




# Paranoid Observability

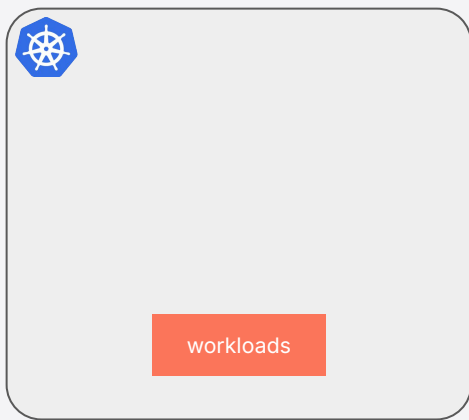
Success Stories and Misfortunes observing an  
Observability Stack

**Erik Sommer**

Sr. Software Engineer

# What you can expect

-  How we use our own Tools for testing and our own observability
-  What we do to be safe doing this
-  This was the last bullet point of the presentation



**Just  
Kubernetes**



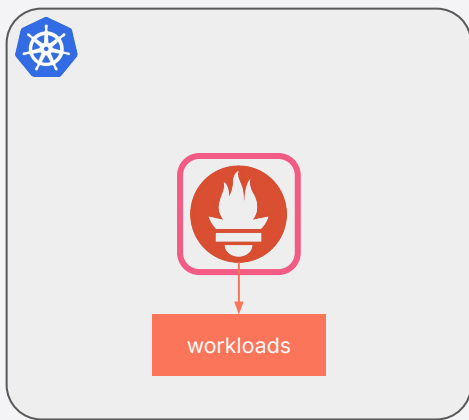
```
Context: <0> all <6> default <a> Attach
Cluster: <1> metamonitoring <ctrl-d> Delete
User: <2> kube-state-metrics <d> Describe
K9s Rev: <3> global-alertmanager <e> Edit
K8s Rev: <4> mimic-prometheus <?> Help
CPU: 44% <5> hosted-exporters <shift-j> Jump Own
MEM: 27%
```

**Pods(kube-state-metrics) [7]**

NAME↑	PF	READY	STATUS	RESTARTS	CPU	MEM	%CPU/R	%CPU/L	%MEM/R	%MEM/L	IP	NODE	AGE
kube-state-metrics-0	●	1/1	Running	0	87	184	28	n/a	17	n/a			20h
kube-state-metrics-1	●	1/1	Running	0	64	148	21	n/a	14	n/a			14h
kube-state-metrics-2	●	1/1	Running	0	92	147	30	n/a	14	n/a			15h
kube-state-metrics-3	●	1/1	Running	0	76	152	25	n/a	14	n/a			4h31m
kube-state-metrics-4	●	1/1	Running	0	72	156	24	n/a	15	n/a			7h33m
kube-state-metrics-5	●	1/1	Running	0	64	155	21	n/a	15	n/a			5h44m
kube-state-metrics-6	●	1/1	Running	0	80	155	26	n/a	15	n/a			18h

