NEED SOMETHING SIMPLER THAN KUBERNETES?

I love it but …

MARTIN AHRER

Founder and president of Enterprise Java User Group Austria

Working with Java since 1998

Working with Docker as of early beta releases (pre 1.0)

Working in the DevOps space since 2017

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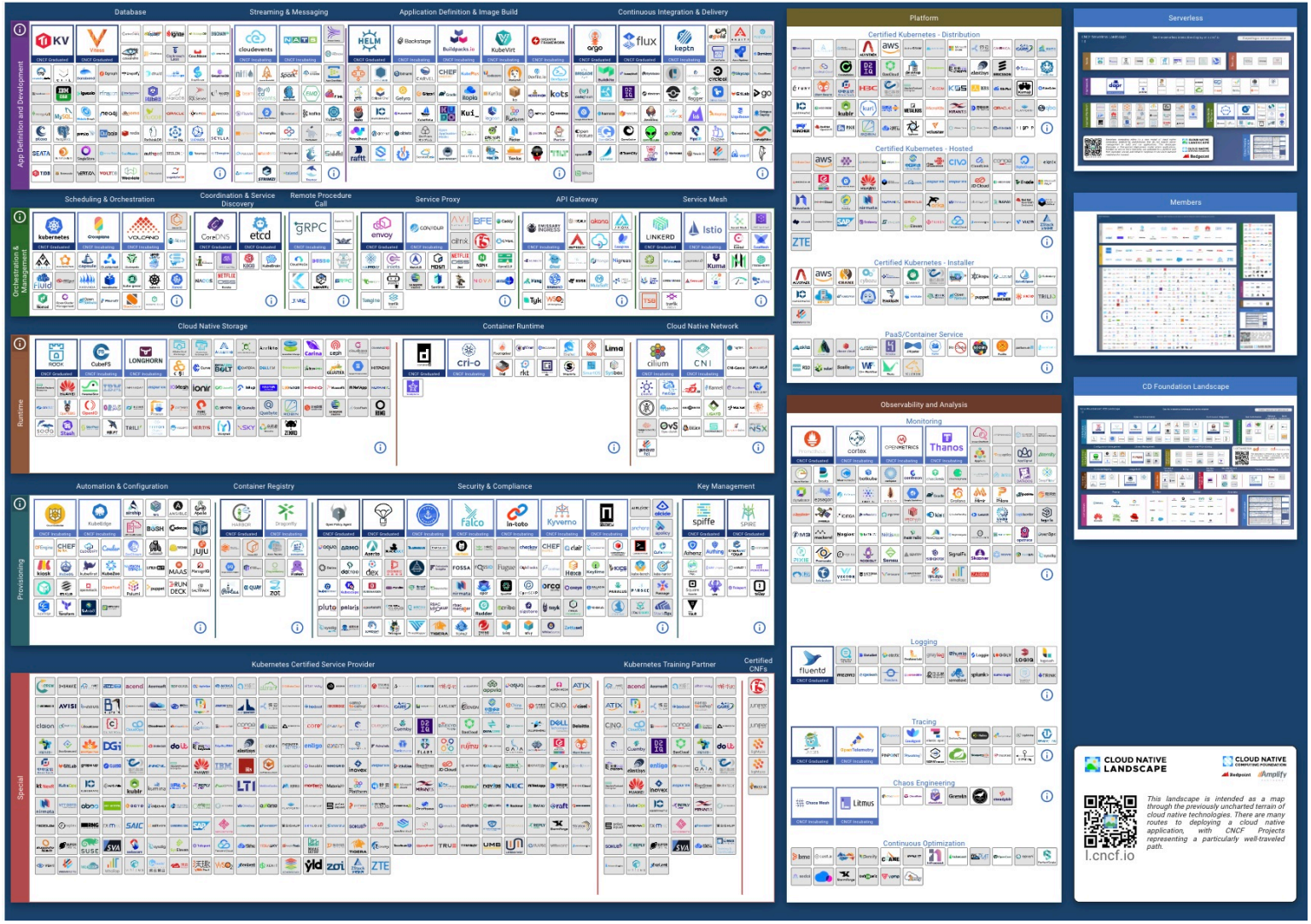
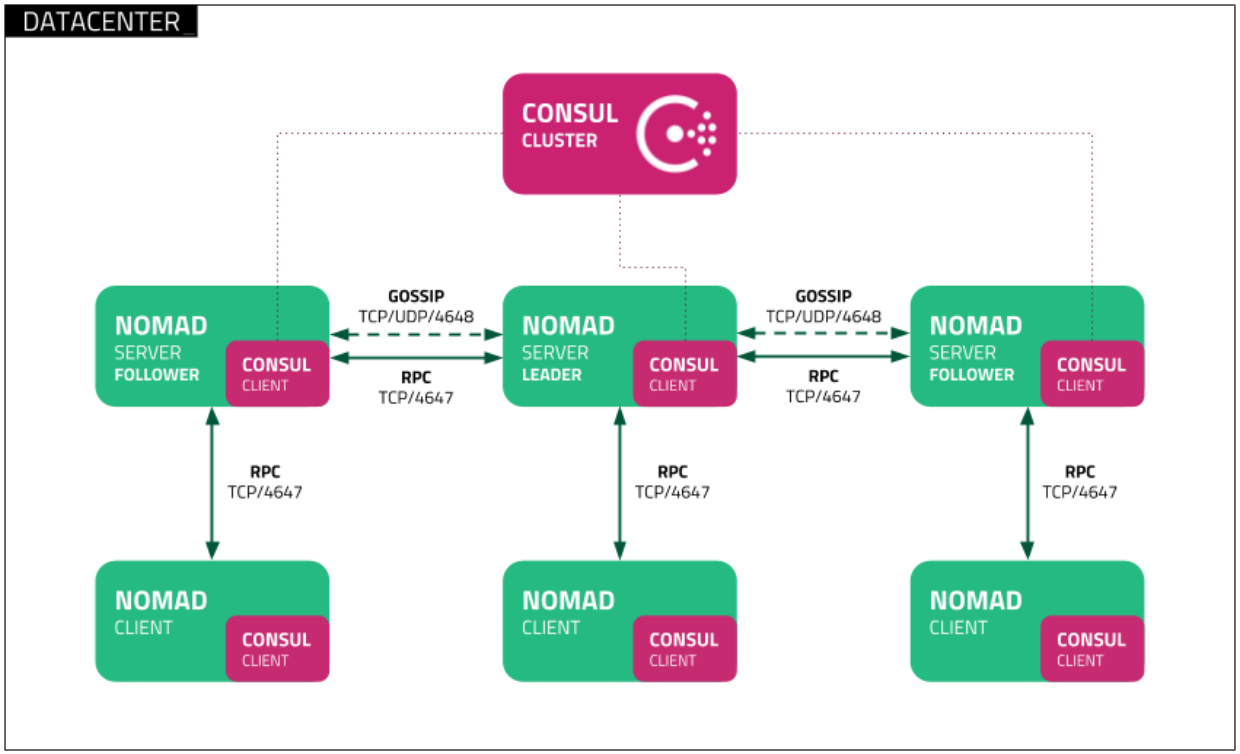
@kodepreacher

