), postal_code__v)</code> Verify	ENABLED
≡	Health Care Professional	specialty_1__v	Specialty null handling	<code>!(ISNULL(specialty_1__v), 'UNSPECIFIED__c', specialty_1__v)</code> Verify	ENABLED
≡	Health Care Professional	medical_degree_1__v	medical degree	<code>!(ISNULL(medical_degree_1__v), 'UNSPECIFIED__c', medical_degree_1__v)</code> Verify	ENABLED

After a NEX rule is created, it can be enabled, disabled, or deleted. If a rule is not enabled, it will not be applied to the target subscription/API.

- Apply to Target Subscriptions** - Associate the rules to target subscriptions. Choose one of the following options:
 - All Target Subscriptions that match the system** - Apply these rules to any target subscription that uses the source system.
 - Specific Target Subscriptions** - Choose the specific target subscriptions that these rules apply to. All the enabled target subscriptions that use this source system display in the list.

Apply to Target Subscription

Apply Rules to Target Subscriptions

All Target Subscriptions that match the system

Specific Target Subscriptions

1 items selected

Search

Select All 1 / 2

VCRM Only

NetworkBridge

- Apply to Search and Retrieve API** - Apply the transformation rule on the API for a specific user. Active users that have API access display in the list.



▼ **Apply to Search and Retrieve API**

Apply Rules to Search and Retrieve API

Apply to Specific User * Woods, Scott (swoods) ▼

7. **Save** the rule.

The NEX rule functions are validated. If there are issues, an error displays.

All rules in your Network instance display on the Transformation Rules page (**System Interfaces**).

Transformation Rules New Rule

Search rules... 6 items selected ▼

NAME	SYSTEM	DESCRIPTION	IMPACTED FIELDS	TARGET SUBSCRIPTIONS	API USER
HealthRules	HealthCloud	Rules for health system data	PARENTHCO parent_hco_status__v HCP specialty_1__v ADDRESS address_status__v HCP medical_degree_1__v	HealthCloud	N/A
HCP	SAP	HCP data	HCP first_name__v	exportdata	N/A
HealthSystemData	ServiceCloud	Health system data updates for ServiceCloud	HCP first_name__v PARENTHCO parent_hco_status__v HCP specialty_2__v HCP specialty_1__v ADDRESS postal_code__v HCP medical_degree_2__v HCP hcp_type__v HCP medical_degree_1__v	healthsystems	N/A
VCRM	VCRM	Change data	PARENTHCO parent_hco_status__v HCP specialty_1__v ADDRESS address_status__v ADDRESS postal_code__v HCP medical_degree_1__v	VCRM	swoods@verteo.vdmdev.com

Target subscriptions

On the target subscription configuration, the **Transformation Rules** section displays any rules that have been applied to the subscription.

Note: When the job runs, transformation rules are applied before transformation queries.

▼ **Transformation Rules**

To apply a transformation rule to your target subscription, update the target subscription list in the transformation rule configuration. Don't have transformation rules set up? [Create a New Transformation Rule](#)

OBJECT	FIELD	DESCRIPTION	TRANSFORMATION RULE	
ADDRESS	address_status__v	Mail only addresses are inactivated	VCRM	View Rule
PARENTHCO	parent_hco_status__v	Ownership Hierarchy in CRM	VCRM	View Rule
ADDRESS	postal_code__v	Postal Code is 5 digits	VCRM	View Rule
HCP	specialty_1__v	Specialty null handling	VCRM	View Rule
HCP	medical_degree_1__v	medical degree	VCRM	View Rule



The following details display:

- **Object, Field, Description**
- **Transformation Rule** - Click the link to open the rule configuration.
- **View Rule** - Click to see the NEX rule. This is the current rule (from the Transformation Rules configuration page).

View Rule ✕

Object ADDRESS

Field address_status__v

Description Mail only addresses are inactivated

Rule `if(address_type__v == 'M', 'I', address_status__v)`

Dataflow View

After you save a subscription configuration, the transformation rules display in the Data Flow View.

