

Metrics

Once an API is published and is being consumed at runtime, metrics information about that usage is recorded in the **Scheer PAS Log Analyzer** (based on OpenSearch). For each request, various pieces of information is stored, including but not necessarily limited to the following:

- Request start and end times
- API start and end times
- Resource path
- Response type (success, failure, error)
- API info (org id, id, version)
- Client app info (org id, id, version)

For APIs and clients, you can access these metrics directly in API Management, or you can analyze the data using the Log Analyzer. API Management provides some basic, predefined metrics, the Log Analyzer is a reporting tool that lets you define your own reports based on OpenSearch data.



The dashboard displayed in the **Metrics** tab of APIs and clients is an embedded functionality of OpenSearch. For a detailed documentation of its functionalities, visit the [official OpenSearch documentation](#).

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Related Pages:

- [APIs](#)
 - [API Settings](#)
- [Clients](#)
 - [Client Settings](#)

Related Documentation:

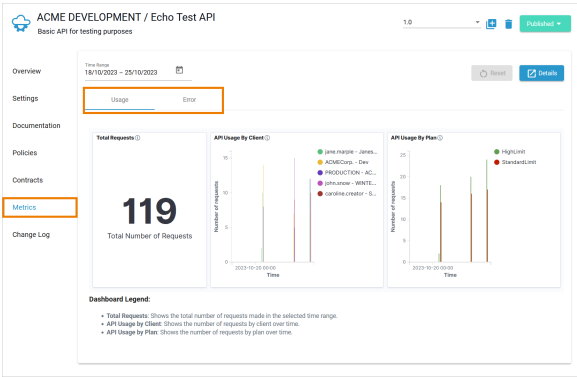
- [Administration Guide](#)
 - [Analyzing Platform Logs](#)
- [Official OpenSearch Documentation](#)

Metrics in the API Management UI

In API Management, some basic metrics based on API and client data are available. The predefined metrics are shown as a dashboard within tab **Metrics** in the [API Settings](#) and [Client Settings](#). The dashboard contains two tabs: **Usage** and **Error**. While tab **Usage** contains information about the usage of an API or a client, tab **Error** displays details about error and failure messages.

	Definition
Error	<ul style="list-style-type: none">• Errors from the API gateway• Connection problems• Backend (unmanaged API) is unavailable
Failure	<ul style="list-style-type: none">• Policy failures, e.g.<ul style="list-style-type: none">◦ Rate Limit is reached◦ IP Blocklist policy blocks request because IP does not match◦ ...

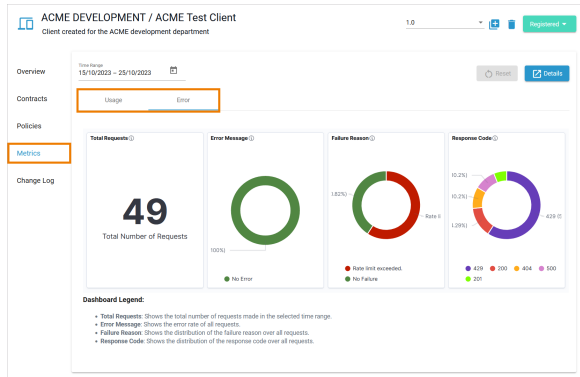
API Metrics



API Usage	Total Requests	Shows the total number of requests made in the selected time range.
	API Usage by Client	Shows the number of requests by client over time.
	API Usage by Plan	Shows the number of requests by plan over time.

API Error	Total Requests	Shows the total number of requests made in the selected time range.
	Error Message	Shows the error rate of all requests.
	Failure Reason	Shows the distribution of the failure reason over all requests.
	Response Code	Shows the distribution of the response code over all requests.

Client Metrics






Client Usage	Total Requests	Shows the total number of requests made in the selected time range.
	Client Usage by API	Shows the number of requests by API over time.
	Client Usage by Plan	Shows the number of requests by plan over time.
Client Error	Total Requests	Shows the total number of requests made in the selected time range.
	Error Message	Shows the error rate of all requests.
	Failure Reason	Shows the distribution of the failure reason over all requests.
	Response Code	Shows the distribution of the response code over all requests.

