What’s New in SAS Lineage Viewer 2.2

Additional Connection Type Support
Data objects are now supported from the following stand-alone connection types in SAS Data Explorer:

- Redshift
- SAS Cloud Data Exchange (support coming soon)

Data objects for these connection types are supported from the Other connection type in SAS Data Explorer:

- Hana
- HDMD
- Microsoft SQL Server

Improvements in Performance and Usability
Performance and usability improvements include the following:

- right to left text support
- accessibility
- interface consistency

Primary Relationships View Type
Primary Relationships views display the relationships that are considered most important. The filters for these views are based on the data type and originating application of the subject.

Lineage Saved Diagrams
Network diagrams now can be modified in any way that you choose and saved as a lineage saved diagram. When you open the lineage saved diagram later, the saved settings are honored.
Modified By Filter

A Modified By filter has been added to the Search for Subjects window.

About SAS Lineage Viewer

SAS Lineage Viewer enables you to better understand the relationships between objects in your SAS Viya applications. These objects include data, transformation processes, reports, and visualizations.

After you select an object as a subject, the application displays a network diagram. This diagram shows the subject that you selected and all of its related objects. These relationships between the subject and the other objects are stored in the Relationship Service.

You can expect to see the complete lineage for the subjects when you add data sources with the Choose Data window in SAS Viya applications. However, lineage results might be incomplete when you import data using other methods such as manual loads and APIs.

You can use SAS Lineage Viewer to perform the following tasks:

- “Work with Views” on page 2
- “Review Object or Relationship Details” on page 8
- “Work with Equivalent and Clustered Objects” on page 9
- “Work with Saved View Filters” on page 17
- “Create Lineage Saved Diagrams” on page 18

For insight into the content of the views that you work with in SAS Lineage Viewer, see “Sample Lineage Network Diagrams” on page 12.

Getting Started with SAS Lineage Viewer

You can open a diagram in SAS Lineage Viewer in one of three ways:

- “Open a SAS Lineage Subject from Another Application” on page 19
- “Search for a Subject” on page 19
- “Open a Lineage Saved Diagram” on page 19

If the subject of a SAS Lineage Viewer diagram is related to an unusually large number of objects, it can fail to load. The stack size might be too small to load such a diagram. You can change the stack size for the Java Virtual Machine by using the —Xss option. For information about changing Java Virtual Machine options, see “Java Virtual Machine (JVM)” in SAS Viya Administration: Configuration Properties.

Work with Views

SAS Lineage Viewer works with three types of views:

Primary Relationships

Primary Relationship views generate network diagrams that display the relationships that are considered most important. The filters for these views consider the data type and originating application of the subject.
For example, a plan object from SAS Data Studio generates a different set of relationships than a profile from SAS Data Explorer. This filtering also applies as you drill down by expanding nodes in the network diagram. The results are always limited to the primary relationships for the subject’s data type and originating application.

All Relationships

All Relationship views generate network diagrams that display the all of the relationships for the subject that are contained in the Relationship Service.

Lineage Saved Diagrams

Lineage saved diagrams enable you to manipulate a network diagram in any way that you choose and save the state of the diagram. For example, you can open a network diagram, zoom to 125% and display the relationships between objects. Then you can open two of its nodes (leaving the other nodes closed), and center the objects on the screen. Finally, you can save those settings. When you display the lineage saved diagram, the saved settings are maintained.

1. Open a view from the Search for Subjects window, an object in another application, or a lineage saved diagram. Each of the views that you open is displayed in a separate network diagram.

2. Click one of the selected subject names listed at the top of the SAS Lineage Viewer window. (You can click these names to switch between views.) The following figure shows the top level of a network diagram:

Review the contents of the network diagram. For example, this view consists of a subject, CONTACTS, and the items that have a relationship with it:

*Figure 1  Network Diagram*

3. Click the expand and collapse control on objects in the view to see the nodes beneath them. The following display shows an expanded view that contains the nodes beneath the CONTACTS.sashdat and the DMTestCasLib objects:
Figure 2  Expanded Network Diagram

Note: The subject of the view is always marked by the highlighting applied to its name. This highlighting always contrasts with the background of the view and the formatting of the names of the other objects in the view. The name of the file CONTACTS in this particular view is formatted with white type against a black background. These colors can change when you use a different theme.

