

# Projet AppScore - Monitoring

## Installation Metrics Server

```
kubectl apply -f https://github.com/kubernetes-sigs/metrics-server/releases/latest/download/components.yaml
```

```
# AJOUTER : - --kubelet-insecure-tls dans la section  
spec.template.spec.containers.args
```

```
# car certif autosigné
```

```
kubectl edit deployment metrics-server -n kube-system
```

ou

```
kubectl patch deployment metrics-server -n kube-system --type='json' -  
p='[{"op": "add", "path": "/spec/template/spec/containers/0/args/-", "value":  
"--kubelet-insecure-tls"}]'
```

```
PS C:\Ynov\M2\Conteneurisation\appscore4> kubectl get deployment metrics-server -n kube-system
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
metrics-server	1/1	1	1	69d

```
PS C:\Ynov\M2\Conteneurisation\appscore4> kubectl get svc metrics-server -n kube-system -o jsonpath='{.spec.selector}'  
{ "k8s-app": "metrics-server" }
```

```
PS C:\Ynov\M2\Conteneurisation\appscore4> kubectl get pods -n kube-system -l k8s-app=metrics-server
```

NAME	READY	STATUS	RESTARTS	AGE
metrics-server-576c8c997c-wlbwp	1/1	Running	0	6m3s

```
PS C:\Ynov\M2\Conteneurisation\appscore4> kubectl get endpoints metrics-server -n kube-system
```

Warning: v1 Endpoints is deprecated in v1.33+; use discovery.k8s.io/v1 EndpointSlice

NAME	ENDPOINTS	AGE
metrics-server	10.1.1.44:10250	7m4s

```
PS C:\Ynov\M2\Conteneurisation\appscore4> kubectl top pods
```

NAME	CPU(cores)	MEMORY(bytes)
applicants-api-689b6b66b7-7qv6z	4m	39Mi
elasticsearch-d847655c-rznrf	34m	518Mi
kibana-85fcb6fb78-4kdfg	6m	74Mi
rabbitmq-7db67947b7-2dkmg	11m	119Mi
service-api-identity-7f468d9569-jm82p	7m	44Mi
service-api-jobs-788468bd69-rjbxm	6m	57Mi
sql-data-77fcd8cb8-9clsv	57m	871Mi
user-data-5b8b95ffb4-9hc6m	4m	5Mi
web-677fbbbc4f-strhm	2m	47Mi
webapp-f7f68c9b7-l8rc6	16m	85Mi

## Installation Kube State metrics