CONTENT

- Complexity versus Simplicity
- Comparison to Kubernetes
- Workload deployment (Job, Group, Task, Service)
- Demo: Container workload (Spring Boot App)
- Demo: Native workload (Spring Boot App)

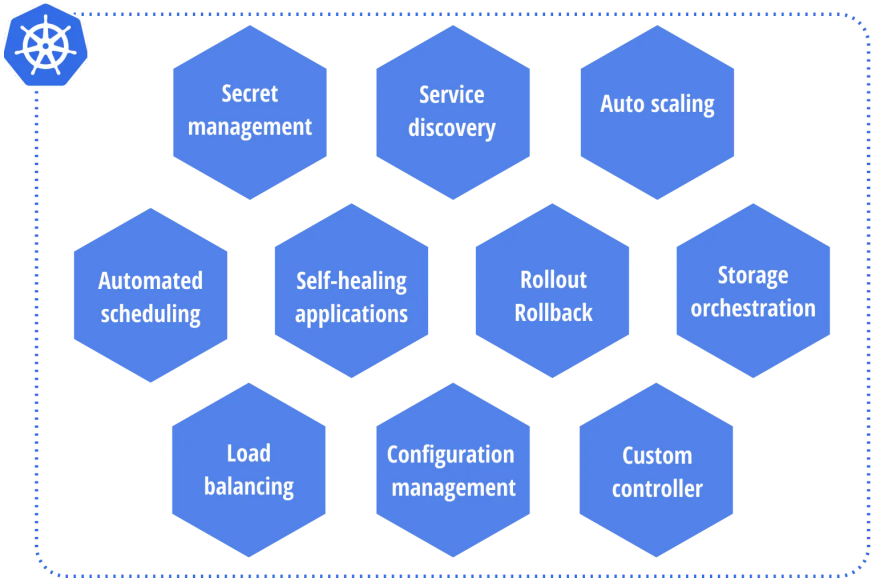
COMPLEXITY VERSUS SIMPLICITY

