Monitoring-Stack Doc

Note**: To setup **Monitoring-Stack** in **Cluster** First Install **Loki** after install **Loki** move towards installation of **Grafana and Prometheus

➢ Installing **Loki**

Follow the Step to install **Loki Monitoring Stack (Log)**
Link: https://artifacthub.io/packages/helm/kube-ops/loki

- ❖ Open Loki Helm-Chart and change Values.yaml as shown below.
- ❖ Installing the Chart use following command:

    - ➢ `helm repo add kube-ops https://charts.kube-ops.io`
    - ➢ `helm repo update`
    - ➢ `helm upgrade --install [RELEASE_NAME]  kube-ops/loki -n monitoring -f values.yaml`

Changes made in ***loki*** Helm Chart are listed Below.

1. Adding Node-Selector in Values.yaml

```
nodeSelector:
 pv: "monitoring"
```

2. Enable **persistence(*pvc*)** for Loki Values.yaml

```
persistence:
 ## If true, use a Persistent Volume Claim, If false, use emptyDir
 ##
 enabled: true
 storageClassName: ""
 size: 10Gi
 accessModes: [ ReadWriteOnce ]
 volumeMode: Filesystem
```

3. Enable Promtail Values.yaml

```
promtail:
 enabled: true
```

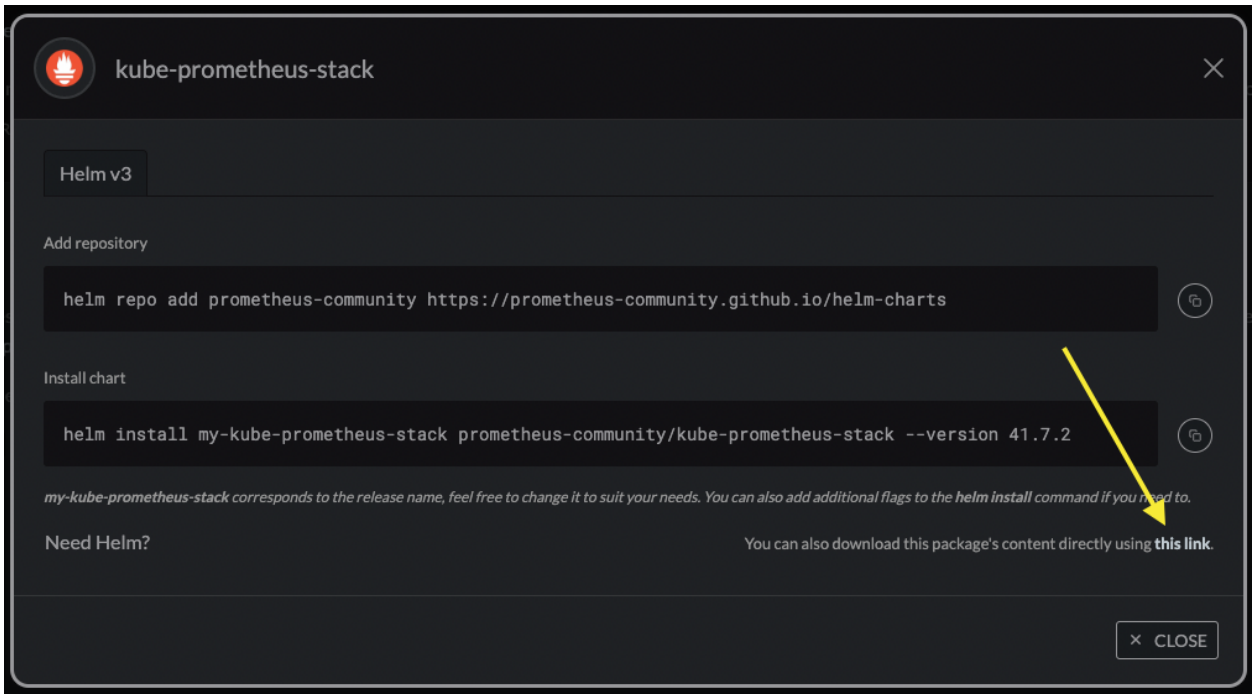
4. Setting Log Retention Period Values.yaml

```yaml
tableManager:
 retentionDeletesEnabled: true
 retentionPeriod: 6d
 throughputUpdatesDisabled: false
 pollInterval: 2m
 creationGracePeriod: 10m
```