<pod>





**We need to see  
something**

→ Scrape and Write Metrics

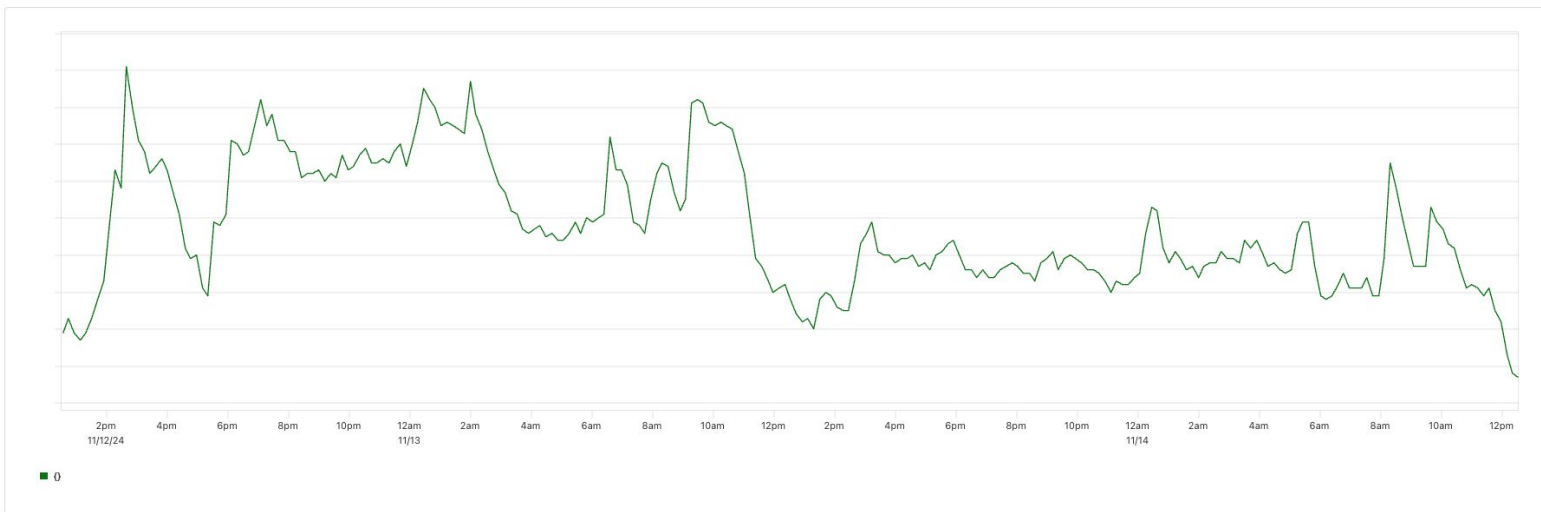


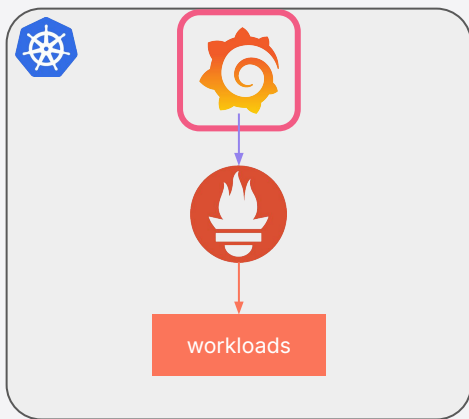
>\_ `count(node:cpu_core_requests:sum)` ⋮ [Execute](#)

[Table](#) [Graph](#) [Explain](#)

— 2d + < End time > Medium res. ⌵

[Unstacked](#) [Stacked](#)

