



Presents



Bridging the gap to Next Generation IT

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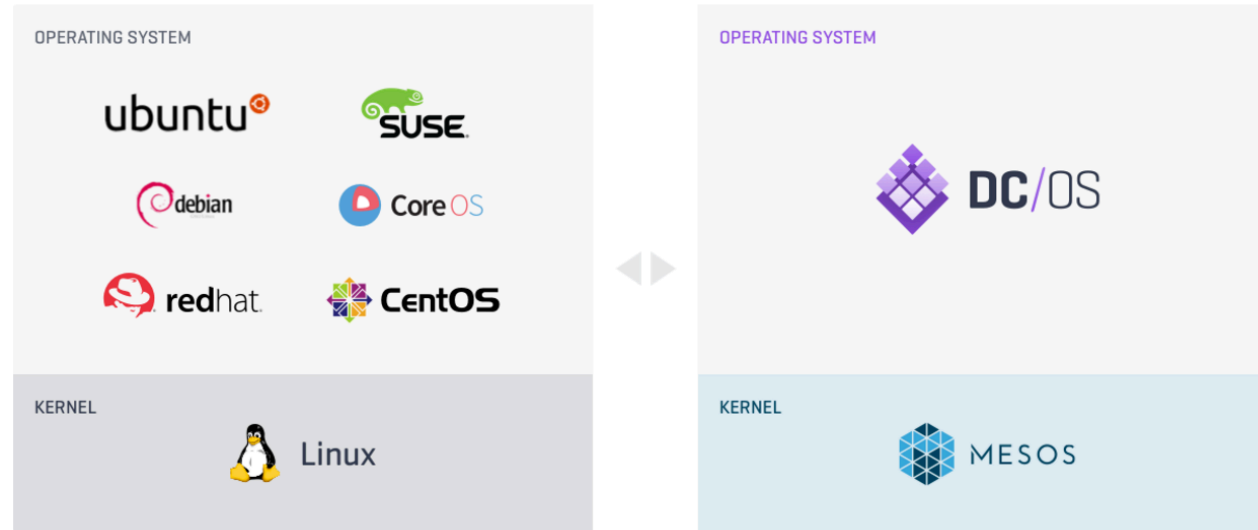
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presents a crash course in



DC/OS

What is Mesosphere DC/OS?

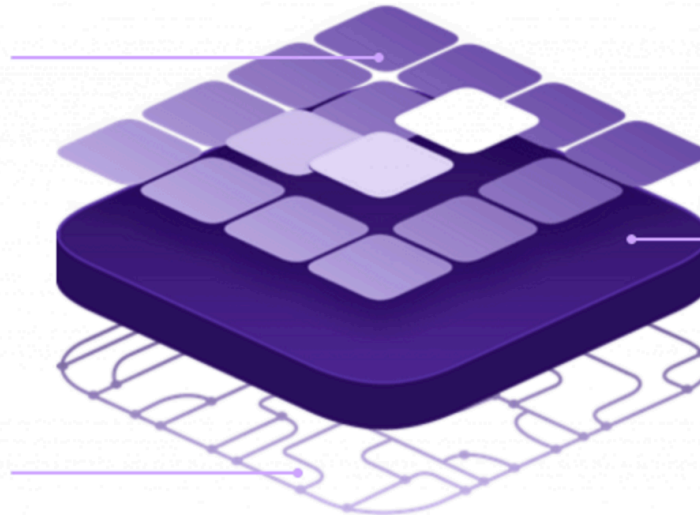


Services & Applications

Easily deploy and run datacenter-wide app services such as Docker, Cassandra, and Spark pooled on a single platform

Run Anywhere

Bare-metal, virtual, cloud or hybrid
- DC/OS runs on it all - only requirement is a modern Linux distro; Windows support coming soon