4 Click at the bottom left side of a view to see a Relationships window. This window explains how the lines between the objects in the view represent the relationships between the objects. For example, a solid line with no arrow represents an equal relationship between two objects. The available relationships are shown in the following figure:

These relationship types are described in the following table:
### Relationship Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is equal to</td>
<td>Applications modeling the same objects from different systems. An object is equal to another when it represents the same object when it is accessed through another method or system. See “Work with Equivalent and Clustered Objects” on page 9.</td>
</tr>
<tr>
<td>Contains</td>
<td>Any applications modeling the inner workings of a top-level entity. An object contains another object when the included object does not make sense or exist without the object that contains it. Example: Table to Column</td>
</tr>
<tr>
<td>Is synonymous with</td>
<td>Applications modeling objects that have the same connotations, implications, or reference. An object is synonymous to another object if it is alike in meaning or significance.</td>
</tr>
<tr>
<td>Is parent of</td>
<td>Applications modeling derived object hierarchy. An object is the parent of any object who cannot be located or found within a hierarchy without the parent object.</td>
</tr>
<tr>
<td>Is dependent on</td>
<td>Any applications modeling a depends on relationship between entities. An object depends on an object when it cannot function or be defined without that related object being present. Example: Job to Table</td>
</tr>
<tr>
<td>Is associated with</td>
<td>Applications modeling loosely related objects. An object is associated with another object through some other known or unknown system or method. Example: Table to Table (FK to PK)</td>
</tr>
</tbody>
</table>

You can also see this relationship information in the Details pane when you select the line between two objects in a network diagram and click 

5 Click ☰ in the tab for the current network diagram. A contextual menu is displayed. Use it to perform the following functions:

- Open a network diagram.
- Open a recently viewed network diagram or lineage saved diagram.
- Search for a subject of a network diagram.
- Close a network diagram.
- Save the current network diagram.
- Save the current network diagram as a lineage saved diagram.
- Refresh the current network diagram.
- Close all opened network diagrams.

6 Right-click an object in the network diagram. A contextual menu provides access to functions that affect the selected object. The following table lists these functions:

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>Displays detailed information about a selected object. For information, see “Review Object or Relationship Details” on page 8.</td>
</tr>
<tr>
<td>Explore lineage</td>
<td>Displays a view that has the selected object as the subject.</td>
</tr>
</tbody>
</table>
**Menu Item** | **Function**
--- | ---
Recluster selected (clustered objects only) | **Recluster selected** removes a selected unclustered object from the network diagram and places it back into a cluster.
Recluster all (clustered objects only) | **Recluster all** removes all unclustered objects from the network diagram and places them back into a cluster.
Uncluster (0) item (clustered objects only) | **Uncluster (0) item** displays a selected object in the network diagram.
Merge equivalents (equivalent objects only) | Merges or separates equivalent objects. Equivalent objects are files that contain the same data but are housed in different database formats. For example, an Oracle file that is converted to a CSV file with the same data is equivalent to the CSV file. Another example is a Server that has an equivalent Map Server. See “Work with Equivalent and Clustered Objects” on page 9.
Separate equivalents (equivalent objects only) | **Separate equivalents** (equivalent objects only) Merges or separates equivalent objects.
Expand | Expands a selected object to show the objects nested beneath it.
Collapse | Collapses a selected object to return to the original view that contains it.
Filter | Filters the object type of a selected object or the relationship type between two objects from the view. You can restore the object type or relationship type by resetting it in the Filter pane and clicking **Apply**.
Hide selection | **Hide selection** hides an object in the view.
Unhide selection | **Unhide selection** restores the visibility of the object in the view. The subject of the network diagram cannot be hidden.
Actions | Provides access to related applications.