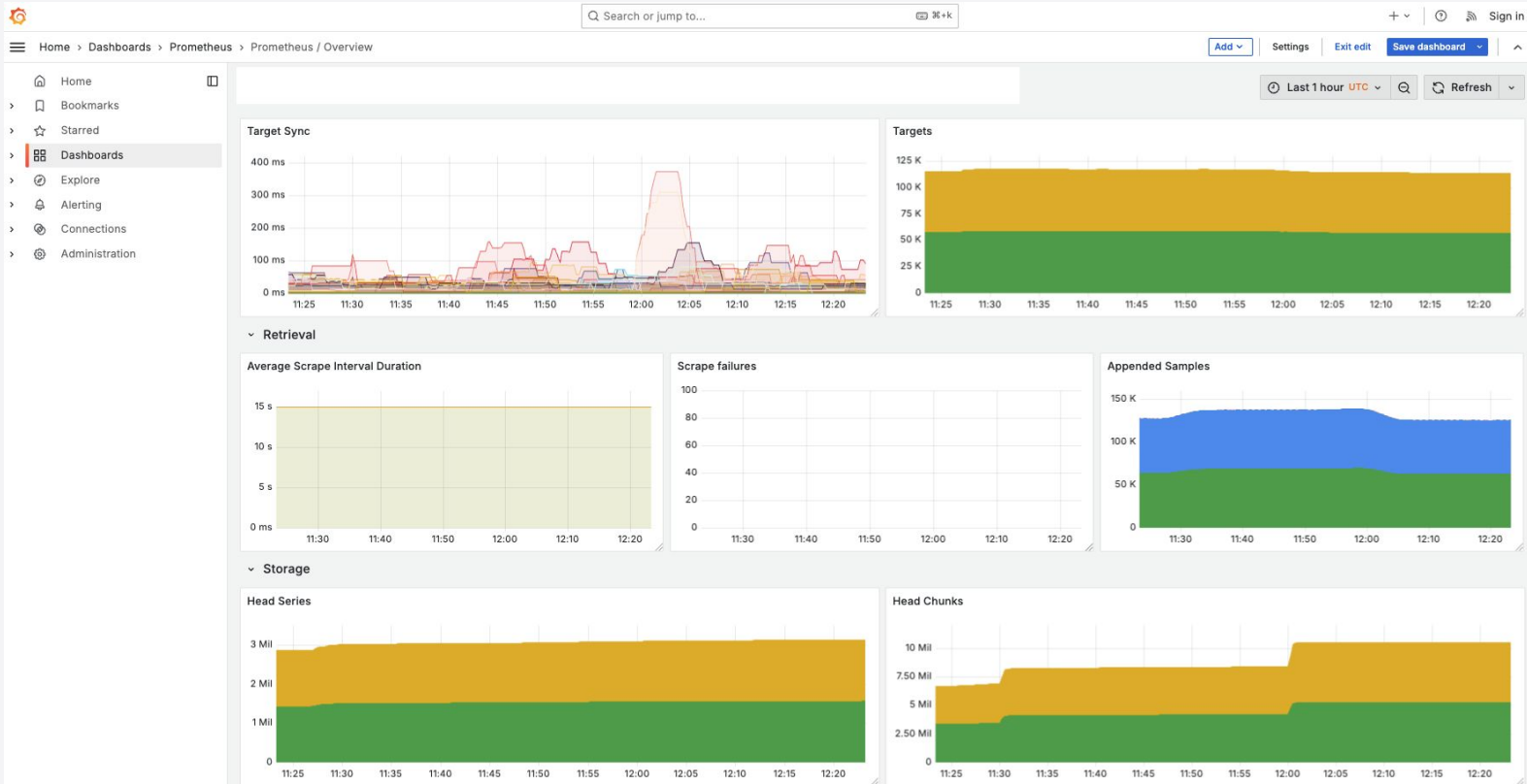




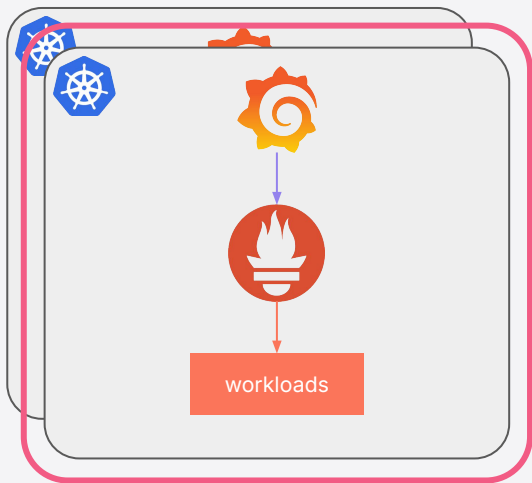
A dashboard  
would be nice

→ Scrape and Write Metrics  
→ Query Metrics





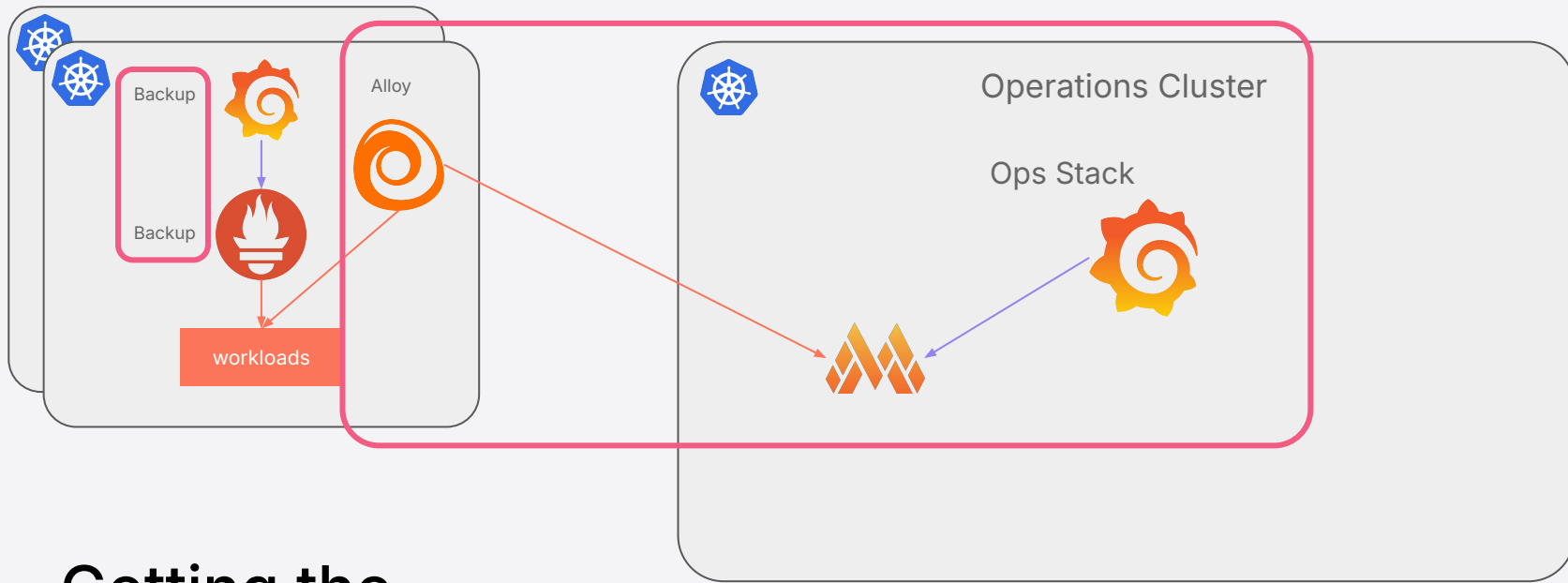