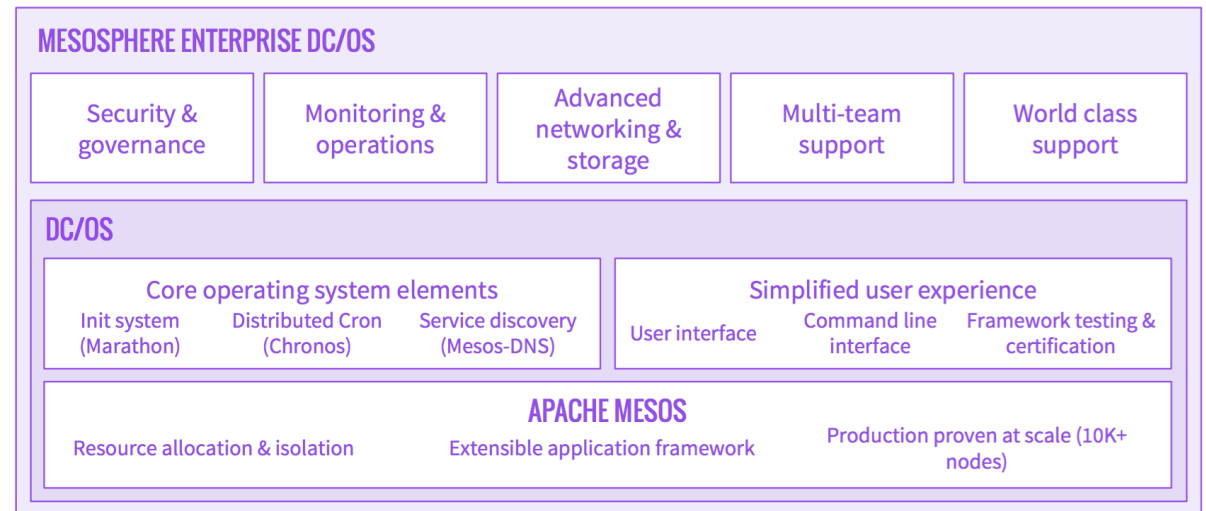


DC/OS Powered by Apache Mesos

Runtime, tools and best practices built-in to simplify operations and deliver a production self-healing infrastructure

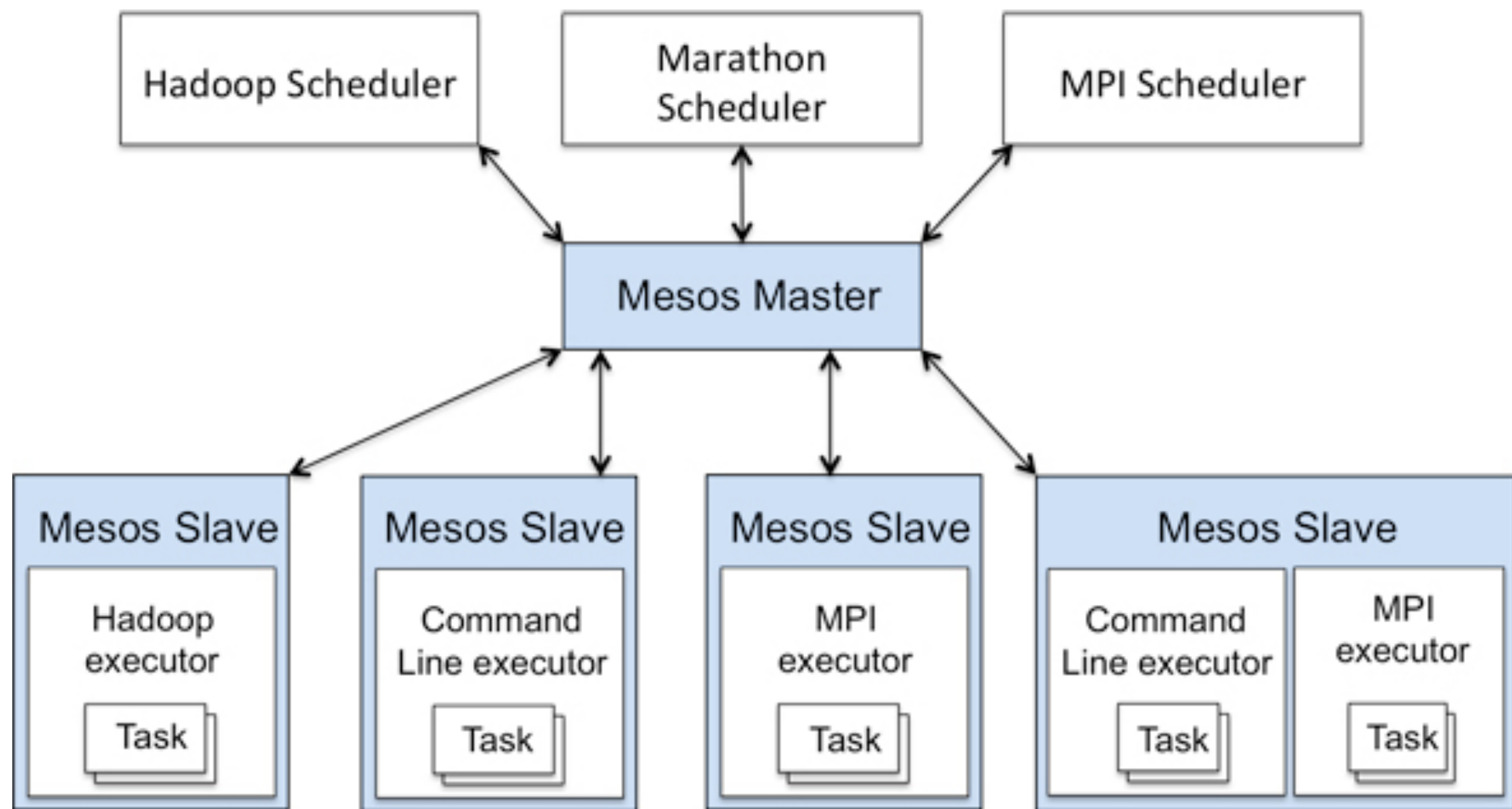
How does DC/OS work?

