Edit a text box widget

Published: 2022-04-04

If you want to include explanatory text next to your dashboard charts or display a company logo in your dashboard, you can edit a text box widget. With the text box widget, you can display text, links, images, or sample metrics in your dashboard.

The text box widget supports Markdown, which is a simple formatting syntax that converts plain text into HTML with non-alphabetic characters, such as "#" or "*". New text box widgets contain Markdown examples. A text box widget is automatically provided each time you create a dashboard ⬈. You can also add a text box widget to your dashboard layout ⬈.

To edit an existing text box widget, complete the following steps:

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Dashboards**.
3. From the dashboard dock, select a dashboard containing the text box you want to edit.
4. Click the command menu ⋮ in the upper right corner and select **Edit Layout**.
5. Click the text box.
6. Type and edit text in the left Editor pane.

   The HTML output text dynamically displays in the right Preview pane. With Markdown, you can format the following types of content:

   - Format text
   - Add images
   - Add metric examples
7. Click **Save** to close the Metric Explorer.

Format text in Markdown

The following table shows common Markdown formats that are supported in the text box widget.

> 📝 **Note:** Additional Markdown format examples are provided in the GitHub Guides: Mastering Markdown ⬈. However, not all Markdown syntax formatting options are supported in the ExtraHop text box widget.

Format	Description	Example
Headings	Place a number sign (#) before your text to format headings. The level of heading is determined by the amount of number signs.	`####Example H4 heading`
Unordered lists	Place a single asterisk (*) before your text.	`* First example * Second example`
Ordered lists	Place a single number and period (1.) before your text.	`1. First example 2. Second example`
Bold	Place double asterisks before and after your text.	`**bold text**`
Italics	Place an underscore before and after your text.	`_italicized text_`

Format	Description	Example
Hyperlinks	Place link text in brackets before the URL in parentheses. Or type your URL.	`[Visit our home page](https://www.extrahop.com)`
	Links to external websites open in a new browser tab. Links within the ExtraHop system, such as dashboards, open in the current browser tab.	`https://www.extrahop.com`

Blockquotes	Place a right angle bracket and a space before your text.	`On the ExtraHop website:`
		
		`> Access the live demo and review case studies.`

Monospace font	Place a backtick (`) before and after your text.	`` `example code block` ``
Emojis	Adding emojis in Markdown syntax is unsupported; however, you can copy and paste a Unicode emoji image into the text box. See the Unicode Emoji Chart ⧉ website for images.	

Add images in Markdown

You can add images to the text box widget by linking to them. Make sure your image is hosted on a network that is accessible to the ExtraHop system.

Links to images must be specified in the following format:

```
![<alt_text>](<file_path>)
```

Where *<alt_text>* is the alternative text for the image name and *<file_path>* is the path of the image. For example:

```
![Graph](/images/graph_1.jpg)
```

> **Note:** You also can add images by encoding them to Base64. For more information, see the following post on the ExtraHop forum, "Putting Images in Text Boxes ⧉."

Add metric examples in Markdown

You can write a metric query to include a metric value inline with text in the text box widget. For example, to show how many web servers have returned a 404 error, you can add a metric query to a sentence and the value is updated within the text.

The following example shows the basic format for writing metric queries:

```
%%metric:{
    "metric_category": "<metric_category>",
    "object_type": "<object_type>",
    "object_ids": [object_id],
    "metric_specs": [
```

```
        {
            "name": "<metric_spec>"
        }
    ]
}%%
```

To locate the `object_type`, `metric_spec`, and `metric_category` values for a metric, complete the following steps:

1. Click **Settings**
2. Click **Metric Catalog**.
3. Type the metric name in the search field.
4. Select the metric, and note the values for `metric_category`, `object_type`, and `metric_spec` in the REST API Parameters section.

   The following figure displays values for NFS Server - TCP Requests by Client.