# Going Global

→ Scrape and Write Metrics  
→ Query Metrics

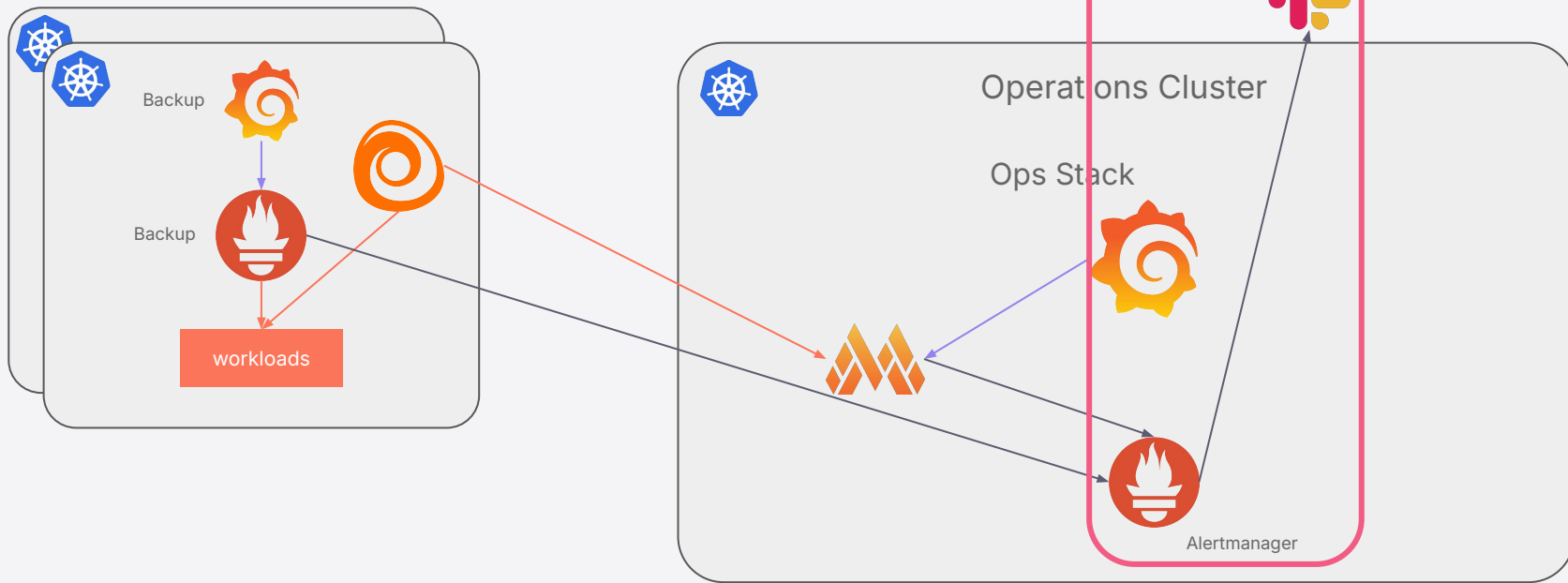




# Getting the global picture

→ Scrape and Write Metrics  
→ Query Metrics

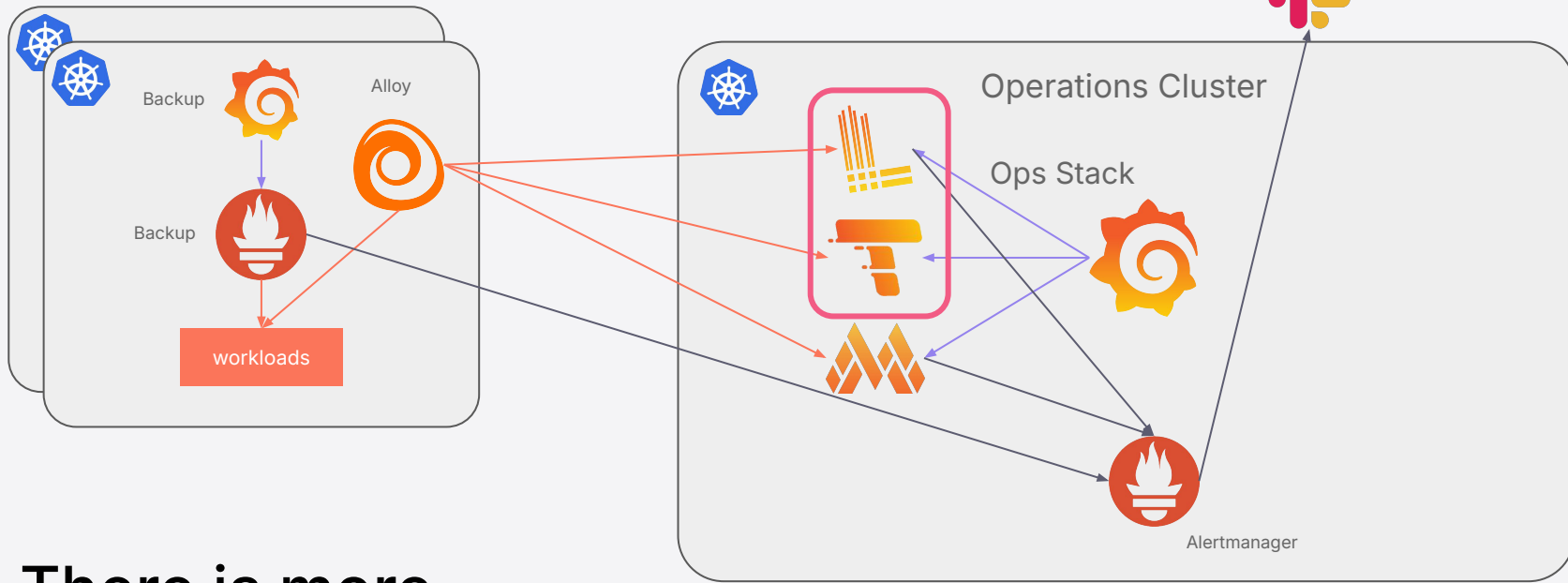