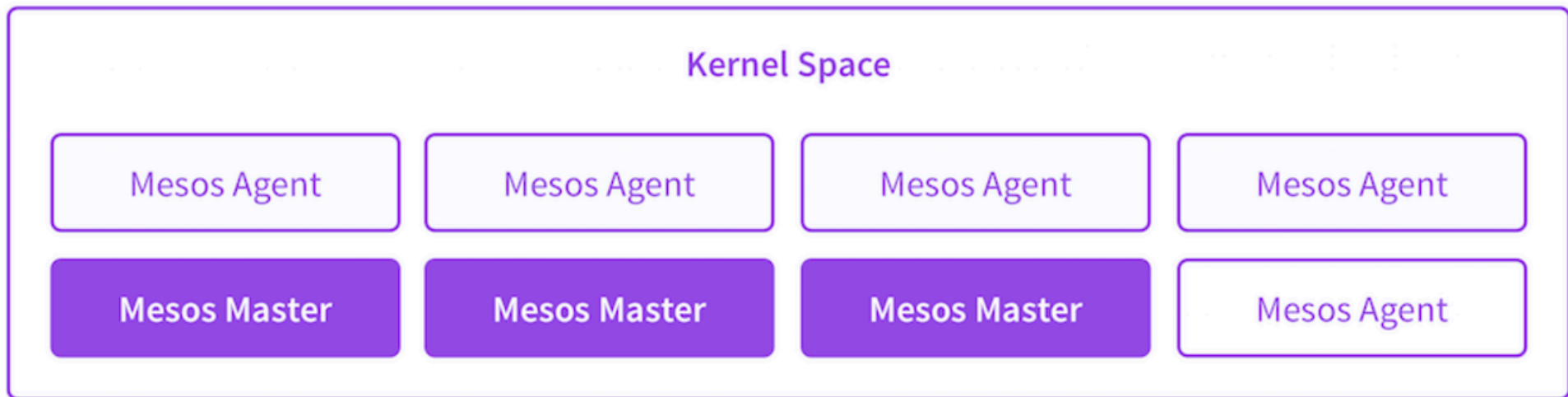
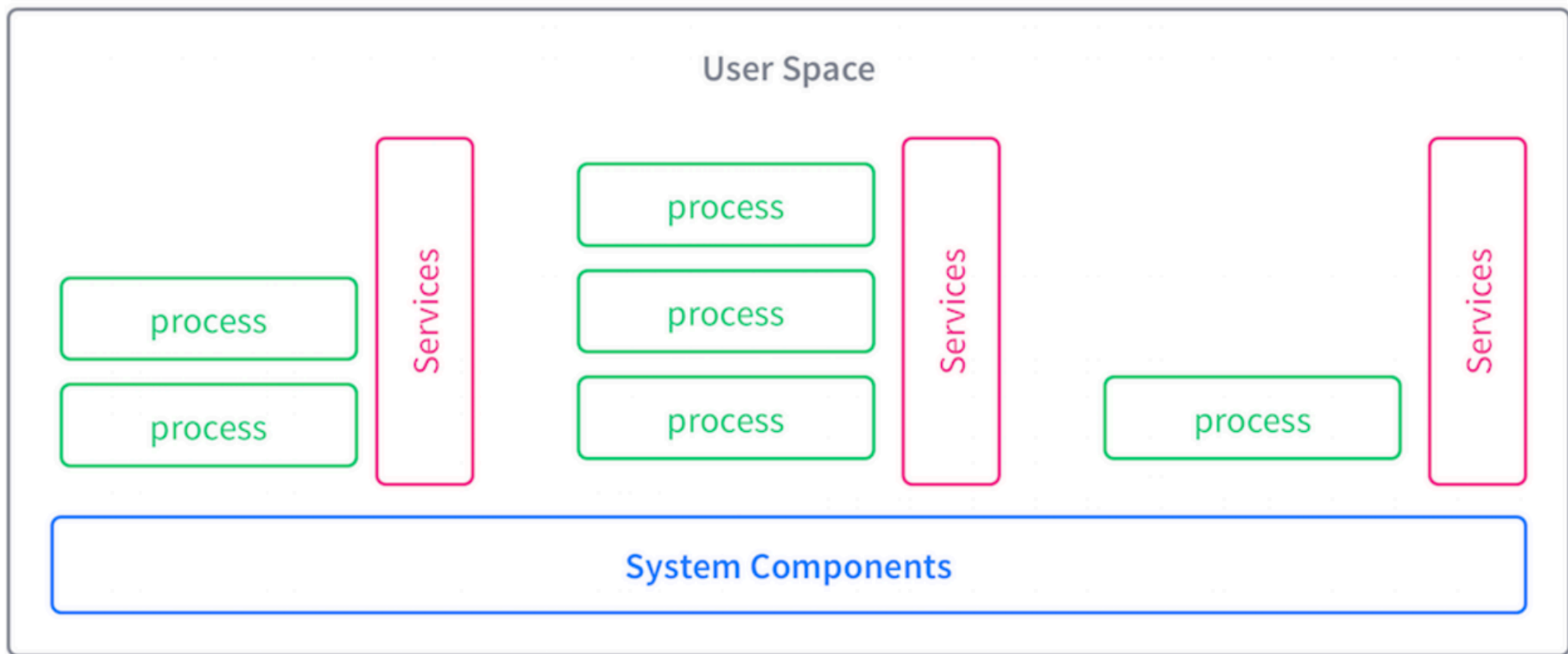
- Distributed architecture
- Resource presentation through continuous service discovery
- Centralized scheduler
- Deployed on top of Apache Mesos
- HTML5 UI
- CLI
- RESTful API