To locate the `object_id` for a device, device group, or other asset, complete the following steps:
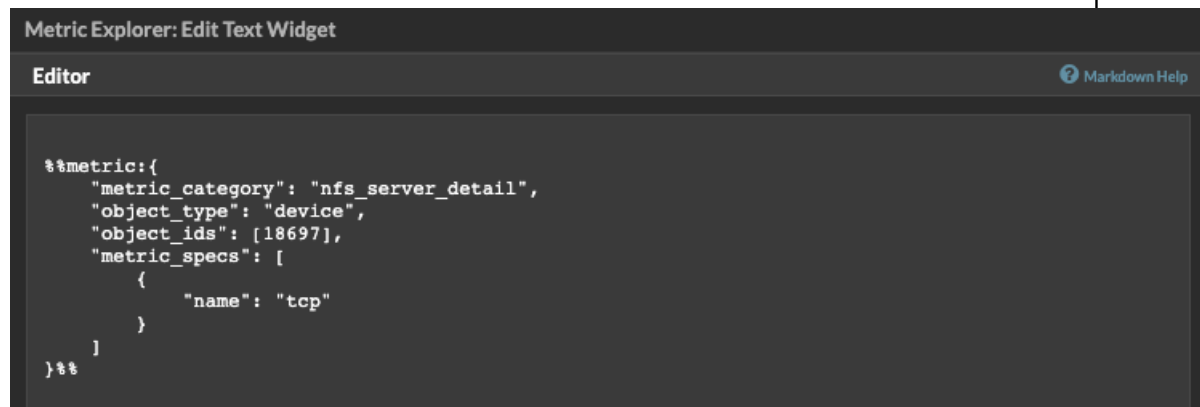
1. Click **Assets**, and then click an asset type from the left pane.
2. Click the name of the asset you want, and then open the properties window.
3. Note the value displayed for the REST API ID.

   The following figure displays the properties for a device with an ID of 18697.
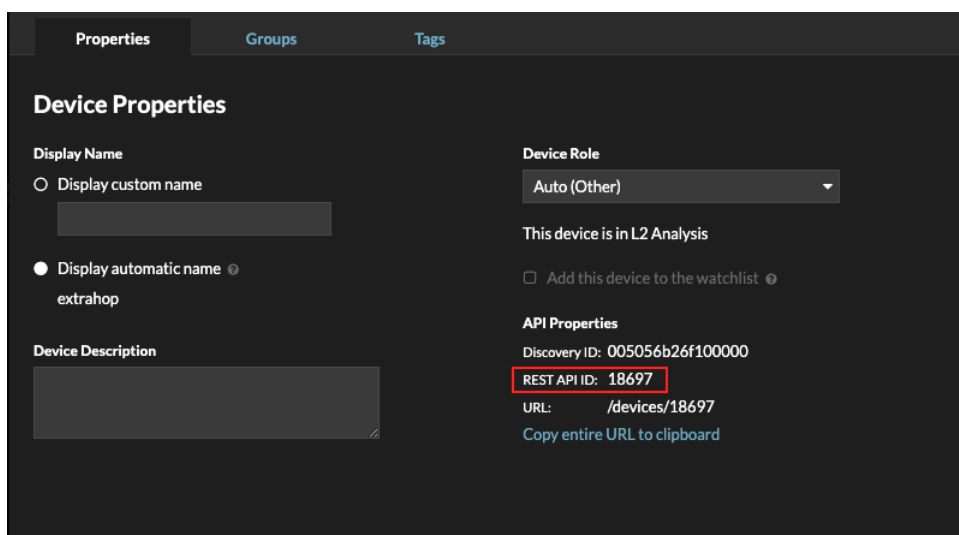
After you locate the values for the metric you want to display, add them to the metric query in the text editor. The value will be displayed in the text widget.

The following example markup will display the number of TCP requests received, listed by client IP address, for an NFS server with the object ID 18697.

```
Metric Explorer: Edit Text Widget

Editor                                                    ❷ Markdown Help

%%metric:{
    "metric_category": "nfs_server_detail",
    "object_type": "device",
    "object_ids": [18697],
    "metric_specs": [
        {
            "name": "tcp"
        }
    ]
}%%
```

Note: The following metric queries are unsupported in the text box widget:

- Time-series queries
- Mean calculations
- Multiple object_ids
- Multiple metric_spec
- Multiple percentiles

Metric query examples for the text box widget

The following examples show you how to write top-level, or base, metric queries for application, device, and network objects. You can also write a query for detail metrics.

Application metrics

To specify the All Activity object, the `object_ids` is "0".

This example query shows how you can retrieve HTTP metrics from the All Activity application object, and displays the following output: "`Getting [value] HTTP requests and [value] HTTP responses from All Activity.`"

```
Getting
%%metric:{
"object_type": "application",
"object_ids": [0],
"metric_category": "http",
"metric_specs": [{"name":"req"}]
}%%HTTP requests and
%%metric:{
"object_type": "application",
"object_ids": [0],
"metric_category": "http",
"metric_specs": [{"name":"rsp"}]
}%%
HTTP responses from All Activity.
```

Device metrics

You must specify either a client ("`_client`") or server ("`_server`") in the `metric_category`. To retrieve metrics for a specific device, specify the device object ID number in `object_ids`. To retrieve the device object ID (`deviceOid`), search for the device object in the ExtraHop global search. Select the device from your search results. The "`deviceOid=`" value will be embedded in the URL query string.

