

Mastering the Chaos: A DevOps Engineer's Journey to Cost-Effective Cloud Monitoring and Logging

Pradeep Gaddamidi DevOps Engineer @ RADAR



Agenda

- Introduction
- Deploying cost effective monitoring and logging
- Automation:
- SLA/SLO/SLI Monitoring Dashboards
- Incidents
- Toil, Time constraints and challenges



Choosing the right open source software and infrastructure is critical especially when you have budget constraints!!

- Software: Got all the required features?
- Hardware: Is the machine size right?



Automation

- Terraform or Ansible
- · CI/CD
- Resilience



SLA/SLO/SLI/Dashboards

SLA: The agreement you make with your clients or users

SLO: The objectives your team must hit to meet that agreement

SLI: The metric that measures how well a service performs.

- Where should you begin?
- Saturation is the important SLI

shboards will	~ Quick CPU / Mem / Disk	gce_vms_prmonitoring gce_vms_prod	(Lorenza)			and the second second				
	Pressure ()	kubernetes-service-endpoints node	Sys Load 🔘	RAM Used ု 🛈	SWAP Used 0	Root FS Used ()	CPU Cores	Uptime (0)		
									1.8 days	
		0.0% 67.4%	76:3%	12.5%	N/A	5.5%	RootFS Total	RAM Total 🕜	SWAP Total 💿	
	vo j	aos 07.4%	V 10.3/1	12.376	I NIA I	0.0%	194 GIB	8 GIB	08	
ioards	~ Basic CPU / Mem / Net / D	isk								
	CPU Basic 🔘 🛡				Memory Basic 💿 🛡	Memory Basic 🔘 🛡				
	100%	_		_	8 GIB					
	80%				6 GIB					
5	60% 40%				4 G18					
plicies	20%				2 GiB					
	0%, 0955:00 0855:30 0856:00 0858:30 0857:30 0856:00 0858:30 0859:30									
		5:30 09:56:00 09:56:30 06 Busy lowait - Busy IRQs Busy Cither - 1		09:58:30 09:59:00 09:59		5:30 09:56:00 09:56:30 VAM Cache + Buffer -= RAM Free -= SWAP	09:57:00 09:57:30 Used	09:58:00 09:58:30	09:59:00 09:59:30	
	Network Traffic Basic: 🔘 🛡				Disk Space Used Basic 0	1				
nection					100%					
	0 k/s				80%					
	-2.kb/s				60%					
	-4 itb)s				40%					
nse rences	-6 kb/s				20%					
85	09:55:00 09: = recv eth0 = recv lo = trans (9:57:00 09:57:30 09:58:00	09:58:30 09:59:00 09:59		5:30 09:56:30 09:56:30	09:57:00 09:57:30	09:58:00 09:58:30	09.59.00 09.59.30	
	> CPU / Memory / Net / Disk	L (Epanele)								
	> Memory Meminfo (15 pane									
	> Memory Vmstat (4 panels)									
	> System Timesync (4 canal									
	→ System Processes (7 pane									
	> System Misc (9 panels)									
	> Hardware Misc (3 panels)									
	> Systemd (2 pavels)							-	5	
	> Storage Disk (8 panels)							42		
	> Storage Filesystem /s per	els)								
	> Network Traffic (17 panels)									

Incidents

Incidents could happen due to two reasons:

 Self Inflicted: Toil (repetitive, manual work that could be automated), Miss setting up an alerts

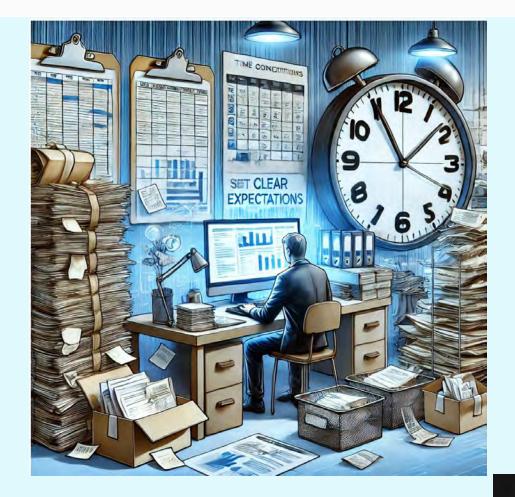
 Natural Incidents: Blamelessness is very important to the success of a team or organization.



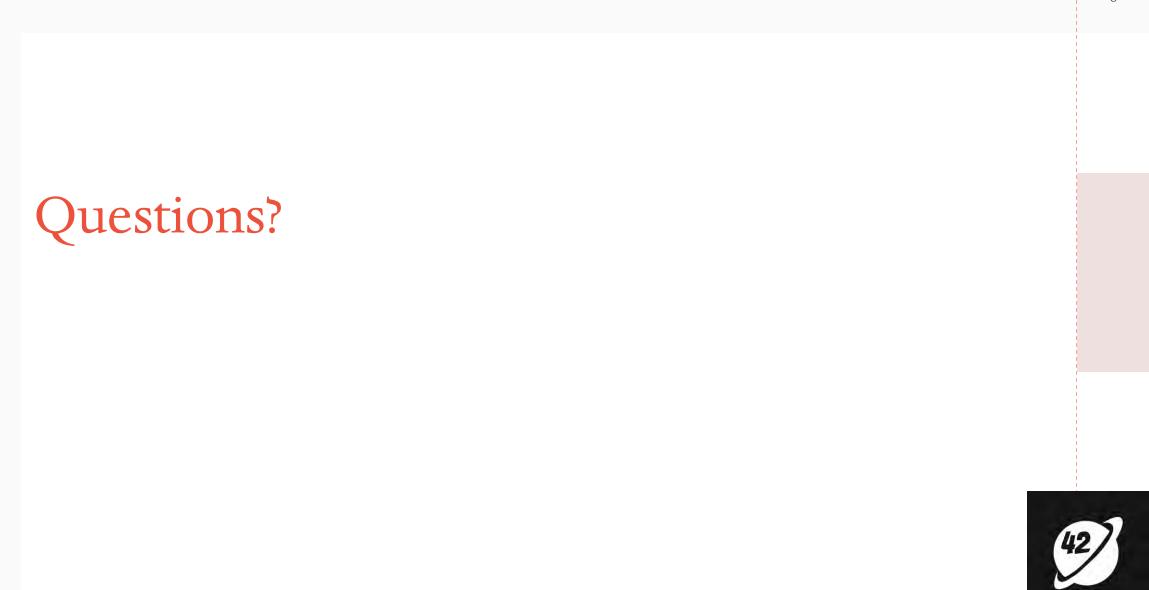


Toil, Time Constraints and Challenges

- Set clear expectations to manage stress
- Tracking and Documentation are crucial







Thank You!!

Pradeep Gaddamidi

Email: gaddamidipradeep@gmail.com

Linkedin: https://www.linkedin.com/in/pradeepgaddamidi-27009625/