Working With Metrics

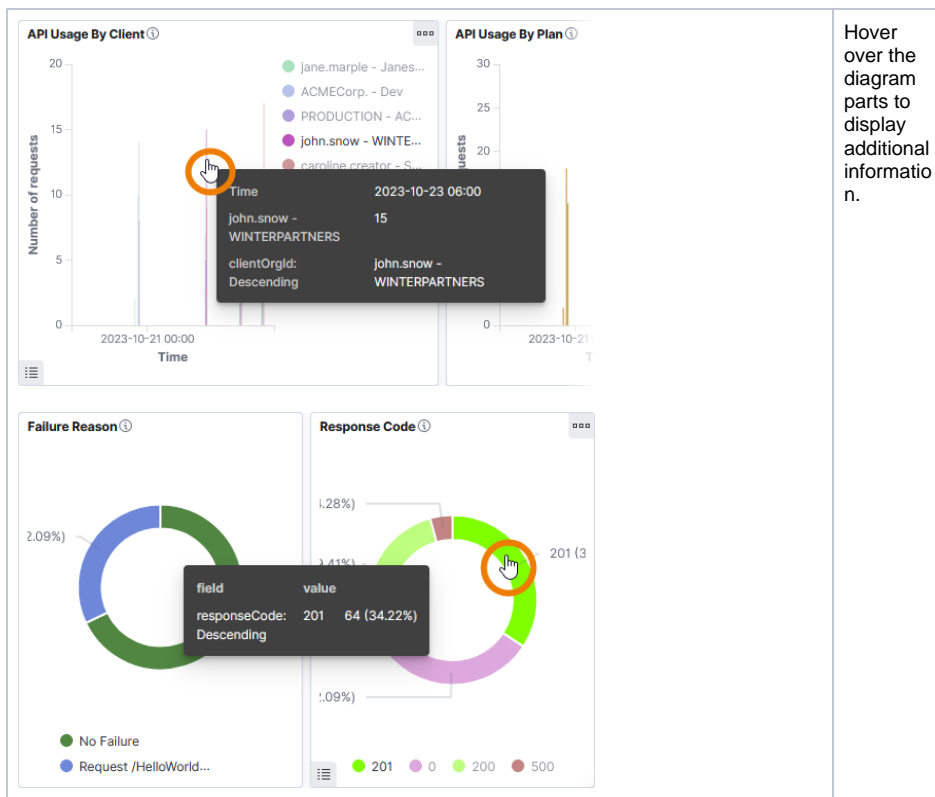
The dashboards offer various functionality to inspect the data.



UI Element	Name	Description
1	Time Range	Specify here the period for which you want to view data. You can enter the dates manually, or use the date picker  to define the time range.

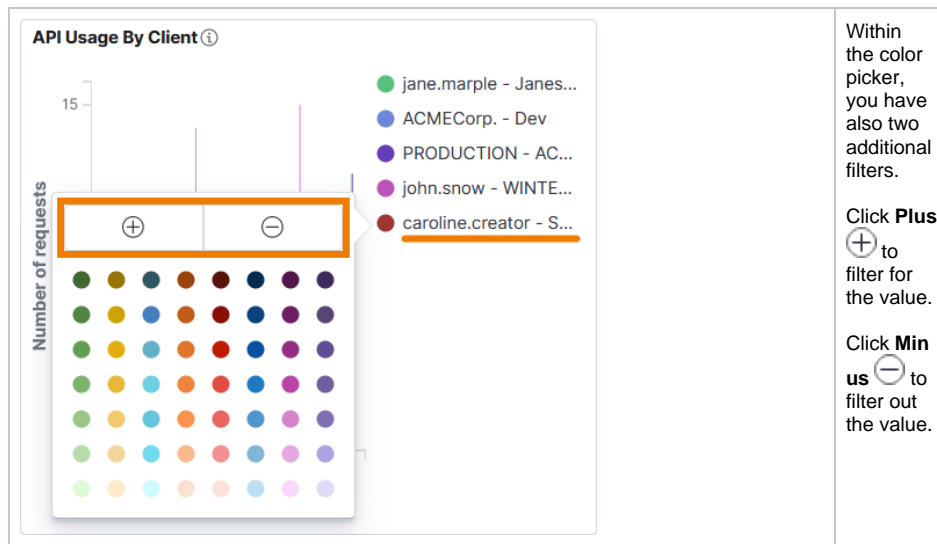
2	Reset	Click Reset to reset all dashboard filters.
3	Details	Click Details to open the preconfigured dashboard API Management - Details in the Log Analyzer.
4	Dashboard Content	Select tab Usage to see the usage metrics and Error to inspect the error metrics.
5	Legend	Hover over the lower left edge to display Toggle legend . Click  to show / hide the legend within the diagram. By default, the legend is shown.
6	Options	<p>Hover over the top right edge to display the Options. Click  to access a menu with the following options:</p> <ul style="list-style-type: none"> • Inspect: Select this option to see a more detailed view. You can choose between Data and Requests. <ul style="list-style-type: none"> ◦ View Data: Shows time, planId and number of requests in a detailed table and offers a download of the data in CSV format (raw or formatted). ◦ View Requests: Choose between the options Statistics, Request and Response to display more detailed data. • Maximize panel: Select this option to maximize the view of the diagram. The other diagrams will be hidden.