## Time for alerts



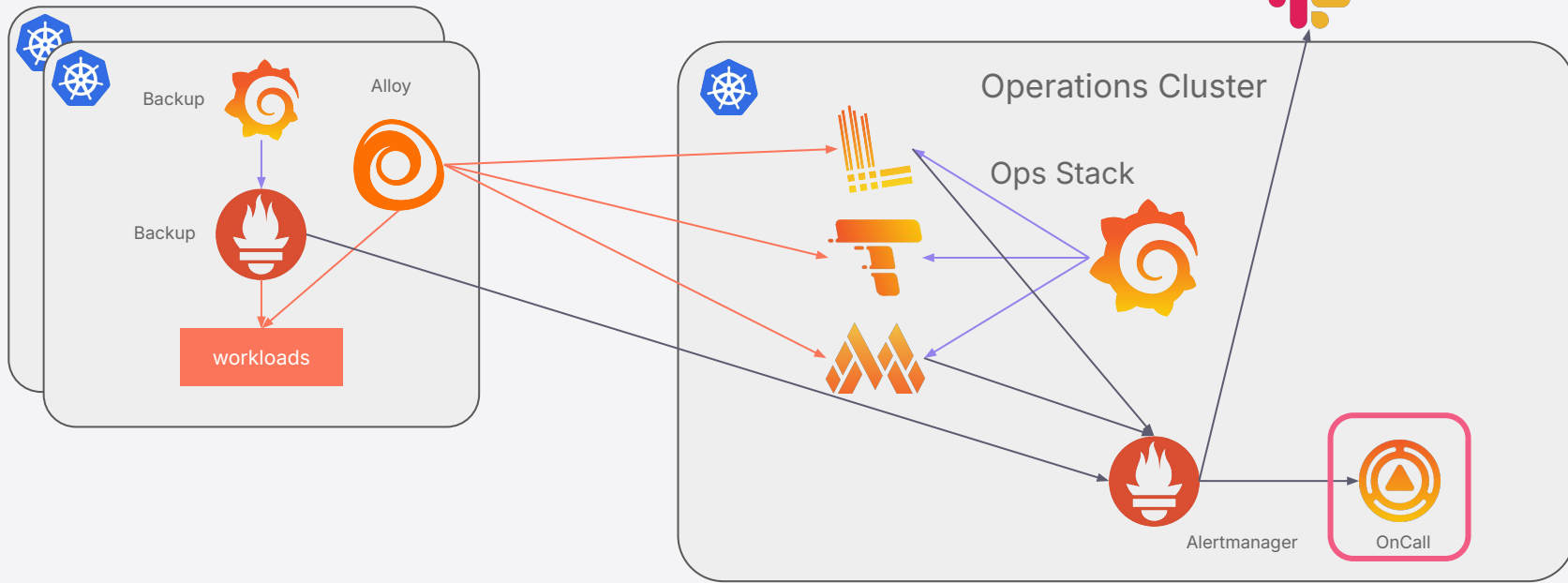
- Scrape and Write Metrics
- Query Metrics
- Alerts



There is more  
than metrics

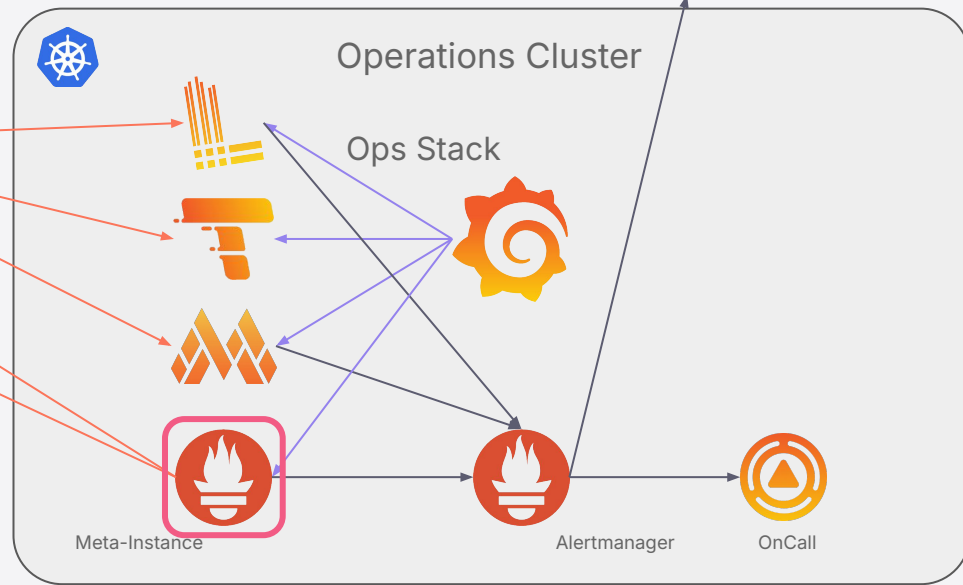
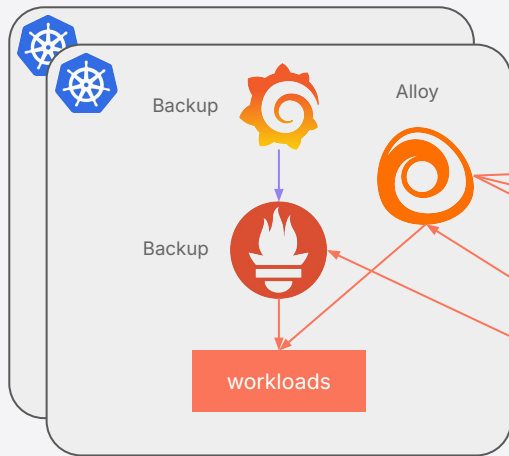