7 Review the palette in the top right corner of the network diagram, as shown in the following figure:

*Figure 3  Network Diagram Palette*

The palette provides the functions covered in the following table:

**Table 2  View Menu Functions**

<table>
<thead>
<tr>
<th>Palette Item</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-layout:</td>
<td>Automatically straightens the layout of the current view.</td>
</tr>
<tr>
<td>Highlight path:</td>
<td>When enabled, it highlights the path from the subject to selected node.</td>
</tr>
</tbody>
</table>
8 Review the toolbar at the top of the SAS Lineage Viewer window. You can switch to a related application, view recent items, view the Help for SAS Lineage Viewer, and log off from the application.

9 Review the palette on the right side of the SAS Lineage Viewer window, as shown in the following figure:

*Figure 4  SAS Lineage Viewer Tool Palette*

The tool buttons in the palette give you access to the functions listed in the following table:

*Table 3  SAS Lineage Viewer Tool Palette Functions*

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object details:</td>
<td>Displays the Details pane for a selected object or relationship.</td>
</tr>
<tr>
<td>Manage views:</td>
<td>Displays the Manage Views pane, where you can create and open views. You can also set a default view. Finally, you can save filter changes, review properties, or delete a selected view.</td>
</tr>
<tr>
<td>Filter:</td>
<td>Displays the Filter pane, where you can set or reset filters on the current view.</td>
</tr>
<tr>
<td>Hidden objects:</td>
<td>Displays the Hidden Objects pane, where you can unhide an object or unhide all objects.</td>
</tr>
<tr>
<td>Find:</td>
<td>Displays the Find pane, where you can enter a search string to find an object in the network diagram.</td>
</tr>
</tbody>
</table>
Review Object or Relationship Details

1. Select an object in a network diagram.

2. Click 🖼 to view detailed information in the Details pane. The following figure shows the Details pane for an object:

   Figure 5  Details Pane for an Object

3. Select a relationship in a network diagram.

4. Click 🖼 to view detailed information in the Details pane. The following figure shows the Details pane for a relationship:
Work with Equivalent and Clustered Objects

Equivalent and clustered objects are marked with contrasting circular badges in the lower right corner of their icons. Equivalent objects are displayed as merged or separated, and clustered objects can be seen in a clustered or an unclustered state. In the merged or clustered state, a single object represents all of the equivalent or clustered object in a network diagram. In the separate or unclustered state, all of the objects are displayed in the diagram.

Figure 6  Merged Equivalent Objects

Equivalent objects contain the same data, but they are contained in different formats.
Both the CAS table object named CAR_VIEW_ORA and the ORACLE_TARG object in the network diagram above have equivalent objects. You can recognize this state of equivalence by the badge in the lower right corner of the icons. This badge specifies the number of equivalent objects in the equivalence.

Equivalent objects can be shown in a merged state. This means that only one of the two or more equivalent items are shown in the network diagram. The other items are indicated by the number on the object icon.

**Figure 7** Separated Equivalent Objects

Right-click an object that has an equivalence badge on it, and click **Separate equivalents**. A new network diagram that shows all of the equivalent objects for the selected object is displayed. Highlight the path between two equivalent objects, and the relationship label *Is equal to* is displayed. The equivalent items are also listed in the Details pane.

Right-click any of the objects in a separated equivalence, and click **Merge equivalences** to merge the objects back into a single object.

**Figure 8** Description of Equivalence
Click on the line between two objects, and click to see an explanation of the relationship between the objects in the Details pane, as shown above.

**Figure 9  Clustered Objects**

Objects are clustered based on their types, relationship to the expanded object, and direction of that relationship. Clusters form when enough objects of the same type are related to the expanded object with the same relationship type and relationship direction. These objects are clustered together as one node in the diagram.

Specifically, clusters contain: ten or more objects, only objects of the same type, and only objects that are related to the same object with same type of relationship.

Clustered objects are displayed in a network diagram as a single object that has a badge in the lower right corner of the object icon. This badge displays the number of items in the cluster. This network diagram contains two clustered objects that are named File and Table.
Click + to expand a clustered object. In this case, the Table object has been unclustered. Each one of the ADDRESSES0x tables in the network diagram is an object that is included in the Table cluster.