VCRM: Data Flow View

Start

Extract Data From Main Database

Apply Transformations

Generate Files

This job starts without any triggers.

Files:

- hco.csv
- hcp.csv
- address.csv
- license.csv
- parenthco.csv
- customkey.csv

Export Options:

- Full Data Extract: Full
- Record State: All
- Record Type: Non-Candidate
- Export Only Updated Sub-Objects: True
- Unmapped Reference Codes: Skip record
- Include Reference Data Files: False

Transformation Rules:

Mail only addresses are inactivated
Field: ADDRESS address_status__v
[VCRM](#) [View Rule](#)

Ownership Hierarchy in CRM
Field: PARENTHCO parent_hco_status__v
[VCRM](#) [View Rule](#)

Postal Code is 5 digits
Field: ADDRESS postal_code__v
[VCRM](#) [View Rule](#)

Specialty null handling
Field: HCP specialty_1__v
[VCRM](#) [View Rule](#)

medical degree
Field: HCP medical_degree_1__v
[VCRM](#) [View Rule](#)

Files:

- hco.csv
- hcp.csv
- address.csv
- license.csv
- parenthco.csv
- customkey.csv

Export Options:

- Export File Format: Com single file
- Compression Format: Zi
- Export File/Folder Name:
- Network FTP Path: Defau
- Delimiter: ,
- Text Qualifier: *
- Include header row?: Tru



Target subscription job details

After the job runs, you can view the rules on the Job Details page.

Transformation Rules				
OBJECT	FIELD	DESCRIPTION	NEX RULE	TRANSFORMATION RULE
Address	address_status__v	Inactivate Mailing Addresses	<code>if(address_type__v == 'M', 'I')</code>	CRMDDataRules
ParentHCO	parent_hco_status__v	Inactivate non ownership/affiliation types	<code>if(relationship_type__v not in [2,7356,12], parent_hco_status__v = 'I')</code>	CRMDDataRules

The following details display in the **Transformation Rules** section:

- **Object, Field, Description**
- **NEX Rule** - The code as it existed when the job ran so you can understand the customizations that were made to the exported data if the NEX rule has since changed.
- **Transformation Rule** - The current name of the rule on the Transformation Rule configuration page. Click the name to open the configuration page. If the rule has since been deleted, the original rule name displays with a (Deleted) comment beside the name.

Job error log

If there is an issue with the NEX rule, errors will be logged. The job will fail in some cases; for example, if the NEX rule references a lookup table that does not exist in your Network instance.

Clone rules

After a transformation rule is saved, it can be cloned. This is helpful if you want to apply the same or similar rules to another source system.

When a rule is cloned, only the description and the NEX rules are copied to the new rule. You can create a name, select the source system, and apply the rules to target subscriptions or the API.

Network API

Transformation rules can be applied to Retrieve and Search API requests.

Search API - Supported requests

- Search API
- Search API + supplemental



Retrieve API - Supported requests

- Retrieve Entity
- Retrieve Child Entity
- Batch Retrieve Entity
- Batch Retrieve Child Entity
- Retrieve HCO
- Retrieve HCP
- Retrieve Change Request (IncludeEntity = True)
- Batch Retrieve Change Request (IncludeEntity = True)

Example request

During this Retrieve HCP request, the transformation rule sets the Mail Only address record status to Inactive.

The screenshot shows a REST client interface for a GET request to the endpoint `https://[redacted].com/api/([version])/hcps/243192143575778305`. The Headers tab is active, showing an Authorization header with a long token. The Body tab is also active, displaying a JSON response in Pretty view. The response body contains various fields, with two fields highlighted by red boxes: `"address_type__v": "M"` (line 245) and `"address_status__v": "I"` (line 250).