- Scrape and Write Metrics
- Query Metrics
- Alerts



# Wakeup!



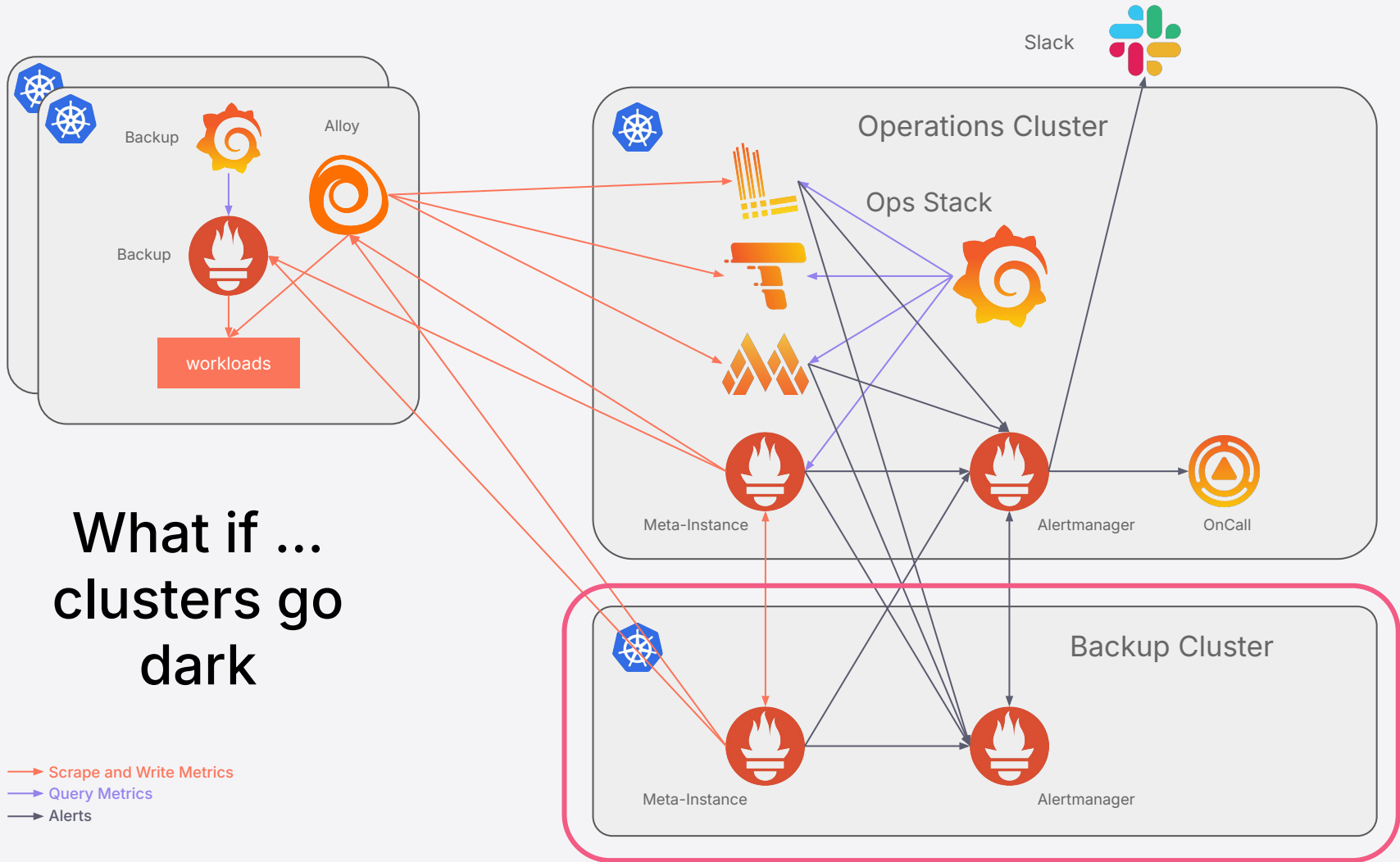


What if ...  
There are no  
scrapes

→ Scrape and Write Metrics  
→ Query Metrics  
→ Alerts



What if ...  
clusters go  