When a clustered object is expanded, it displays all of the relationships that its member objects are a part of, except relationships between member objects. Expanding a clustered object is similar to expanding each member object individually. Once a clustered object has been expanded, those objects should be added to the diagram in a fully expanded state when any of its members are unclustered.

If a clustered object has not been expanded, any member objects that are added to the diagram are displayed in a collapsed state. The only exception is when all of the objects to which that member object is related are already present on the diagram. However, if you expand a cluster group that contains an object that has circular references to other objects, this object with the circular references must be separated from this cluster group. An example of a circular reference is an Object A that is related to Object B. Object B, in turn, is related to an Object C. This Object C is also related to Object A. In this way, all three objects are related.

Sample Lineage Network Diagrams

This topic contains a series of lineage network diagrams. These network diagrams illustrate some of the ways in which objects from SAS Viya applications and the relationships between them are depicted in the SAS Lineage Viewer application. Each network diagram is followed by a table that contains detailed information about the objects in the network diagram. Other types of network diagrams can be generated, but the network diagrams here display a variety of the objects and relationships that you can explore in SAS Lineage Viewer.

- “Data Source for DBMS” on page 13
- “Data Interactions in a Network Diagram” on page 14
- “Job Request Network Diagram” on page 15
- “Data Source for a CAS Server” on page 16
Data Source for DBMS

This network diagram contains the data source ORACLE_TEST, the database schema DMTEST, and the
database server ed01-scan.unx.sas.com. ORACLE_TEST is a DBMS backed CAS Library.

Figure 11  Data Source Network Diagram

The following table lists key properties of the objects in the network diagram:

Table 4  Data Source View Object Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Object Type</th>
<th>Object URI</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORACLE_TEST</td>
<td>data source</td>
<td>/dataSources/providers/cas/sources/CAS_Server_ID–ORACLE_TEST</td>
<td>SAS</td>
</tr>
<tr>
<td>DMTEST</td>
<td>database schema</td>
<td>ed01–your.server.com/DMTEST</td>
<td>SAS</td>
</tr>
<tr>
<td>ed01–your.server.com</td>
<td>database server</td>
<td>ed01–your.server.com</td>
<td>SAS</td>
</tr>
</tbody>
</table>

The URI for a database server varies according to the DBMS type and the data source attributes. These values
are listed in the following table:

Table 5  Database Server URI Formatting

<table>
<thead>
<tr>
<th>DBMS Type</th>
<th>Data Source Attributes</th>
<th>URI Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>db2</td>
<td>path, db</td>
<td>path/db</td>
</tr>
<tr>
<td>Oracle</td>
<td>path</td>
<td>path</td>
</tr>
<tr>
<td>lasr</td>
<td>server</td>
<td>server</td>
</tr>
</tbody>
</table>
### Data Interactions in a Network Diagram

This network diagram contains the data source COMMON_TEST, which is the parent of the data table BATTING. BATTING is used as a source for the SAS table Batting.sashdat. COMMON_TEST is also the parent of the external file Batting.csv, from which BATTING was loaded and Batting.sashdat was created.

#### Figure 12  Data Interactions Network Diagram

The following table lists key properties of the objects in the network diagram:

<table>
<thead>
<tr>
<th>DBMS Type</th>
<th>Data Source Attributes</th>
<th>URI Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teradata</td>
<td>database, server</td>
<td>server/database</td>
</tr>
<tr>
<td>Postgres</td>
<td>database, server</td>
<td>server/database</td>
</tr>
<tr>
<td>Impala</td>
<td>server</td>
<td>server</td>
</tr>
<tr>
<td>Hive</td>
<td>server</td>
<td>server</td>
</tr>
<tr>
<td>Cloudex</td>
<td>dataAgentName</td>
<td>host:port</td>
</tr>
<tr>
<td>Note: This support is coming soon. The host:port is found by lookup of the dataAgent by Name.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>server</td>
<td>server</td>
</tr>
<tr>
<td>Hana</td>
<td>server</td>
<td>server</td>
</tr>
<tr>
<td>HDMD</td>
<td>hdfsMetadir, hdfsDatadir</td>
<td>hdm://?hdfsMetadir&amp;hdfsDatadir</td>
</tr>
</tbody>
</table>