Key	Value
Authorization	D7C24B0F9041E89B00EC5E5308CA1B58C56F0D0ADFBB5B9AE02272BE88F375DD527

```

239     "phone_1__v": "7184389333",
240     "is_veeva_master__v": true,
241     "ISO_3166_3__v": "USA",
242     "ISO_3166_n__v": "840",
243     "thoroughfare__v": "E 23rd St",
244     "status_update_time__v": "2021-05-08T09:04:32.000-07:00",
245     "address_type__v": "M",
246     "delivery_address_1__v": "1332 E 23rd St",
247     "sub_administrative_area__v": "Kings",
248     "entity_type__v": "HCP",
249     "address_verification_status__v": "V",
250     "address_status__v": "I",
251     "modified_date__v": "2021-05-08T09:04:32.000-07:00",
252     "record_state__v": "VALID",
253     "vid__v": "243365017116738572",
254     "entity_vid__v": "243192143575778305",
    
```



Support for fields with null values

In the Network API, if a field is empty, the record is not returned in the JSON. For transformation rules, the field is returned in the response entity JSON because the transformation rule adds a value.

Example

The `specialty_1__v` field value is NULL, so it is not returned in the Retrieve HCP response. A transformation rule runs that changes the NULL value to "UNSPECIFIED__c". Now, the Specialty field will be returned in the JSON: "specialty_1__v":"UNSPECIFIED__c".

Hashtag considerations

Hashtags reflect the untransformed values. They do not change for transformed values.

If you search using hashtags, the results returned are based on the original value of the data.

Example transformation rules

Object	Description	Field	NEX Rule
Address	Deactivate mailing addresses	address_status__v	if(address_type__v == 'M', 'I', address_status__v)
	Limit US zip codes to 5 digits	postal_code__v	if(country__v == 'US', left(postal_code__v,5), postal_code__v)
ParentHCO	Deactivate relationship types that are not Ownership or Affiliation	parenthco_status__v	if(not(relationship_type__v in ['2','7356','12']), 'I', parent_hco_status__v)
HCP	Override retired HCP status	hcp_status__v	if(hcp_status__v == 'R' && status_override__c == 'Y', 'A', hcp_status__v)
	When Specialty is null, then set it to a custom reference type (UNSPECIFIED__c)	specialty_1__v	if(ISNULL(specialty_1__v), 'UNSPECIFIED__c', specialty_1__v)
	When Medical Degree is null, then set it to a custom reference type (UNSPECIFIED__c)	medical_degree_1__v	if(ISNULL(medical_degree_1__v), 'UNSPECIFIED__c', medical_degree_1__v)
	Set record type Note that this uses a lookup table.	record_type__v	LOOKUP('type_mapping__t', 'record_type', hcp_type: hcp_type__v)

Note: For rules that change an object status to inactive (for example, addresses or relationships), if it is pushed to Veeva CRM, some CRM settings will then remove those records. For more information, see the *Veeva CRM integrations* section above.



```
IQuky148qHn5uv8CIVCLbpVtz+uH96cfs6mDHA4DvUYQ7vUtV9EQqJFftjW0/tDe
RSfVOeQz6c2qdgZNP1q5Ri6MT08rbjiIvysf0HZG5AM97SceZuTRkO1aW39YUMxg
an5F5qoVLu3vvUA1nS5Fi+cN5ueo7rxV47I2Ww7ru/DMOKKw3oMIVxZtDr6dg9yQ
FKTHdSH7heJDJvX60UioKzZ31KEKRPBGyTmznyxkEXtU9CV6reZssk/9cEq708Cj
lb13vPF1jrdn9A==
-----END CERTIFICATE-----
```