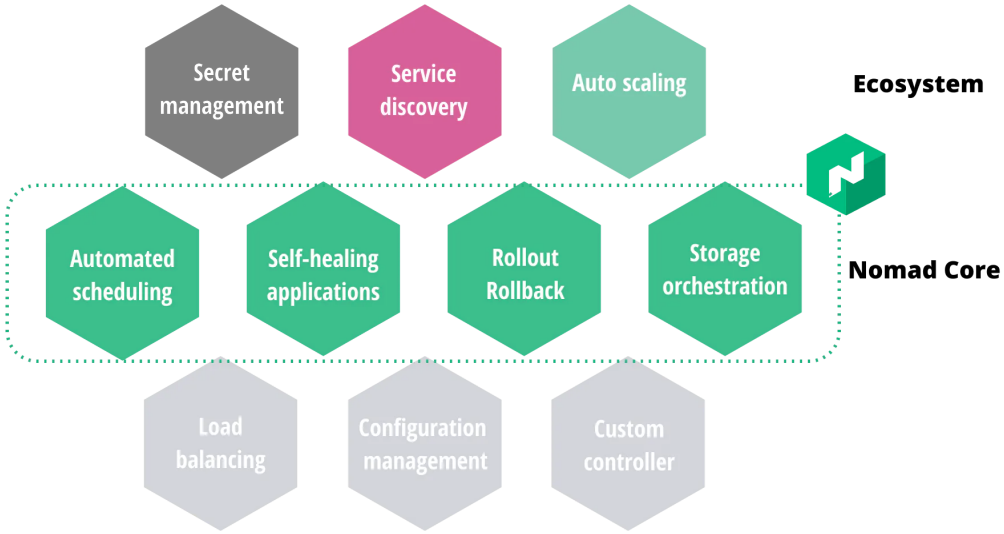




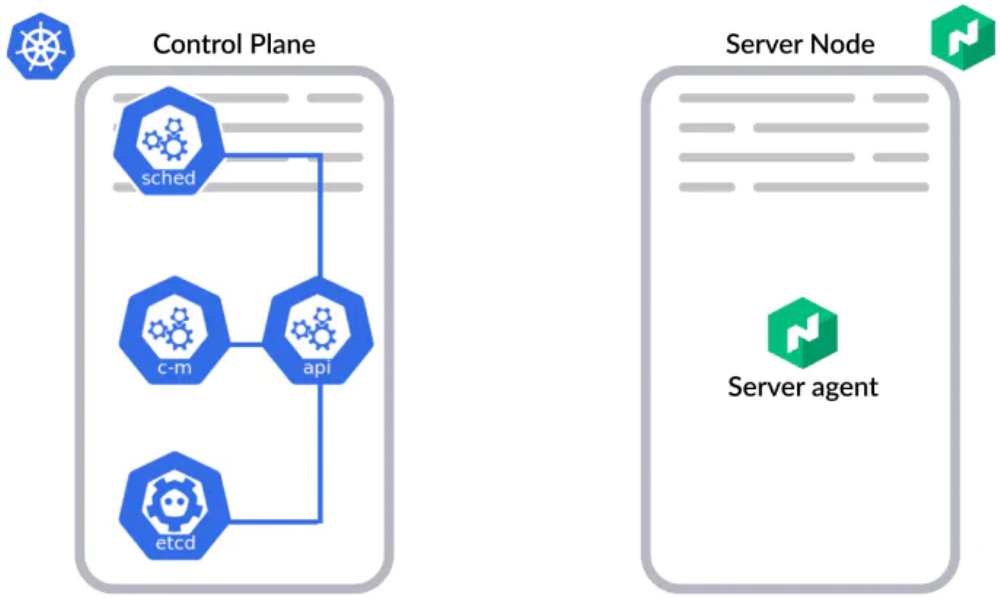
NOMAD VERSUS KUBERNETES

COMPONENTS

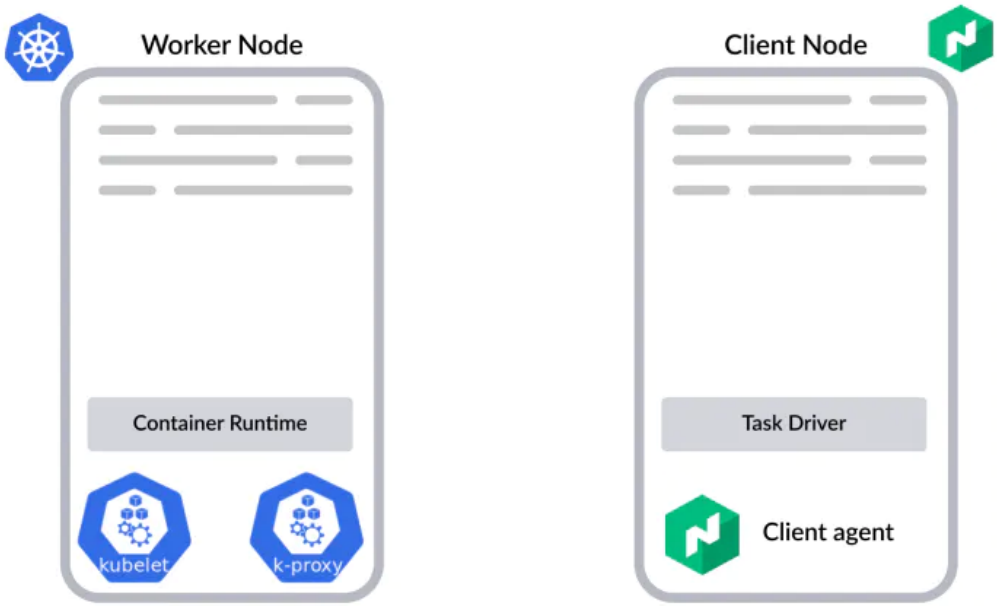




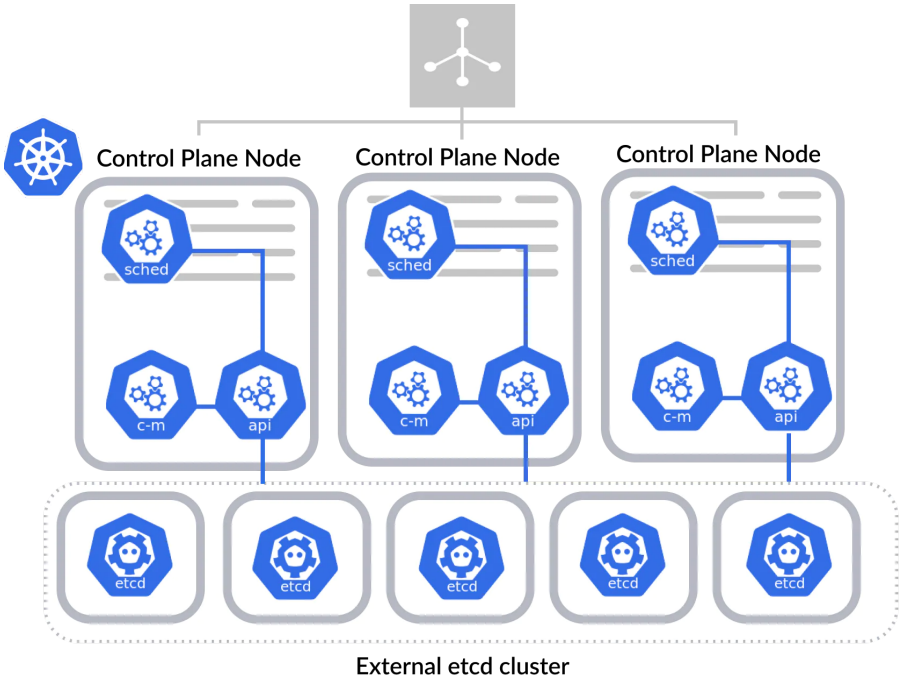
SERVER NODE

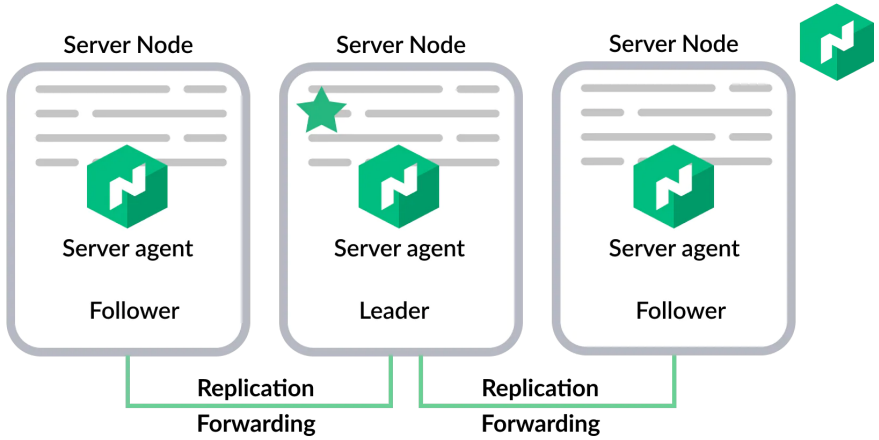


CLIENT NODE



DEPLOYMENT





DEPLOYMENT

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- `nomad agent -dev` starts a agent in server and client role
- `nomad` binary also provides the CLI

THE 2 MILLION CONTAINER CHALLENGE

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- https://www.hashicorp.com/c2m

