

K8s VS Chaos

...

A Tale Of An Always On App

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Gartner

Cool
Vendor
2017

getup

WE MAKE THE INFRASTRUCTURE INVISIBLE



CAOS



CHAOS ENGINEERING

Disciplina da experimentação em sistemas distribuídos,
a fim de construir confiança nas capacidades do sistema
para resistir às condições turbulentas de produção.

Resiliência



Capacidade de se recobrar facilmente ou se adaptar à má sorte ou às mudanças.

It ain't about how hard you hit.



**It's about how hard you can get hit
and keep moving forward!**

FAIL

Quando você acredita que está tudo certo

É aí que você se engana!



Processo de engenharia do caos



Demo Time!

- K8s cluster with kops
- Deploy app1
- Try chaos app1
- Deploy app2
- Try chaos app2
- Break k8s nodes
- Break k8s masters



```
(chaostk) root@instance-1#
(chaostk) root@instance-1#
```

IP-ADDRESS	APP	CPUS	MEM	STATUS	IP	OS	NAME
172.20.42.128	consumer	10%	100.96.4.0	Running	172.20.42.128	us-west-2	compute.internal
172.20.42.132	consumer	10%	100.96.4.0	Running	172.20.42.132	us-west-2	compute.internal
172.20.42.136	consumer	10%	100.96.4.0	Running	172.20.42.136	us-west-2	compute.internal
172.20.42.140	consumer	10%	100.96.4.0	Running	172.20.42.140	us-west-2	compute.internal
172.20.42.144	consumer	10%	100.96.4.0	Running	172.20.42.144	us-west-2	compute.internal
172.20.42.148	consumer	10%	100.96.4.0	Running	172.20.42.148	us-west-2	compute.internal
172.20.42.152	consumer	10%	100.96.4.0	Running	172.20.42.152	us-west-2	compute.internal
172.20.42.156	consumer	10%	100.96.4.0	Running	172.20.42.156	us-west-2	compute.internal
172.20.42.160	consumer	10%	100.96.4.0	Running	172.20.42.160	us-west-2	compute.internal

```
con.rusniles.antifragilesoftware.SingleBootMicroserviceProvider$$Enhancer$y$SpringCGI.IH5$ai1b555$@4ba4aa0e 1 instance saying: Hello Microservice World
con.rusniles.antifragilesoftware.SingleBootMicroserviceProvider$$Enhancer$y$SpringCGI.IH5$4d7b0ab5g23982890 1 instance saying: Hello Microservice World
con.rusniles.antifragilesoftware.SingleBootMicroserviceProvider$$Enhancer$y$SpringCGI.IH5$ai1b555$@4ba4aa0e 1 instance saying: Hello Microservice World
con.rusniles.antifragilesoftware.SingleBootMicroserviceProvider$$Enhancer$y$SpringCGI.IH5$4d7b0ab5g23982890 1 instance saying: Hello Microservice World
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```

Muito Obrigado!

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Kubernetes

Google Images

Giphy.com

Chaostoolkit.org