Additional Functionality

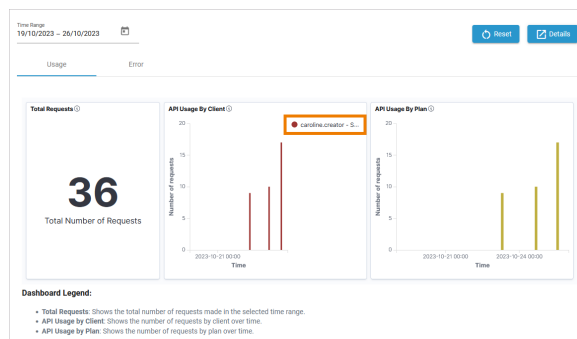


Hover over the diagram parts to display additional information.

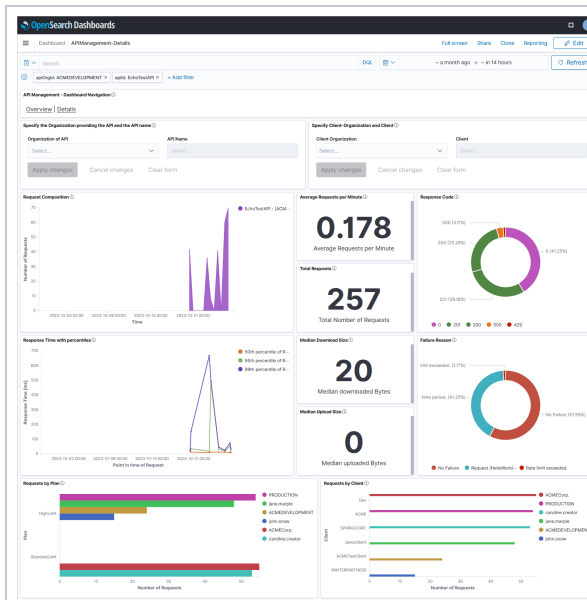
<div data-bbox="159 136 734 464"> <div>×</div> <h3>Select filters to apply</h3> <div> <input checked="" type="checkbox"/> requestStart: Nov 9, 2023 @ 00:00:00.000 to Nov 9, 2023 @ 12:00:00.000 </div> <div> <input checked="" type="checkbox"/> clientOrgId: PRODUCTION </div> <div> <div>Cancel</div> <div>Apply</div> </div> </div>	<p>You can also click the content to select some filters...</p>
<div data-bbox="159 493 730 968"> <h4>API Usage By Client ⓘ</h4> </div>	<p>...to display the data in more detail.</p>
<div data-bbox="159 997 730 1509"> <h4>API Usage By Client ⓘ</h4> <div> <div> <div>+</div> <div>−</div> </div> <div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>11</div> <div>12</div> <div>13</div> <div>14</div> <div>15</div> </div> </div> </div> <div> <div>jane.marple - Janes...</div> <div>ACMECorp. - Dev</div> <div>PRODUCTION - AC...</div> <div>john.snow - WINT...</div> <div>caroline.creator - S...</div> </div> </div>	<p>You can change the color of the displayed legend.</p> <p>Click on a legend entry to open the color picker.</p>



The value filter is applied to all diagrams in the dashboard:



Metric Reports Using the Log Analyzer



The Log Analyzer is an analytics and visualization tool designed to work with OpenSearch. With the Log Analyzer you can search, view, and interact with data stored in OpenSearch indices. You can perform advanced data analysis and visualize your data in a variety of charts, tables, and maps.

The **Schler PAS Log Analyzer** already contains some default dashboards for API Management users. For more information about the log analyzer, refer to the [Administration Guide > Analyzing Platform Logs](#).