



Getting Started with Kubernetes



kubernetes



lagoon



amazee.io

Why Kubernetes?

Kubernetes is an open-source orchestration and management platform that automates container operations. It's quickly becoming the standard in container orchestration, surpassing all other existing solutions to maintain, start, and deploy containers – with a broad open-source ecosystem has been built around it. It now offers tools and features that were previously only available with closed source software, including:

- Role-based access control
- Enterprise-grade security
- Network segregation
- Full support from all major infrastructure providers



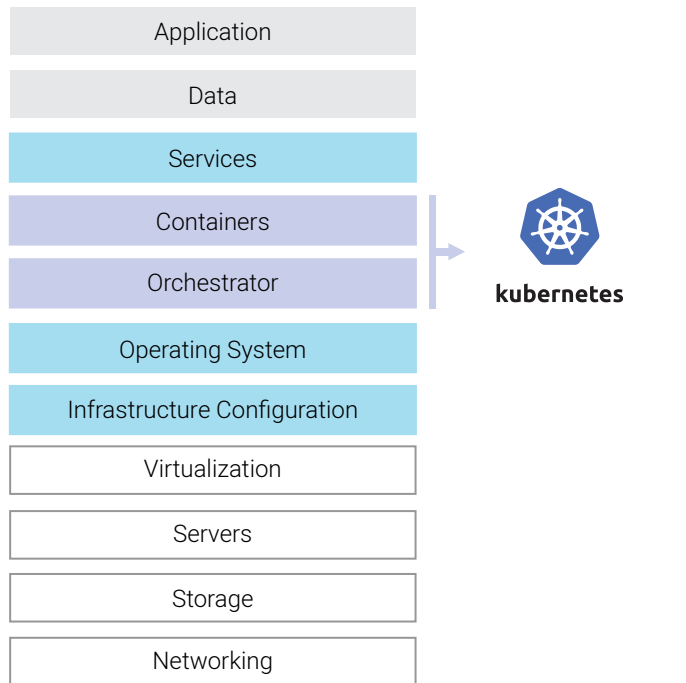
Automated rollouts & rollbacks



Full scalability & self-healing

100%

application agnostic to flexibly run anything in any container



Kubernetes Stack

- Runs on many operating systems
- Completely application agnostic
- Almost every service (PHP, Nginx, Apache, Elasticsearch, etc.) can run in Kubernetes
- Managed Kubernetes (AWS EKS, Microsoft Azure AKS, GCP Kubernetes, etc.) offers cost reduction compared to self-managed Kubernetes



Kubernetes Cluster Build & Run Checklist

Building your own Kubernetes cluster can be a daunting task requiring the expertise of multiple roles and responsibilities. The IT team needs to set up the operating systems to support the separated microservices, ensure the ports are open properly, and databases are stored on the correct filesystem. You will also need to ensure the system is tested, secured and patched.



Setup & Installation:

- Infrastructure architecture
- Services configuration
- Integration with existing development tools
- Security and load testing

Ongoing Maintenance & Management:

- Ensure operations of Kubernetes clusters and nodes
- Monitor automated scaling processes
- Maintain infrastructure
- Apply weekly patches and upgrades
- Apply critical security patches within 24 hours
- Run and pay for testing clusters
- Ongoing Kubernetes training
- Configure logging
- Manage backups

Continuous Monitoring & Troubleshooting

- Ensure 24x7 platform performance
- Establish tools and processes for issue management and notification
- Urgently respond to critical service disruptions
- Build internal competencies to meet monitoring and alerting needs and strict SLAs
- Employ teams to provide all-hours support
- Stay abreast of vulnerabilities
- Own responsibility for system failures

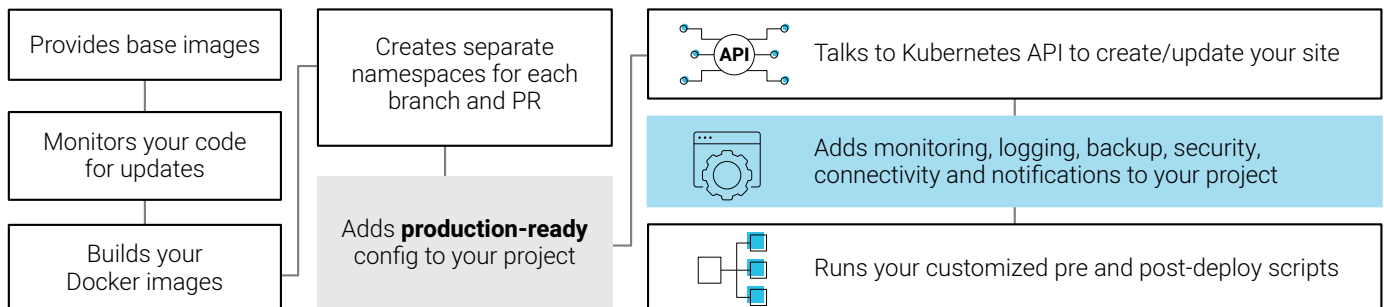


A self-service alternative Lagoon by amaze.io

Lagoon is an open-source build and deploy platform built and maintained by amaze.io. It equips developers with better deployment processes, the freedom of local development, and the flexibility of a container-based environment. The platform is built by the same people who use it, ensuring Lagoon continuously evolves with new features, functionality, and contributions from the open-source community.