---

*The table continues with similar entries for other databases and data sources.*
Table 6  Path View Object Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Object Type</th>
<th>Object URI</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMON_TEST</td>
<td>Data source</td>
<td>/dataSources/providers/cas/sources/CAS_Server_ID~COMMON_TEST</td>
<td>SAS</td>
</tr>
<tr>
<td>Batting.sashdat</td>
<td>file</td>
<td>file:CASServerAddress/net/dmtesting/ifs/dmt_data/SASViya/Data/Common_Test/Batting.sashdat</td>
<td>SAS</td>
</tr>
<tr>
<td>Batting.csv</td>
<td>file</td>
<td>file:CASServerAddress/net/dmtesting/ifs/dmt_data/SASViya/Data/Common_Test/Batting.csv</td>
<td>SAS</td>
</tr>
<tr>
<td>BATTING</td>
<td>table</td>
<td>/dataTables/dataSources/CAS_Server_ID~COMMON_TABLES/tables/BATTING</td>
<td>SAS</td>
</tr>
</tbody>
</table>

COMMON_TEST is a data source object that represents a path-backed CAS library. The Batting.csv file is a file object in a directory used to load or create a data table and its source file. This file is usually located within the directory defined by a CAS library or data source. BATTING is a data table object in a data source that is path based.

Job Request Network Diagram

CONTACTS_Job_201783161048 is a job request used in the execution of a scheduled data movement. Import Table-PostgreSQL is a job definition or action template used in execution of the data movement. Contactsin.sashdat is a SAS table that contains the inputs to the job. CONTACTS is a CAS table that receives the outputs.

Figure 13  Job Request Network Diagram

The following table lists key properties of the job request and job definition objects in the network diagram:
Table 7  Job Request View Object Properties

<table>
<thead>
<tr>
<th>Name</th>
<th>Object Type</th>
<th>Object URI</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTACTS_Job_201783161048</td>
<td>job request</td>
<td>/jobExecution/jobRequests/requestID</td>
<td>SAS</td>
</tr>
<tr>
<td>Import Table-PostgreSQL</td>
<td>job definition</td>
<td>jobDefinitions/definitions/definitionID</td>
<td>SAS</td>
</tr>
</tbody>
</table>

**Data Source for a CAS Server**

This network diagram contains the data source for a CAS server.

**Figure 14  CAS Server Network Diagram**

Table 8  Data Source View

<table>
<thead>
<tr>
<th>Name</th>
<th>Object Type</th>
<th>Object URL</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS_Server_Name</td>
<td>data source</td>
<td>/dataSources/providers/cas/sources/CAS_Server_Name</td>
<td>SAS</td>
</tr>
</tbody>
</table>
Work with Saved View Filters

You can create and save a filter that controls the objects included in an existing view. Then, you can work with this saved view filter at a later time.

1. Click 
2. Click to access the New View Filter window.
3. Enter the name, relationship types, objects, and behaviors that you want to include in the saved view filter. 
   Note: The behavior of the selected items is specified in the drop-down menus. The available behaviors are Enabled in the filter panel, Disabled in the filter panel, and Hidden in the filter panel.

   A completed New View Filter window is shown in the following figure:

   Figure 15  New View Filter

4. Click Save to save the view filter and display the filtered view.
5. Click to manage the view filters that you have saved. The Banking View filter is selected in the Manage View pane is in the following display:
When you create a saved view, you can open it in the Manage Views pane. Simply click the name of a saved view filter in the list. View filters are saved as items in the Preference Microservice.

## Create Lineage Saved Diagrams

You can save any network diagram as a lineage saved diagram. When a lineage saved diagram is opened, the resulting network diagram is generated based on these saved settings. Any action that you take before saving the lineage saved diagram is preserved. For example, you can expand and collapse objects, zoom the diagram, and move objects across the screen. When you open the lineage saved diagram, you see the effects of all the changes that you saved.