dark







## Graph

Lines

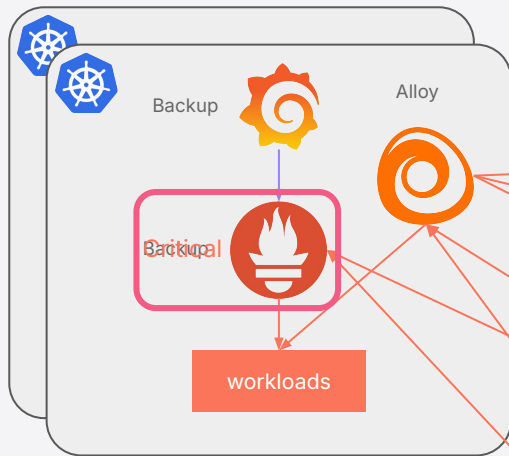
Bars

Points

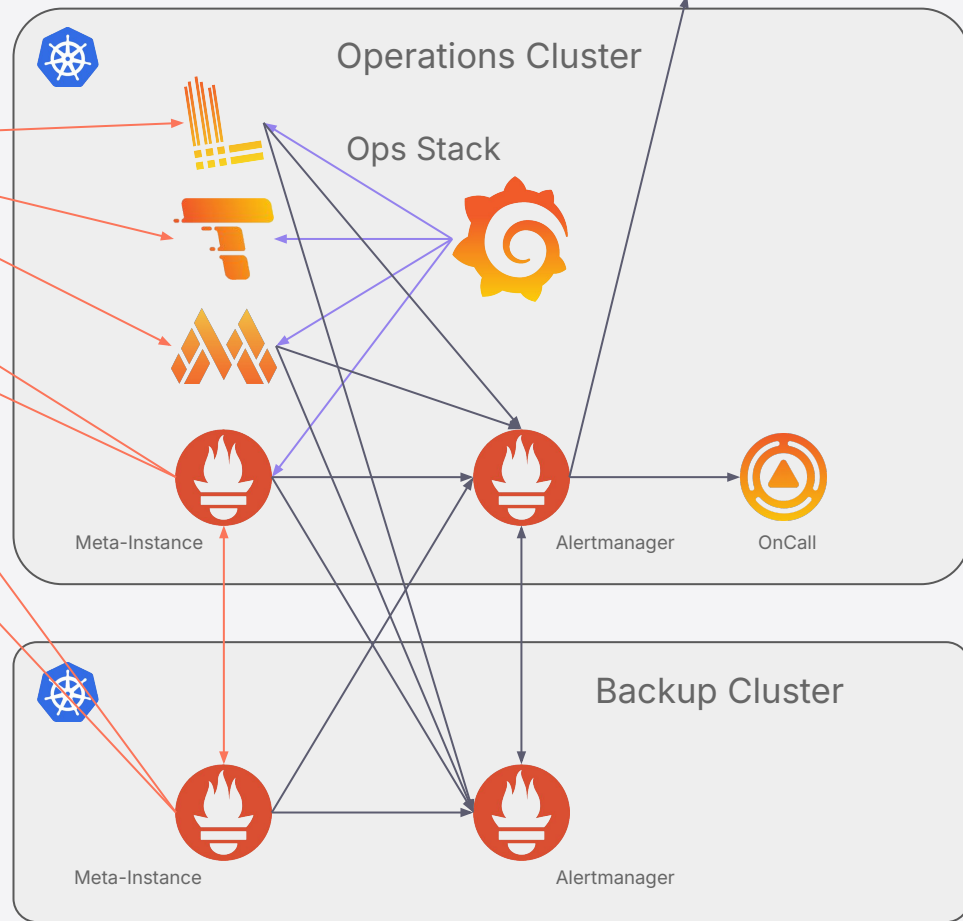
Stacked lines

Stacked bars





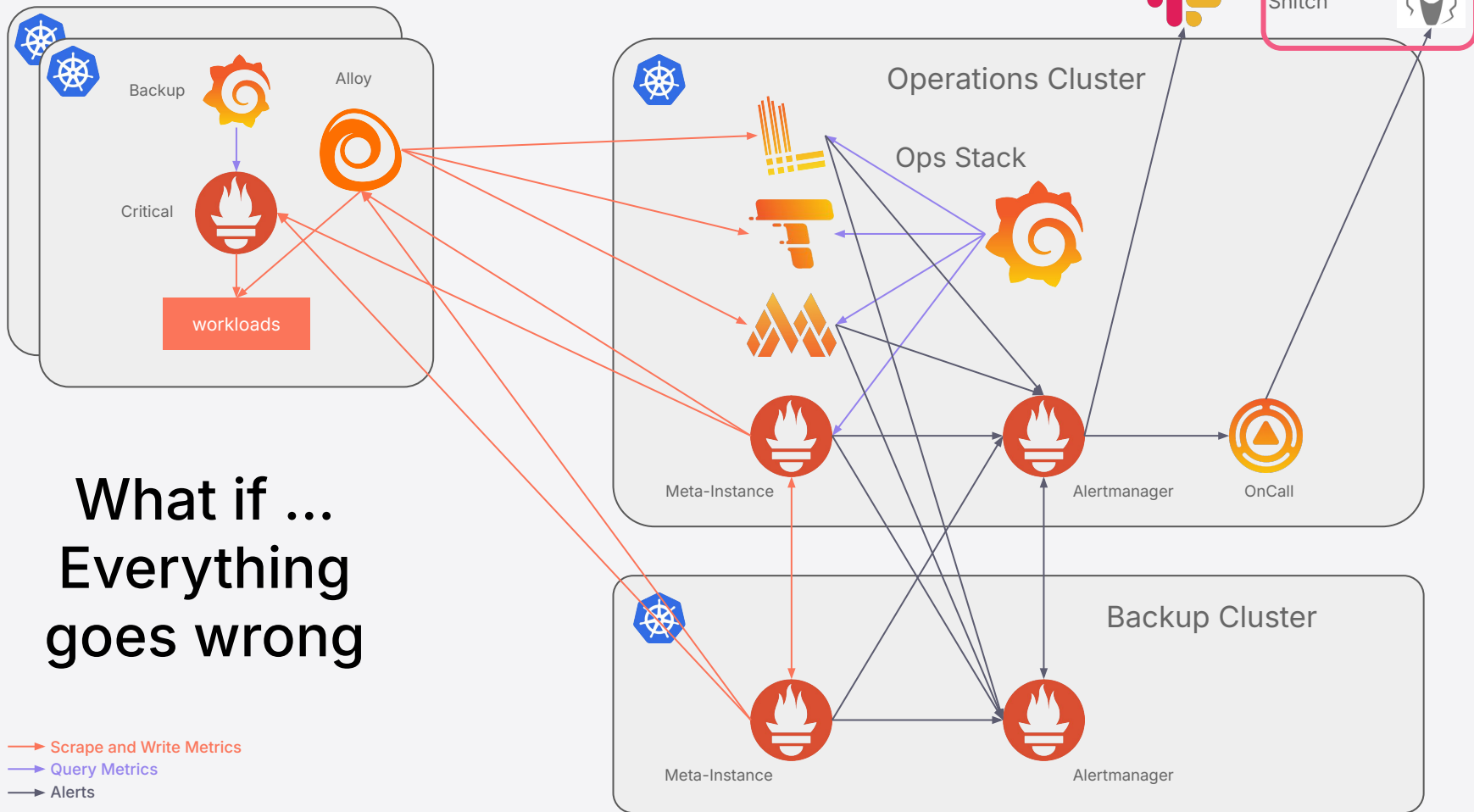
What if ...  
the backup  
struggles