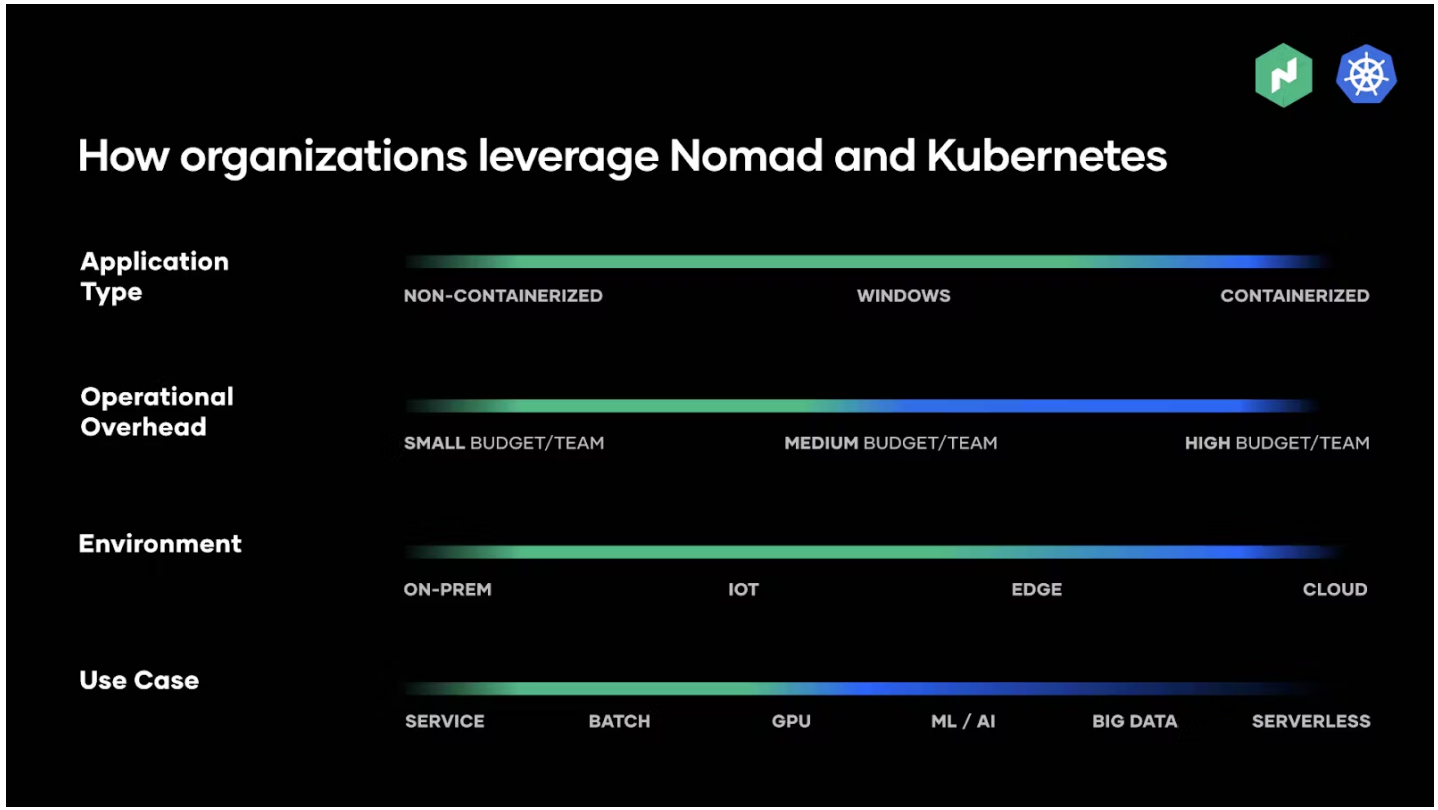
DEMO: CONTAINER WORKLOAD

- https://github.com/MartinAhrer/continuousdelivery
- Spring Boot 3, JDK 17
- **Executable Boot JAR** packaged as **Container**
- Startup time **~ 7.5 sec**

DEMO: NATIVE WORKLOAD

- https://github.com/MartinAhrer/continuousdelivery
- Spring Boot 3, JDK 17, **GraalVM 22.3.r17**
- **AOT compiled** using GraalVM to **native** macOS binary
- Startup time ~ **0.4 sec**

WHY WOULD YOU WANT TO USE NOMAD?



https://developer.hashicorp.com/nomad/docs/nomad-vs-kubernetes/supplement

Nomad is a supplemental strategy to Kubernetes

NOMAD ECOSYSTEM

Just in case you are missing something

- Nomad pack is like helm chart
- Nomad levant templating engine (used by Nomad pack)
- Waypoint (Build and deployment management)

RESOURCES

https://speakerdeck.com/martinahrer

https://github.com/martinahrer

https://developer.hashicorp.com/nomad/docs/nomad-vs-kubernetes/supplement

https://developer.hashicorp.com/nomad/docs/nomad-vs-kubernetes

https://www.hashicorp.com/blog/a-kubernetes-user-s-guide-to-hashicorp-nomad

https://developer.hashicorp.com/nomad/docs

QUESTIONS