➢ Installing **Grafana** and **Prometheus**

Follow the Step to install Monitoring Stack
Link: https://artifacthub.io/packages/helm/prometheus-community/kube-prometheus-stack

➔ Go to above link and Download kube-prometheus-stack Helm-Chart.



➔ Open Helm-Chart and change Values.yaml and Grafane Values.yaml as shown below.
➔ After doing all the changes now install it using following command.

```
helm install [RELEASE_NAME] kube-prometheus-stack - n monitoring
```

Changes made in ***kube-prometheus-stack*** Helm Chart are listed Below

1. To add ScrapeConfigs

Search for "**additionalScrapeConfigs**" in main Values.yaml of Helm Chart
And add following content

```
  additionalScrapeConfigs:
  #1
    - job_name: fantasy-node-dev-pm2-metrics
      scrape_interval: 10s
      scrape_timeout: 10s
      metrics_path: /metrics
      scheme: http
      static_configs:
        - targets:
            - fantasy-node-dev-pm2.dev.svc.cluster.local:9209
```

2. Change **Service-Type** for Grafana in Grafana Values.yaml

You will Find this Values.yaml in *Charts/grafana/values.yaml.*

```
service:
 enabled: true
 type: NodePort
 port: 80
 targetPort: 3000
```

3. Change Service-Type for Grafana in Grafana Service.yaml

You will Find this Values.yaml in *Charts/grafana/templates/service.yaml.*

```
spec:
{{- if (or (eq .Values.service.type "ClusterIP") (empty
.Values.service.type)) }}
 type: NodePort
```

4. Enable **persistence(*pvc*)** for Grafana in Grafana Values.yaml

```
persistence:
 type: pvc
 enabled: true
```

5. To Enable **SMTP** in Grafana add ENV in Grafana Values.yaml

```
env:
 GF_SMTP_ENABLED: "true"
 GF_SMTP_HOST: "smtp.gmail.com:587"
 GF_SMTP_USER: "support@yudiz.com"
 GF_SMTP_PASSWORD: "Yudiz@2022"
```

6. Add **Datasources** in Grafana Values.yaml

```
datasources:
datasources.yaml:
  apiVersion: 1
  datasources:
  - name: Loki
    type: loki
    url: http://loki
  - name: CloudWatch
    type: cloudwatch
    jsonData:
      authType: keys
      defaultRegion: ap-south-1
    secureJsonData:
      accessKey: 'accesskey'
      secretKey: 'secretkey'
```

7. To Change admin Password, Login to Grafana Using Default Password and go to Server admin at bottom Left corner and click on admin and Edit Password and save it.

8. Add Dashboards in Grafana Values.yaml, uncomment ***dashboardprovide***r & add ***dashboards***

```
...
dashboardProviders:
dashboardproviders.yaml:
  apiVersion: 1
  providers:
  - name: 'default'
    orgId: 1
    folder: ''
    type: file
    disableDeletion: false
    editable: true
    options:
      path: /var/lib/grafana/dashboards/default
...
dashboards:
 default:
 #   some-dashboard:
 #     json: |
 #       $RAW_JSON
 #   custom-dashboard:
 #     file: dashboards/custom-dashboard.json
   pm2-dashboard:
     gnetId: 12745
     datasource: Prometheus
   loki-dashboard:
     gnetId: 13639
     datasource: Loki
   alb-dashboard:
     gnetId: 14361
     datasource: CloudWatch
 #   prometheus-stats:
 #     gnetId: 2
 #     revision: 2
 #     datasource: Prometheus
```