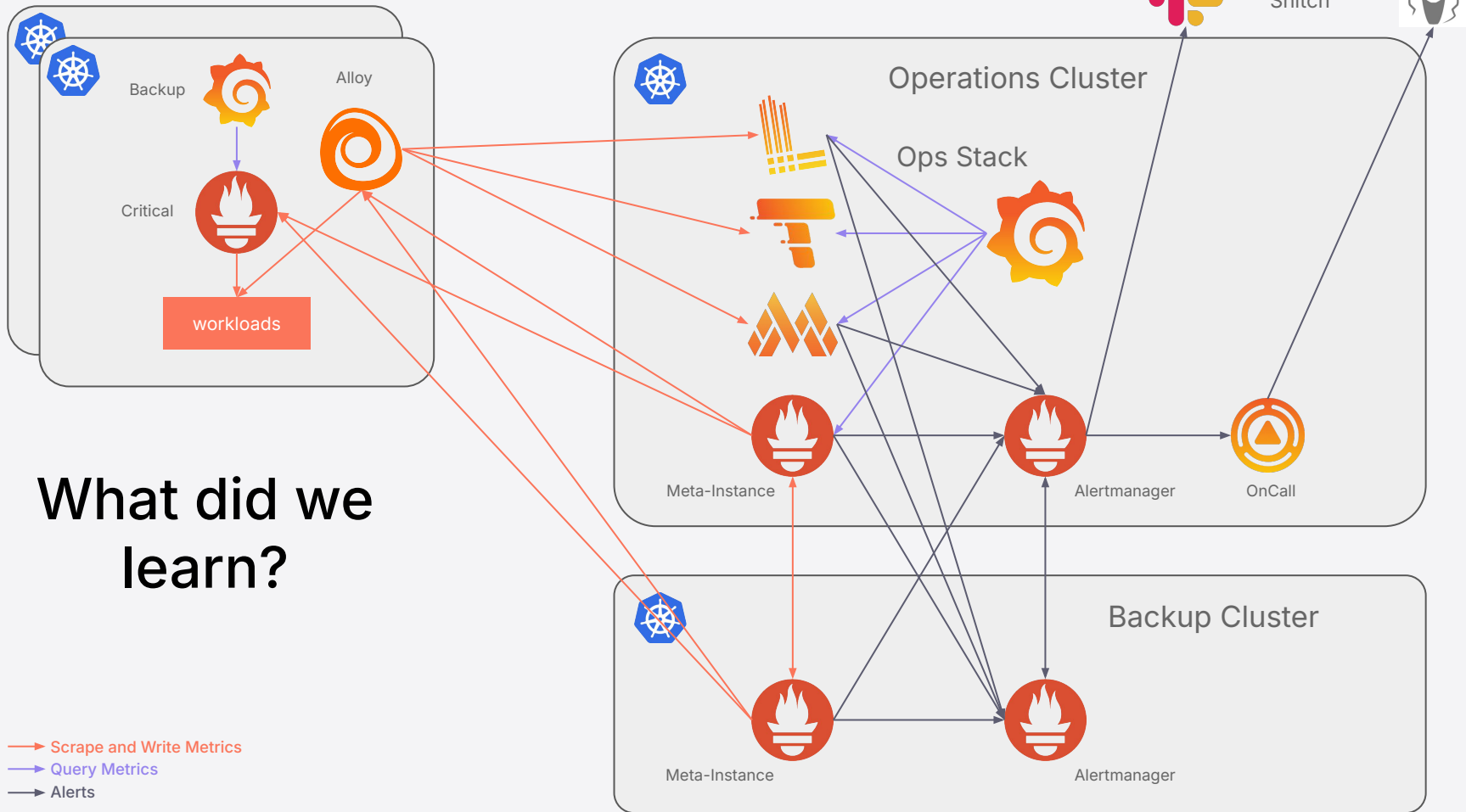


- Scrape and Write Metrics
- Query Metrics
- Alerts



What if ...  
Everything  
goes wrong





What did we learn?



# Thank you

Slides: <https://github.com/the-it/talks>





# Title