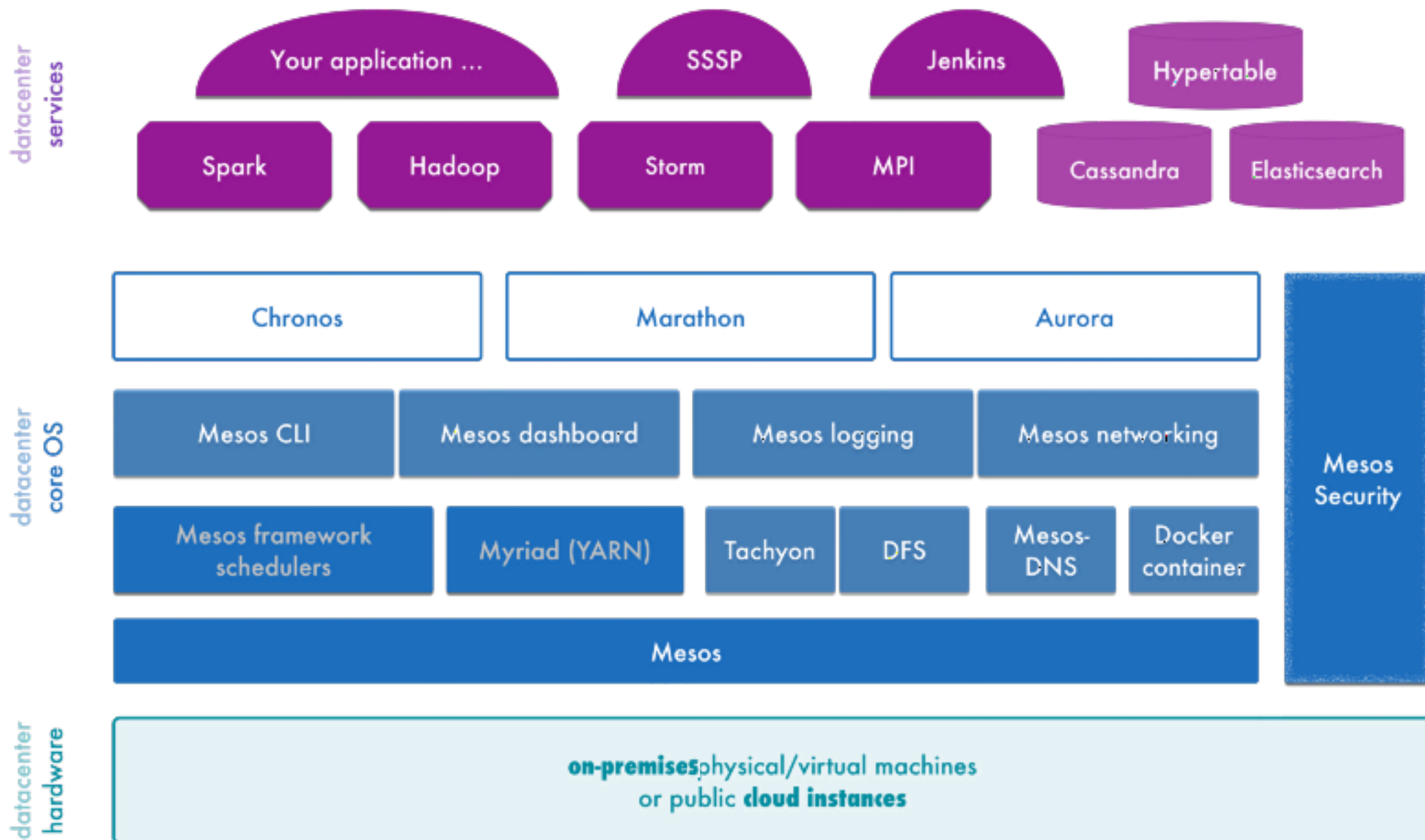
DC/OS Terminology

- **Master:** aggregates resource offers from all agent nodes and provides them to registered frameworks.
- **Scheduler:** the scheduler component of a service, for example the Marathon scheduler.
- **User:** also known as Client, is an application either internal or external to the cluster that kicks off a process, for example a human user that submits a Marathon app spec.
- **Agent:** runs a discrete Mesos task on behalf of a framework. It is an agent instance registered with the Mesos master. The synonym of agent node is worker or slave node. You can have private or public agent nodes.
- **Executor:** launched on agent nodes to run tasks for a service.
- **Task:** a unit of work scheduled by a Mesos framework and executed on a Mesos agent.