The Lagoon Build and Deploy Platform



Key benefits of Lagoon



Turnkey
Setup



UI & CLI



Enterprise
Security



Local Development
with Lando

Lagoon provides:

- Monitoring
- Logging
- Backups
- Security
- Connectivity
- Notifications

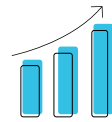


Ready to get started with Kubernetes? // [Contact us](#) today!

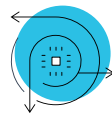
Lagoon automates Kubernetes

Using Lagoon allows teams to reap the benefits of Kubernetes without implementing or managing it – eliminating the need to learn how it works or dedicating internal resources to oversee it. With the build, deploy, and management automations Lagoon brings to Kubernetes operations, developers can release code faster and with fewer issues. Applications also benefit from running on hosting infrastructure that **self-heals** and **autoscales**.

When using amaze.io’s Managed Services, our engineers provide 24/7 monitoring, troubleshooting and support to ensure maximum uptimes and optimal performance. All upgrades and patches are handled by amaze.io so that your team can **focus on what’s really important: innovating and building great applications.**



Powerful

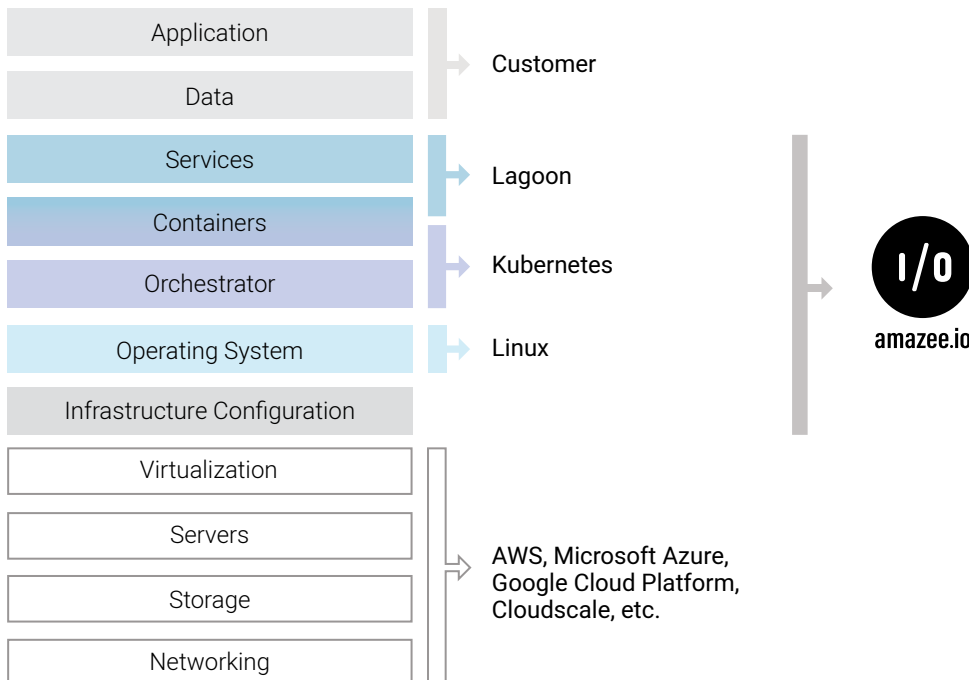


Flexible



Open

Platform as a Service



Lagoon + Kubernetes Benefits

- **Choose** your own software, hardware, and services
- **Focus** on your application
- **Launch** and iterate faster
- **Run** with enterprise support and stability 24x7x365
- **Save** on major capital and operating expenses
- **Grow** with ease sustainably

Take a deeper look at all the [benefits of both Kubernetes and Lagoon](#)





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Considering a DIY self-managed approach to running Kubernetes?

Evaluate the challenges of this strategy vs. operating with a Managed Service

	 Self-Managed Kubernetes	 amaze.io Managed Service
Setup costs	Upwards of \$100,000	Save around 50%
Timeline for setup	Months	Weeks
Maintenance, monitoring & support costs	Upwards of \$500,000	Save around 70%
Internal Kubernetes training	Required	Not required
Internal IT involvement	High	Low
Test cluster expenses	Extra	Included
24x7 SLAs	Internal responsibility	Included
Support processes	Required	Provided
Operating expenses	Inflated	Optimized
Development environments	Disparate	Congruent to production
Deployments & rollbacks	Manual	Automated

If your organization is considering a DIY approach to migrating to Kubernetes, navigating the growing set of possibilities can be challenging. Working with amaze.io **eases the burden** on your IT team while delivering a **state-of-the-art** Kubernetes build and deploy platform.



Ready to get started with Kubernetes? // [Contact us](#) today!

Host anything, anywhere

Lagoon is both flexible and portable. Built with Kubernetes and containers, it supports any web technology or hosting infrastructure. Whether in customers' dedicated cloud infrastructure, on-premises servers, or on any of our cloud servers located around the world, hosting with Lagoon brings development teams the benefits of Kubernetes without the costly overhead of running it directly.



Interested in joining the hundreds of organizations embracing containerization?
[Reach out!](#)

