

```
+++ title = "JSON model" keywords = ["grafana", "dashboard", "documenta-  
tion", "json", "model"] aliases = ["/docs/grafana/latest/reference/dashboard/"]  
weight = 1200 +++
```

## Dashboard JSON model

A dashboard in Grafana is represented by a JSON object, which stores metadata of its dashboard. Dashboard metadata includes dashboard properties, metadata from panels, template variables, panel queries, etc.

To view the JSON of a dashboard:

1. Navigate to a dashboard.
2. In the top navigation menu, click the **Dashboard settings** (gear) icon.
3. Click **JSON Model**.

## JSON fields

When a user creates a new dashboard, a new dashboard JSON object is initialized with the following fields:

**Note:** In the following JSON, `id` is shown as `null` which is the default value assigned to it until a dashboard is saved. Once a dashboard is saved, an integer value is assigned to the `id` field.

```
{  
  "id": null,  
  "uid": "cLV5GDCkz",  
  "title": "New dashboard",  
  "tags": [],  
  "style": "dark",  
  "timezone": "browser",  
  "editable": true,  
  "hideControls": false,  
  "graphTooltip": 1,  
  "panels": [],  
  "time": {  
    "from": "now-6h",  
    "to": "now"  
  },  
  "timepicker": {  
    "time_options": [],  
    "refresh_intervals": []  
  },  
  "templating": {  
    "list": []  
  },  
}
```

```

    "annotations": {
      "list": []
    },
    "refresh": "5s",
    "schemaVersion": 17,
    "version": 0,
    "links": []
  }

```

Each field in the dashboard JSON is explained below with its usage:

Name	Usage
<b>id</b>	unique numeric identifier for the dashboard. (generated by the db)
<b>uid</b>	unique dashboard identifier that can be generated by anyone. string (8-40)
<b>title</b>	current title of dashboard
<b>tags</b>	tags associated with dashboard, an array of strings
<b>style</b>	theme of dashboard, i.e. <b>dark</b> or <b>light</b>
<b>timezone</b>	timezone of dashboard, i.e. <b>utc</b> or <b>browser</b>
<b>editable</b>	whether a dashboard is editable or not
<b>graphTooltip</b>	0 for no shared crosshair or tooltip (default), 1 for shared crosshair, 2 for shared crosshair AND shared tooltip
<b>time</b>	time range for dashboard, i.e. last 6 hours, last 7 days, etc
<b>timepicker</b>	timepicker metadata, see timepicker section for details
<b>templating</b>	templating metadata, see templating section for details
<b>annotations</b>	annotations metadata, see annotations section for details
<b>refresh</b>	auto-refresh interval
<b>schemaVersion</b>	version of the JSON schema (integer), incremented each time a Grafana update brings changes to said schema
<b>version</b>	version of the dashboard (integer), incremented each time the dashboard is updated
<b>panels</b>	panels array, see below for detail.

## Panels

Panels are the building blocks of a dashboard. It consists of data source queries, type of graphs, aliases, etc. Panel JSON consists of an array of JSON objects, each representing a different panel. Most of the fields are common for all panels but some fields depend on the panel type. Following is an example of panel JSON of a text panel.

```

"panels": [
  {
    "type": "text",
    "title": "Panel Title",
    "gridPos": {

```

```

        "x": 0,
        "y": 0,
        "w": 12,
        "h": 9
    },
    "id": 4,
    "mode": "markdown",
    "content": "# title"
}

```

### Panel size and position

The `gridPos` property describes the panel size and position in grid coordinates.

- `w` 1-24 (the width of the dashboard is divided into 24 columns)
- `h` In grid height units, each represents 30 pixels.
- `x` The x position, in same unit as `w`.
- `y` The y position, in same unit as `h`.

The grid has a negative gravity that moves panels up if there is empty space above a panel.

### timepicker

```

"timepicker": {
  "collapse": false,
  "enable": true,
  "notice": false,
  "now": true,
  "refresh_intervals": [
    "5s",
    "10s",
    "30s",
    "1m",
    "5m",
    "15m",
    "30m",
    "1h",
    "2h",
    "1d"
  ],
  "status": "Stable",
  "type": "timepicker"
}

```

Usage of the fields is explained below:

Name	Usage
<b>collapse</b>	whether timepicker is collapsed or not
<b>enable</b>	whether timepicker is enabled or not
<b>notice</b>	TODO
<b>now</b>	TODO
<b>refresh_intervals</b>	TODO
<b>status</b>	TODO
<b>type</b>	TODO

## templating

The `templating` field contains an array of template variables with their saved values along with some other metadata, for example:

```
"templating": {
  "enable": true,
  "list": [
    {
      "allFormat": "wildcard",
      "current": {
        "tags": [],
        "text": "prod",
        "value": "prod"
      },
      "datasource": null,
      "includeAll": true,
      "name": "env",
      "options": [
        {
          "selected": false,
          "text": "All",
          "value": "*"
        },
        {
          "selected": false,
          "text": "stage",
          "value": "stage"
        },
        {
          "selected": false,
          "text": "test",
          "value": "test"
        }
      ]
    },
    {
      "query": "tag_values(cpu.utilization.average,env)",
```

```

        "refresh": false,
        "type": "query"
    },
    {
        "allFormat": "wildcard",
        "current": {
            "text": "apache",
            "value": "apache"
        },
        "datasource": null,
        "includeAll": false,
        "multi": false,
        "multiFormat": "glob",
        "name": "app",
        "options": [
            {
                "selected": true,
                "text": "tomcat",
                "value": "tomcat"
            },
            {
                "selected": false,
                "text": "cassandra",
                "value": "cassandra"
            }
        ],
        "query": "tag_values(cpu.utilization.average,app)",
        "refresh": false,
        "regex": "",
        "type": "query"
    }
]
}

```

Usage of the above mentioned fields in the templating section is explained below:

Name	Usage
<b>enable</b>	whether templating is enabled or not
<b>list</b>	an array of objects each representing one template variable
<b>allFormat</b>	format to use while fetching all values from data source, eg: wildcard, glob, regex, pipe, etc.
<b>current</b>	shows current selected variable text/value on the dashboard
<b>data source</b>	shows data source for the variables
<b>includeAll</b>	whether all value option is available or not

Name	Usage
<b>multi</b>	whether multiple values can be selected or not from variable value list
<b>multiFormat</b>	format to use while fetching timeseries from data source
<b>name</b>	name of variable
<b>options</b>	array of variable text/value pairs available for selection on dashboard
<b>query</b>	data source query used to fetch values for a variable
<b>refresh</b>	TODO
<b>regex</b>	TODO
<b>type</b>	type of variable, i.e. <code>custom</code> , <code>query</code> or <code>interval</code>