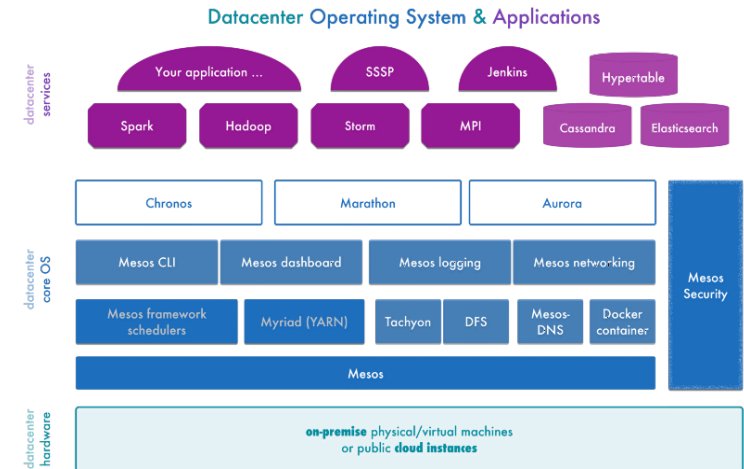


Datacenter Operating System & Applications



DC/OS System Components

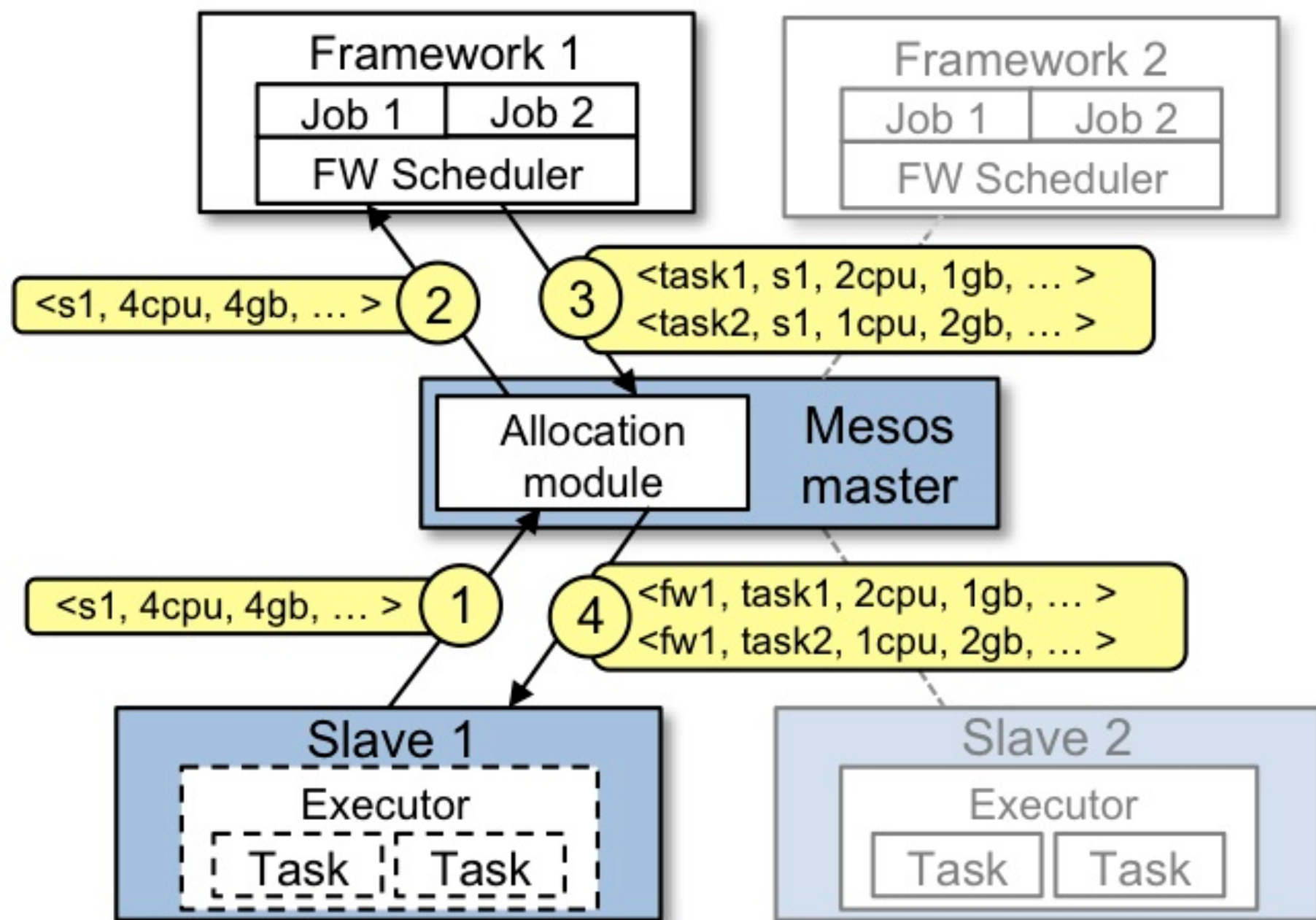
- **Admin Router** - Open source NGINX configuration that provides central authentication and proxy to DC/OS services.
- **Exhibitor** - Automatically configures ZooKeeper during installation and provides a usable Web UI to ZooKeeper.
- **Mesos-DNS** - Provides service discovery, allowing apps and services to find each other by using the domain name system (DNS).
- **Minuteman** - internal layer 4 load balancer. Distributed DNS Proxy is the internal DNS dispatcher.
- **DC/OS Marathon** – Native init system for DC/OS, starts and monitors DC/OS services.
- **ZooKeeper** - High-performance coordination service that manages the DC/OS services.



