Updating Grafana Dashboard with New PromQL Queries

This document outlines two methods to update an existing Grafana dashboard with new PromQL queries:

1. Manually using the Grafana UI.

2. Automatically using Grafana’s API.

# Option 1: Manually Update Queries via Grafana UI

1. \*\*Duplicate the Existing Dashboard\*\*:

- Open the existing dashboard in Grafana.

- Click on the dashboard title and select \*\*Save As\*\* to create a copy.

- Save it with a new name in the desired folder.

2. \*\*Edit the Queries in the Panels\*\*:

- Open the new dashboard.

- For each panel, click on the panel's title and select \*\*Edit\*\*.

- Replace the existing PromQL query in the \*\*Queries\*\* section with the updated query.

3. \*\*Save the Dashboard\*\*:

- After updating all the queries, click \*\*Save Dashboard\*\* to persist the changes.

# Option 2: Use Grafana API to Update Queries in Panels

1. \*\*Retrieve the Existing Dashboard Configuration\*\*:

- Use the Grafana API to retrieve the JSON configuration of the current dashboard.

- Example API call to get the dashboard by UID:

GET /api/dashboards/uid/:uid  
  
 Example curl command:  
 curl -X GET http://<grafana-server>/api/dashboards/uid/<dashboard\_uid> \  
 -H "Authorization: Bearer <API\_KEY>"

2. \*\*Update the PromQL Queries in the JSON\*\*:

- Locate the panels in the JSON. Each panel has a \*\*targets\*\* section where PromQL queries are defined.

- Update the `expr` field with the new PromQL query.

- Example JSON structure for updating queries:

{  
 "panels": [  
 {  
 "type": "graph",  
 "title": "Panel Title",  
 "targets": [  
 {  
 "expr": "new\_promql\_query"  
 }  
 ]  
 }  
 ]  
}

3. \*\*Create a New Dashboard with Updated Queries\*\*:

- Use the Grafana API to create a new dashboard with the updated JSON structure.

- Example API call to create a new dashboard:

POST /api/dashboards/db  
  
 Example curl command:  
 curl -X POST http://<grafana-server>/api/dashboards/db \  
 -H "Authorization: Bearer <API\_KEY>" \  
 -H "Content-Type: application/json" \  
 -d '{  
 "dashboard": {  
 "id": null,  
 "uid": null,  
 "title": "Updated Dashboard",  
 "tags": ["updated"],  
 "timezone": "browser",  
 "schemaVersion": 16,  
 "version": 0,  
 "panels": [  
 {  
 "type": "graph",  
 "title": "Panel Title",  
 "targets": [  
 {  
 "expr": "new\_promql\_query"  
 }  
 ]  
 }  
 ]  
 },  
 "folderId": 0,  
 "overwrite": false  
 }'

4. \*\*Verify the New Dashboard\*\*:

- After the dashboard is created, navigate to Grafana to verify the new dashboard and ensure the queries work as expected.