Intermediate CA certificate

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

```
-----BEGIN CERTIFICATE-----
MIIEYDCCA7CgAwIBAgIQDPW9BitwAvR6uFAsI8zwZjANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMSAwHgYDVQQDExdEaWdpQ2VydCBHbG9iYWwgUm9vdCBH
MjAeFw0yMTAzMzAwMDAwMDBaFw0zMTAzMjkyMzU5NTlaMFkxXzAjBjBjNVBAYTA1VT
MRUwEwYDVQQKEwxEaWdpQ2VydCBHbG9iYmMxMzAxZjBjNVBAMTKkRjZ21DZXJ0IEdsb2Jh
bCBHMiBUTFMgU1NBIFNIQTl1NiAyMDIwIENBMTCCASIwDQYJKoZIhvcNAQEBBQAD
ggEPADCCAQoCggEBAMz3EGJPprtjb+2QU1bFbSd7ehJWivH0+dbn4Y+9lavyYEEV
cNsSAPonCrVXOft9slGTcZUOakGUWzUb+nv6u8W+JDD+Vu/E832X4xT1FE3LpxDy
FuqrIvAxIhFhaZAmunjZlx/jfWardUSVc8is/+9dCopZQ+GssjOP80j812s3wWPC
3kbW20X+fSP9kOhRBx5Ro1/tSUZUfyYIxfQTnJcVPAPooTncaQwywa8WV0yUR0J8
osicfebUTVSvQpmowQTCd5zWSOTOEeAqgJnwQ3DPP3Zr0UxJqyRwgg2C/Uaoq2yT
zGJSQnWS+Jr6Xl6ysGHlHx+5fwmY6D36g39HaaECAwEAAaOCAYIwggF+MBIGA1Ud
EwEB/wQIMAYBAf8CAQAwwHQYDVR0OBBYEFHSHFgMBmx9833s+9KTeqAx2+7c0XMB8G
A1UdIwQYMBaAFE4iVCAYlebjuYP+Vq5Eu0GF485MA4GA1UdDwEB/wQEAwIBhjAd
BgNVHSEUfjAUBggrBgEFBQcDAQYIKwYBBQUHAwIwdgYIKwYBBQUHAQEeEajBoMCQG
CCsGAQUFBzABhhhodHRwOi8vb2NzcC5kaWdpY2VydC5jb20wQAYIKwYBBQUHMAKG
NGh0dHA6Ly9jYWNlcnRzLmRjZ21jZXJ0LmNvbS9EaWdpQ2VydEdsb2JhbFJvb3RH
Mi5jcnQwQgYDVFR0fBDswOTA3oDWgM4YxaHR0cDovL2NybdMuZGlnaWNlcnQuY29t
L0RjZ21DZXJ0R2xvYmFsUm9vdEcyLmNybdA9BgNVHSAENjA0MAUGCWCGSAGG/WwC
ATAHBgVngQwBATAIBgZngQwBAGewCAYGZ4EMAQICMAgGBmeBDAECAzANBgkqhkiG
9w0BAQsFAAOCAQEAAkPFwyyiXaZd8dP3A+iZ7U6utzWX9upwGnIrXWkOH7U1MV1+t
wcW1BSAuWdH/SvWgKtiwla3JLko716f2b4gp/DA/JIS7w7d7kwcsr4drdjPtAFVS
slme5LnQ89/nD/7d+MS5EHKBCQRfz5eeLjJ1js+aWNJXMX43AYGyZm0pGrFmCW3R
bpD0ufovARTFXFzKAdl9h6g4U5+LXUZtXMYnhIHUfoYMo5tS58aI7Dd8KvVwVVo4
chDYABPPTHpbqjclqCmBaZx2vN4Ye5DUys/vZwP9BFohFrH/6j/f3IL16/RZkiMN
JCqVJUzKozHmlLesh3Ssz8W2jmdv51b2EQJ8HmA==
-----END CERTIFICATE-----
```

Expiry

The new certificates are valid until December 2024 (Network version 24R3.0).

View updated certificates

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

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



Output

```
Signature Algorithm: sha256WithRSAEncryption
Issuer: C=US, O=DigiCert Inc, CN=DigiCert Global G2 TLS RSA SHA256
2020 CA1
Validity
  Not Before: Oct 30 00:00:00 2023 GMT
  Not After : Oct 29 23:59:59 2024 GMT
Subject: C=US, ST=California, L=Pleasanton, O=Veeva Systems Inc.,
CN=*.veevanetwork.com
```

API

VERSION UPDATE

23R3

The Network API is updated to v31.0.

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

As with all version updates, Integration Users should continue to use v30.0 until there is a change for v31.0 that they want to apply.

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

Updates in v31.0

Updates have been made to the Change Request API to support adding attachments in DCRs. These API updates are available only in v31.0 and later.

For more information, see the "DCR Attachments" topic in these Release Notes.