Working with Queries

Cloud Insights

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Working with Queries

Assets used in queries

Queries enable you to monitor and troubleshoot your network by searching the assets in your environment at a granular level based on user-selected criteria (annotations and performance metrics). Additionally, annotation rules, which automatically assign annotations to assets, require a query.

The following asset types can be used in queries, dashboard widgets, and custom asset landing pages. The fields and counters available for filters, expressions, and display will vary among asset types. Not all assets can be used in all widget types.

- Application
- Datastore
- Disk
- Fabric
- Generic Device
- Host
- Internal Volume
- iSCSI Session
- iSCSI Network Portal
- Path
- Port
- Qtree
- Quota
- Share
- Storage
- Storage Node
- Storage Pool
- Storage Virtual Machine (SVM)
- Switch
- Tape
- VMDK
- Virtual Machine

- Volume
- Zone
- Zone Member

You can create a query to enable you to search the assets in your environment at a granular level. Queries enable you to slice data by adding filters and then sorting the results to view inventory and performance data in one view.

1. About this task
   You can create a query for volumes, add a filter to find particular storages associated with the selected volume, add a filter to find a particular annotation, such as Tier 1, on the selected storages, and finally add another filter to find all storages with IOPS - Read (IO/s) greater than 25. When the results are displayed, you can then sort the columns of information associated with the query in ascending or descending order.

When a new data collector is added which acquires assets or any annotation or application assignments are made, you can query for those assets, annotations, or applications after the queries are indexed, which occurs at a regularly scheduled interval.

1. Steps
2. Click **Queries** > **New Query**
3. Click +**Query**
4. From the 'Search for' list, select the asset type you want to query for.

Viewing queries

You can view your queries to monitor your assets and change how your queries display the data related to your assets.

Steps

1. Log in to your Cloud Insights tenant.
2. Click **Queries** and select **Show all queries**.
   You can change how queries display by doing any of the following:
3. You can enter text in the filter box to search to display specific queries.
4. You can change the sort order of the columns in the table of queries to either ascending (up arrow) or descending (down arrow) by clicking the arrow in the column header.
5. To resize a column, hover the mouse over the column header until a blue bar appears. Place the mouse over the bar and drag it right or left.
6. To move a column, click on the column header and drag it right or left.

When scrolling through the query results, be aware that the results may change as Cloud Insights automatically polls your data collectors. This may result in some items being missing, or some items appearing out of order depending on how they are sorted.

Exporting query results to a .CSV file

You can export the results of any query to a .CSV file, which will allow you to analyze the data or import it into another application.

Steps

1. Log in to your Cloud Insights tenant.
2. Click **Queries** and select **Show all queries**.

   The Queries page is displayed.
3. Click a query.
4. Click to export the query results to a .CSV file.
5. When prompted, do one of the following:
   a. Click **Open with** and then **OK** to open the file with Microsoft Excel and save the file to a specific location.
   b. Click **Save file** and then **OK** to save the file to your Downloads folder.

All of the attributes for the objects in the columns currently selected for display are exported to the file, regardless of whether those attributes are being displayed.

When exporting query results, be aware that all rows in the results table will be exported, not just those selected or displayed on the screen, up to a maximum of 10,000 rows.

Note: When a comma appears in an asset name, the export encloses the name in quotes, preserving the asset name and the proper .csv format.

When opening an exported .CSV file with Excel, if you have an object name or other field that is in the format NN:NN (two digits followed by a colon followed by two more digits), Excel will sometimes interpret that name as a Time format, instead of Text format. This can result in Excel displaying incorrect values in those columns. For example, an object named "81:45" would show in Excel as "81:45:00".

To work around this, import the .CSV into Excel using the following steps:

1. Open a new sheet in Excel.
2. On the "Data" tab, choose "From Text".
3. Locate the desired .CSV file and click "Import".
4. In the Import wizard, choose "Delimited" and click Next.

5. Choose "Comma" for the delimiter and click Next.
6. Select the desired columns and choose "Text" for the column data format.
7. Click Finish.

   Your objects should show in Excel in the proper format.

Modifying or Deleting a Query

Modifying a Query

You can change the criteria that are associated with a query when you want to change the search criteria for the assets that you are querying.

Steps

1. Click **Queries** and select **Show all queries**.

   The Queries page is displayed.

2. Click the query name
3. To add a criteria to the query, click and select a criteria from the list.
4. To remove a filter from the query, click the **X** next to the filter to remove.

When you have made all necessary changes, do one of the following:

- Click the **Save** button to save the query with the name that was used initially.
- Click the drop-down next to the **Save** button and select **Save As** to save the query with another name. This does not overwrite the original query.
- Click the drop-down next to the **Save** button and select **Rename** to change the query name that you had used initially. This overwrites the original query.
- Click the drop-down next to the **Save** button and select **Discard Changes** to revert the query back to the last saved changes.

Deleting a Query

To delete a query, click **Queries** and select **Show all queries**, and do one of the following:

1. Click on the "three dot" menu to the right of the query and click **Delete**.
2. Click on the query name and select **Delete** from the **Save** drop-down menu.

Assigning multiple applications to or removing multiple applications from assets

You can assign multiple applications to or remove multiple applications from assets by using a query instead of having to manually assign or remove them.

You can use these steps to add or remove annotations in the same way.

Before you begin

You must have already created a query that finds all the assets that you to edit.

Steps

1. Click **Queries** and select **Show all queries**.

   The Queries page displays.

2. Click the name of the query that finds the assets.

   The list of assets associated with the query displays.

3. Select the desired assets in the list or click the top checkbox to select All.

   The

button displays.

4. To add an application to the selected assets, click

and select **Add Application**.
5. Select one or more applications.

   You can select multiple applications for hosts, internal volumes, qtrees, and virtual machines; however, you can select only one application for a volume or a share.

6. Click **Save**.
7. To remove an application assigned to the assets, click

and select **Remove Application**.
8. Select the application or applications you want to remove.
9. Click **Delete**.

Any new applications you assign override any applications on the asset that were derived from another asset. For example, volumes inherit applications from hosts, and when new applications are assigned to a volume, the new application takes precedence over the derived application.

Copying table values

You can copy values in tables to the clipboard for use in search boxes or other applications.

About this task

There are two methods you can use to copy values from tables or query results to the clipboard.

Steps

1. Method 1: Highlight the desired text with the mouse, copy it, and paste it into search fields or other applications.
2. Method 2: For single-value fields, hover over the field and click the clipboard icon that appears. The value is copied to the clipboard for use in search fields or other applications.

   Note that only values that are links to assets can be copied using this method. Only fields that include single values (i.e. non-lists) have the copy icon.

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