When a saved diagram is opened, the selected view filter is changed to **All Relationships**. However, the filter settings in the Filter panel are the same as those in force when it is saved.

Lineage saved diagrams are stored in the File Microservice. You can access a lineage saved diagram by clicking **Open** in the SAS Lineage Viewer opening window. You can also access them from a network diagram. Click  and **Open** or **Open Recent** in the menu.

1. Open a network diagram in SAS Lineage Viewer.
2. Perform one or modifications to the network diagram. For example, you can zoom the diagram or open all or some of the nodes.
3. Click  and click **Save as** to access the Save As window.
4. Select a save location, specify an appropriate name, and click **Save**.
Open a Lineage Saved Diagram

Perform the following steps to access a lineage saved diagram from the SAS Lineage Viewer opening window:

1. Click Open in the SAS Lineage Viewer opening window.
2. (Optional) Enter a string in the Search field to search for a lineage saved diagram.
3. Navigate to the lineage saved diagram that you need in the Open window. If you do not see the lineage saved diagram that you need when the type is set to Lineage saved diagram, click \(\downarrow\) in the Type field to access the (all types) type.
4. Select the lineage saved diagram that you need from the list of available items.
5. Click Open to close the Open window and display the selected diagram.
6. (Optional) To open a lineage saved diagram from a network diagram, click \(\Rightarrow\) to access the Manage Views pane. Then click the name of a lineage saved diagram in the list to open it.
7. (Optional) Click Open or Open Recent to open any lineage saved views that are available. Then click \(\downarrow\) in a network diagram to access these menu items.

Open a SAS Lineage Subject from Another Application

You might see an object in another SAS Viya application and want to see it in the context of its relationships with other objects. If that SAS Viya application supports the Relationship Service, you can select the object and bring it up directly in a SAS Lineage Viewer network diagram. For example, you can follow these steps in SAS Data Studio:

1. Add a source table to a plan. Click \(\Rightarrow\).
2. Click Actions \(\Rightarrow\) Source table \(\Rightarrow\) Explore lineage in the contextual menu.

If relationship data for the selected object exists in the Relationship Service, the object is displayed as the subject of a network diagram in SAS Lineage Viewer.

Search for a Subject

Sometimes, you know the name of an object and need to explore its relationships with other objects. In this case, you can open SAS Lineage Viewer and use the Search for a Subject window.

1. Click Search for Subjects in the SAS Lineage Viewer opening window.
2. Enter a string in the Search field, and click \(\Rightarrow\).

The Results table is populated with every object that contains the string that you entered. These objects have been loaded into memory from any of your SAS Viya applications that contribute to the relationship service. They include tables, files, plans, rules, reports, and other types of data used in these applications.
3 To refine your search and limit the number of results, click to use the tools in the **Refine Search** section. The filtering tools that you can use are summarized in the following table:

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Information to Enter</th>
<th>Where to Enter Information</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>The object types that you want to include</td>
<td>The check boxes next to the object types ( )</td>
<td>The objects that contain the selected data types are displayed.</td>
</tr>
<tr>
<td>Modified By</td>
<td>Applications or users that have modified the objects that you want to include</td>
<td>The check box next to the application or user name ( )</td>
<td>The objects that have been modified by the applications or users that have been selected are displayed.</td>
</tr>
<tr>
<td>Date Modified</td>
<td>Start and end dates</td>
<td>The <strong>Start date</strong> and <strong>End date</strong> fields in the <strong>Date Modified</strong> section</td>
<td>The objects that were modified between the selected start and end dates are displayed.</td>
</tr>
</tbody>
</table>

4 Set an object-type filter, a modified by filter, a date-modified filter, both types of filters, or no filters at all.

5 (Optional) Click to see a list of recent searches. Click a search in the list to perform the search again.

6 (Optional) Click to hide or display the columns in the **Subjects** table or resize the columns in the table.

7 When you have found one or more subjects for network diagrams, select the check box next to the objects. Then click **Open** to open the network diagram. A separate view is opened for each of the selected subjects. Each view shows its subject and all of the objects that are related to it.