**THEY ASKED FOR CPU AND
RAM**



**I MADE THEM AN OFFER THEY
CAN'T REFUSE**



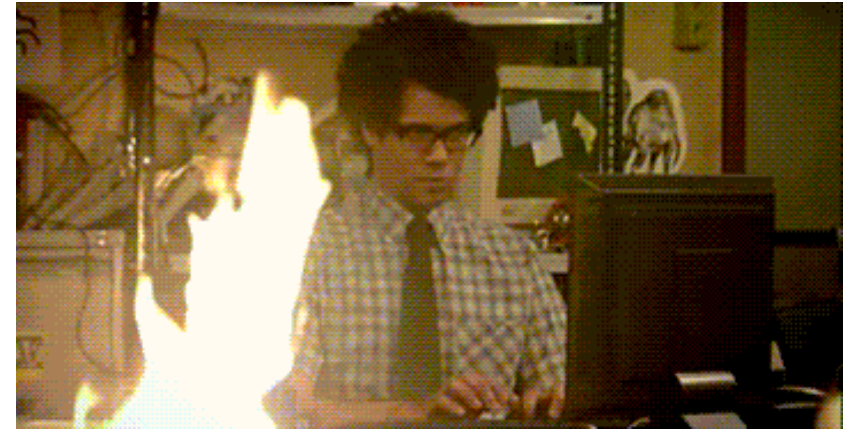
What does Mesosphere DC/OS solve?

- Common abstraction of infrastructure
- API-driven
- Application-centric approach
- Enables multiple tools within its framework
- Adopted by large scale customers and partners feeding back upstream code and features

