Mapgl.org - Network geomap and graph with metrics

A solution for visualizing network infrastructure within the Grafana ecosystem on a geo-map or graph. Demo panels: **https://play.mapgl.org**

Functional overview of network infrastructure

· A holistic view of network connections and their status, identification of bottlenecks
· Actual paths from the network core to end devices with highlighting and detailed analysis of routes through intermediate nodes.

Easy perception of complex network maps

· Expanded visualization of parallel connections
· Collapsing parallel path segments: only faulty connections are shown
· Nested connections info in tooltips
· Node filtering and clustering: grouping devices by status, type, and other parameters with statistics shown as icons with pie charts
· Two-color arcs for displaying multiple metrics (for example, tx/rx)
· Node search by name, city, street, and other attributes.

Full compatibility with Grafana

Mapgl relies on Grafana standards and capabilities:
· Support for all Grafana data sources
· Use of any panels and dashboards together with Mapgl, leveraging “Grafana data links” — adaptive links in the tooltip of a selected node or connection.

Using Mapgl in combination with Grafana is the most flexible and scalable solution for network visualization.

Expanding your infrastructure capabilities without integrating new software or changing architecture

Mapgl is equally suitable for working with any metric collection software.
When changing the stack, all developments related to Mapgl can be reused.

This is enabled by a universal data frame to which any data sources in Grafana are converted, and by the transparency of Mapgl plugin settings.
There are no hidden requirements: no hardcoding, workarounds, or tuning for specific data sources.

Two network diagram display modes

· **Geo-map** - vector Yandex Maps v.3, OpenStreet Maps, Carto, Google Satellite, and others. It is possible to connect your own offline map server.
· **Automatic graph layout** - for logical topology, a graph construction algorithm with segmented multi-layer layout is used.
· Support for subgraphs per namespace makes the network diagram easy to read even with a large number of nodes and connections.

Simple source data format

No intermediate normalization or data preparation for specific graph structures is required. Only the essentials are needed for each connection: node1, node2 (link target), metric, and additional attributes.

Modular, builder-style system

Mapgl panels are built without complex deployments or migrations:
· you can start with a basic topology of nodes and their attributes,
· gradually add and combine data sources with statuses and metrics into a single data frame. For this, you can use Grafana transformation tools or prepare the data with your own server-side scripts (for example, in NetBox),
· extend functionality via “Grafana data links” and integrations with other Grafana panels.

Solution pricing

$749 for the latest version of the plugin with a **perpetual license**.
You can use it on up to 5 Grafana servers. For broader usage, additional agreement is required.