

# Containers Vs VMs? - It's All About Microservices

Anne Currie

CTO Microscaling Systems

@microscaling / @anne\_e\_currie



FIRE BOX

A close-up, high-contrast photograph of Stannis Baratheon from the Game of Thrones series. He is wearing a dark, textured cloak and has a serious, intense expression. The lighting is dramatic, with strong highlights on his face and deep shadows elsewhere.

**Bare Metal**  
Strength: Power

Stannis Baratheon

Weakness: Inflexibility, Spin-up Speed, Server  
Density (=Resource Utilization)

# Virtual Machines

Strength: Flexibility,  
Agnosticism, Security,  
Networking

Weakness: Slightly  
overweight,  
Microservices?



# Containers

Strength: Lightweight,  
Fast

Daenerys Targaryen

Weakness:  
Unseasoned,  
Security, Networking

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artwork: <https://www.facebook.com/graphicck>

# Container Instantiation Speeds!

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# Autoscaling->Microscaling

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# Microservices

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# Cattle not pets

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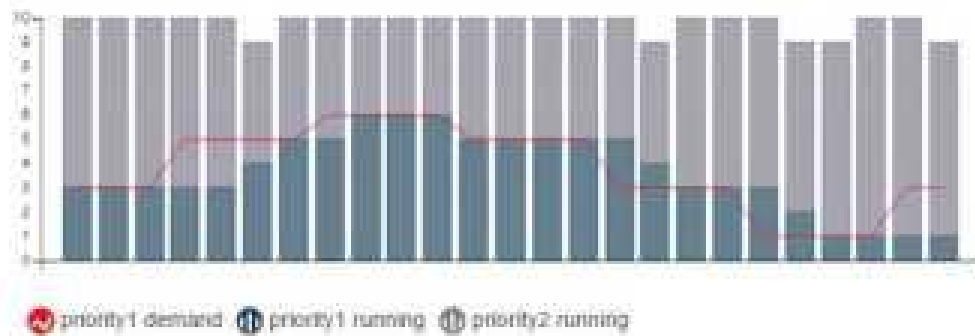


Realtime

1  
sec  
per  
slice

## Microscaling-on-your-Box

Force12.io controlling your containers via Docker



Google, Netflix

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- Lower cost
  - high server density
- Lower maintenance
  - self-healing
- More than the humanly achievable



# Summary

- Containers already won @ Google & Netflix
- Lower maintenance & lower costs
- Ops requirements: Docker (or alternative), orchestrator, microscaling
- Architecture requirements: microservices, cattle not pets

# Containers are Coming

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Questions for me?

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