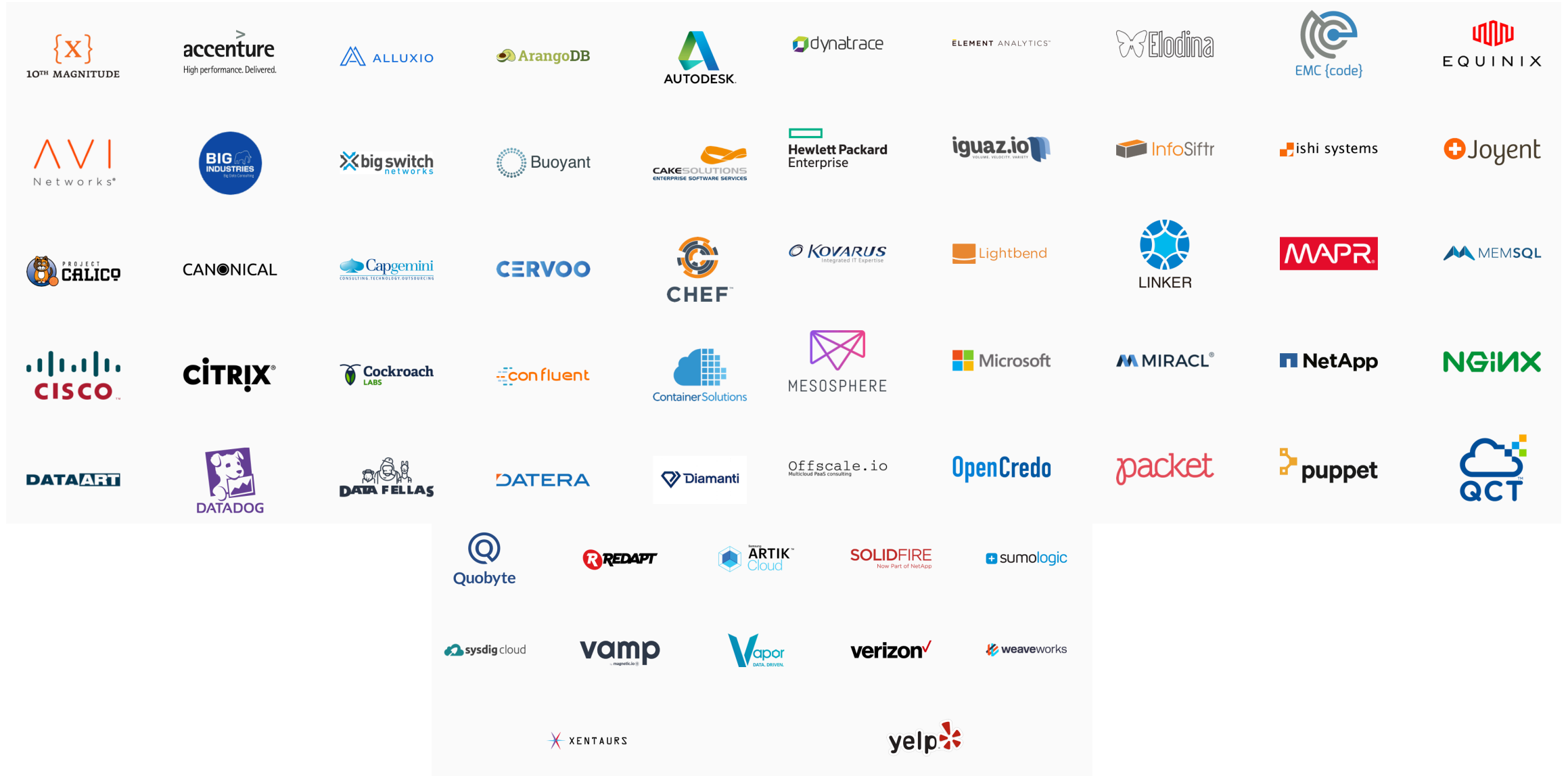


Mesosphere Challenges

- New way to approach the whole stack
- Augment rather than replace infrastructure
- Application-centric approach
- Health is different than performance
- Creating a practice that embraces new technology without impacting operations and infrastructure