```
kubectl apply -f https://github.com/kubernetes/kube-state-  
metrics/releases/download/v2.10.0/standard-conf.yaml
```

Non sécurisé prometheus/targets

IA Learn Mail Ynov Google Stockage Devops Réseau Infra Cloud Sécurité Gameprog Utile Docker NoSQL Learn Ydays Thalès Emulator Online ... Cisco Networking... Bienvenue sur le P...

Prometheus Alerts Graph Status Help

## Targets

All scrape pools All Unhealthy Collapse All Filter by endpoint or labels Unknown Unhealthy Healthy

### kube-state-metrics (1/1 up) Show logs

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://kube-state-metrics.kube-system.svc.cluster.local:8080/metrics	UP	instance="kube-state-metrics.kube-system.svc.cluster.local:8080" job="kube-state-metrics"	9.148s ago	12.515ms	

### kubernetes-nodes-cadvisor (1/1 up) Show logs

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
https://kubernetes.default.svc/api/v1/nodes/docker-desktop/proxy/metrics/cadvisor	UP	instance="docker-desktop" job="kubernetes-nodes-cadvisor"	5.493s ago	982.195ms	

**Métrique demandée**|Requête à taper dans Prometheus pour l'afficher|

---|---

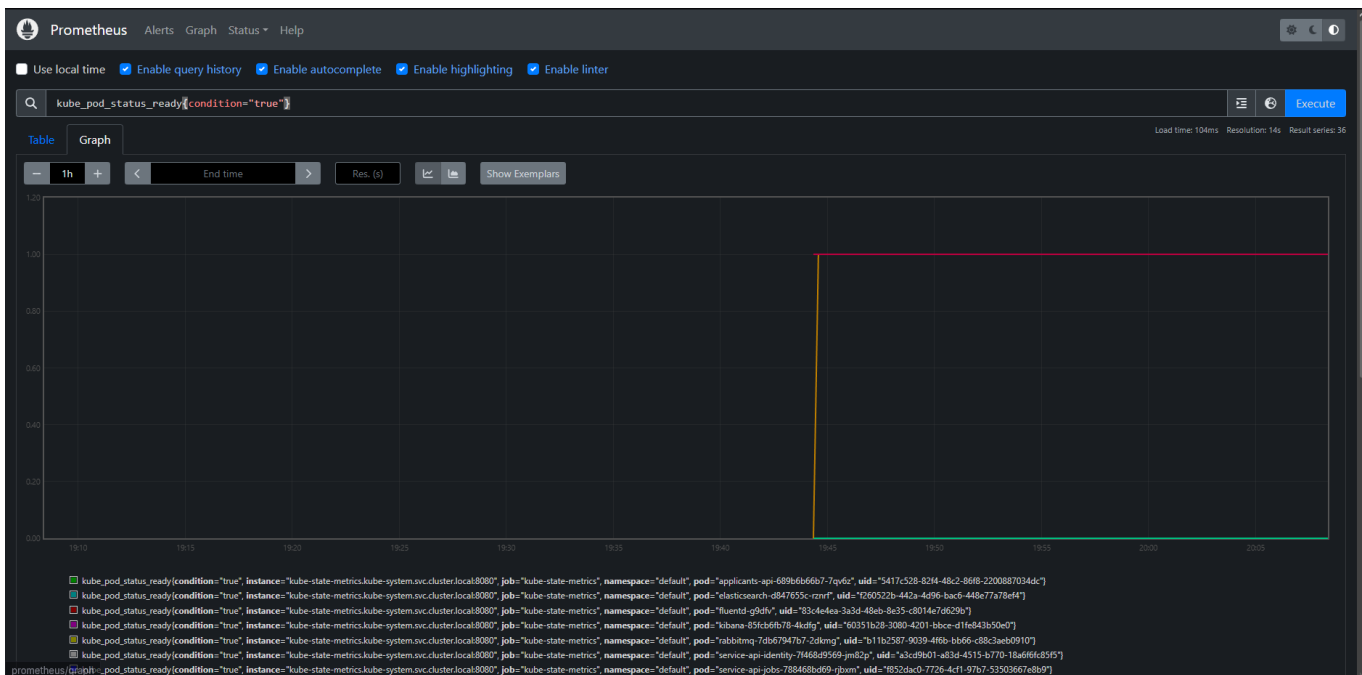
**Sondes (Liveness/Readiness)**| `prober_probe_total` ou `kube_pod_status_ready` |

**État du cluster**| `kube_node_status_condition` |

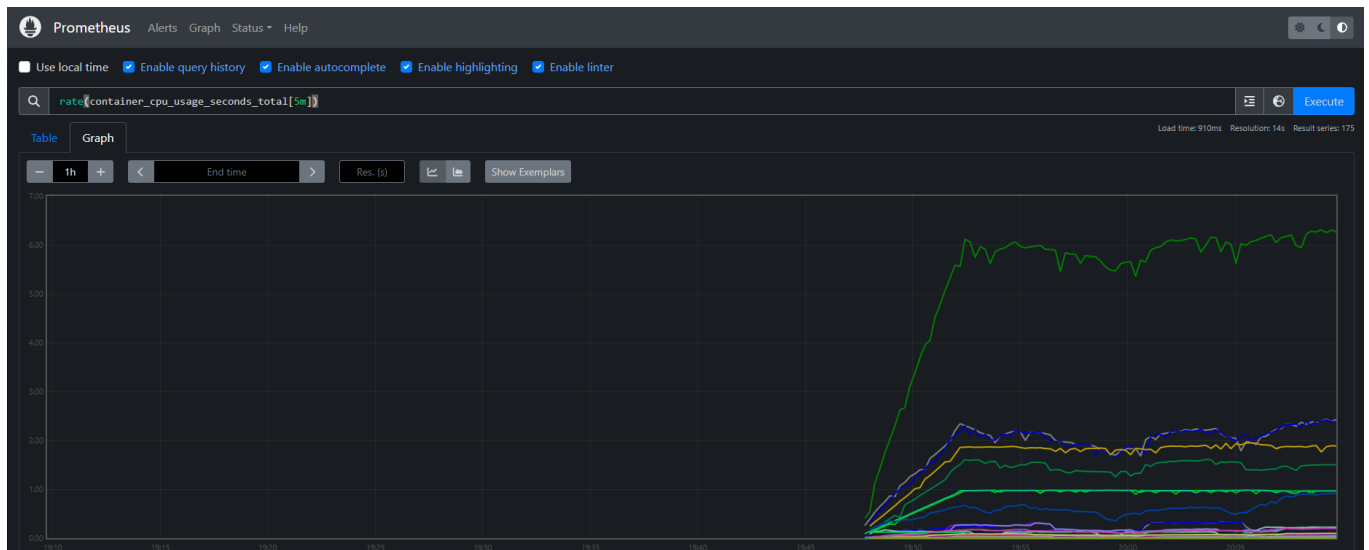
**Ressources (Nodes/Pods)**| `node_cpu_seconds_total` ou `container_memory_usage_bytes` |

**Plan de contrôle**| `apiserver_request_total` ou `rest_client_requests_total` |

```
# Santé des Pods : CPU en temps réel
kube_pod_status_ready{condition="true"}
```



```
# La charge CPU des conteneurs
rate(container_cpu_usage_seconds_total[5m])
```



# Les erreurs (Restart)  
kube\_pod\_container\_status\_restarts\_total