This example query shows how to retrieve metrics from a device client object, and displays the following output: "`Getting [value] CLIENT DNS response errors from a specific device.`"

```
Getting
%%metric:{"object_type": "device",
"object_ids": [8],
"metric_category": "dns_client",
"metric_specs": [{"name":"rsp_error"}]
}%%
CLIENT DNS response errors from a specific device.
```

This example query shows how to retrieve metrics from a device server object, and displays the following output: "`Getting [value] SERVER DNS response errors from a specific device.`"

```
Getting
%%metric:{
"object_type": "device",
"object_ids": [156],
"metric_category": "dns_server",
"metric_specs": [{"name":"rsp_error"}]
}%%
SERVER DNS response errors from a specific device.
```

Network metrics

To specify All Networks, the `object_type` is "`capture`" and the `object_ids` is "`0`." To specify a specific VLAN, the `object_type` is "`vlan`" and the `object_ids` is the VLAN number.

This example query shows how to retrieve metrics for all networks, and displays the following output: "`Getting [value] broadcast packets from all networks.`"

```
Getting
%%metric:{
"object_type": "capture",
"object_ids": [0],
"metric_category": "net","metric_specs":
 [{"name":"frame_cast_broadcast_pkts"}]
}%%
broadcast packets from all networks.
```

This example query shows how to retrieve metrics for a specific VLAN and displays the following output: "`Getting [value] broadcast packets from VLAN 3.`"

```
Getting
%%metric:{
"object_type": "vlan",
"object_ids": [3],
"metric_category": "net",
"metric_specs": [{"name":"frame_cast_broadcast_pkts"}]
}%%
broadcast packets from VLAN 3.
```

Group metrics

To specify a group, the `object_type` is "`device_group`." You must specify either a client ("`_client`") or server ("`_server`") in the `metric_category`. The `object_ids` for the specific group must be retrieved from the REST API Explorer.

This example query shows how to retrieve metrics for all networks, and displays the following output: "`Getting [value] HTTP responses from the HTTP Client Device Group.`"

```
Getting
%%metric:{
"object_type": "device_group",
"object_ids": [17],
"metric_category": "http_client",
"metric_specs": [{"name":"req"}]
}%%
HTTP responses from the HTTP Client Device Group.
```

Detail metrics

If you want to retrieve detail metrics, your metric query should contain additional key parameters, such as key1 and key2:

- object_type
- object_ids
- metric_category
- metric_spec

  - name
  - key1
  - key2

The key parameters act as a filter for displaying detail metric results. For non-custom detail metrics, you can retrieve detail metric parameters from the Metric Catalog. For example, type `HTTP Responses by URI`, and then look at the parameter values in the REST API Parameters section.

⚠ **Important:** You must supply the `object_ids` in your query.

This example shows how to retrieve HTTP requests by URI for the All Activity application (`object_ids` is "`0`"):

```
%%metric:{
"object_type": "application",
"object_ids": [0],
"metric_category": "http_uri_detail",
"metric_specs": [{"name":"req"}]
}%%
```

This example query shows you how to retrieve HTTP requests by URIs that contain a key value for "`pagead2`" for the All Activity application (`object_ids` is "`0`"):

```
%%metric:{
"metric_category": "http_uri_detail",
"object_type": "application",
"object_ids": [0],
"metric_specs": [
{
"name": "req",
"key1": "/pagead2/"
}
]
```

```
}%%
```

This example query shows how to retrieve count metrics for all networks and displays the following output:
"Getting [value] detail ICA metrics on all networks."

```
Getting
%%metric:{
"object_type": "capture",
"object_ids": [0],
"metric_category": "custom_detail",
"metric_specs": [{
"name":"custom_count",
"key1":"network-app-byte-detail-ICA"
}]
}%%
detail ICA metrics on all networks.
```

This example query shows how to retrieve a custom dataset statistic with topn keys and percentiles, and displays the following output: "The fifth percentile is: [value]."

```
The fifth percentile is:
%%metric:{
"object_type": "vlan",
"object_ids": [1],
"metric_category": "custom_detail",
"metric_specs": [{
"name": "custom_dset",
"key1": "myCustomDatasetDetail",
"key2": "/10.10.7/",
"calc_type": "percentiles",
"percentiles": [5]
}]
}%%
.
```

> **Note:** Sampleset metrics are unsupported in the text box widget. For example, adding the
> "calc_type": "mean" parameter to your text box query is unsupported.