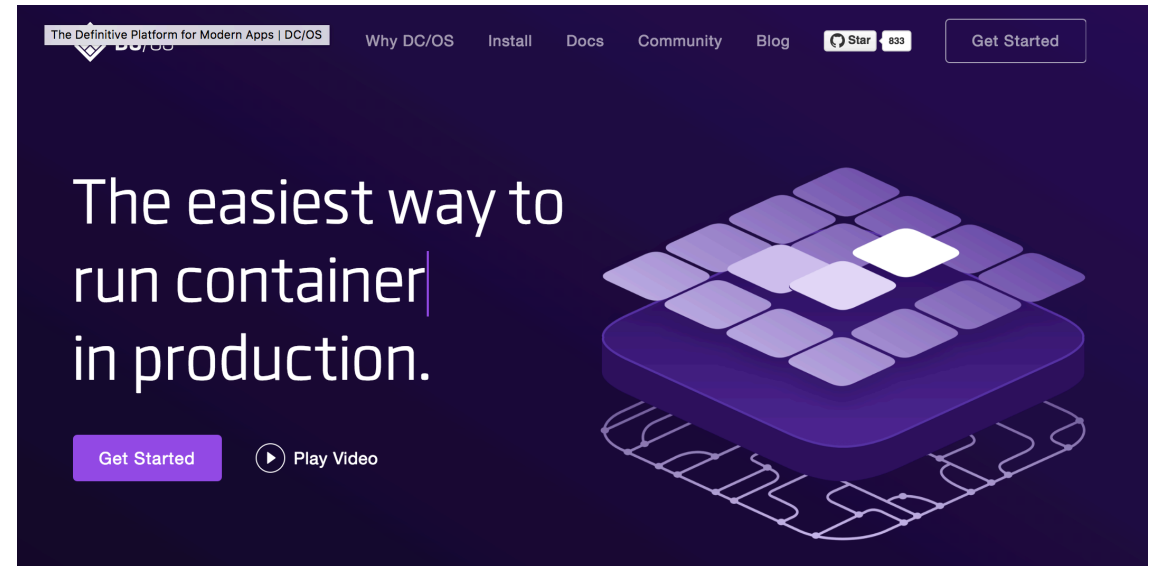


Who uses Mesosphere DC/OS?



How to find out more about Mesosphere DC/OS

- **dcos.io** – project homepage
- Meetups
- YouTube
- Blogs continuing to grow



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Thank you from the team at Turbonomic!