



Kubernetes

1.28 - What's

New:



1

Sidecar Container:

- **Overview:** At last, Kubernetes has native support for the sidecar pattern. For those of us managing complex microservices, this is a game-changer.
- **Operational Impact:** No more workarounds or custom scripts. This means streamlined deployments, easier logging, and monitoring setups. It's all about enhancing the resilience and observability of our applications.



2

Optimization on Jobs:

- **Overview:** Jobs in Kubernetes have always been powerful, especially for batch processing and ML tasks. Now, they've been supercharged.
- **Operational Impact:** Enhanced job controls mean better resource utilization and failure handling. Whether it's data processing or ML training, expect smoother operations and fewer midnight alerts.



3

Rolling Upgrades:

- **Overview:** Rolling upgrades just got a lot less nerve-wracking. New enhancements ensure smoother transitions with minimal service disruptions.
- **Operational Impact:** Reduced downtime and better traffic management during upgrades. This means more uptime, happier users, and fewer rollback scenarios.



4

Consistent Reads From Cache:

- **Overview:** API performance is crucial for our CI/CD pipelines and monitoring tools. By fetching data from etcd's watch cache, we're looking at a significant speed boost.
- **Operational Impact:** Faster API responses can lead to quicker deployment times and more responsive scaling operations, especially in large-scale environments.



5

Allow Informers for Streaming Data:

- **Overview:** Instead of the traditional LIST-then-WATCH pattern, we can now stream changes directly. It's all about real-time data with reduced overhead.
- **Operational Impact:** Expect reduced memory footprints on the API server and more timely updates for our applications and monitoring solutions.



Unknown Version Interoperability Proxy:

- **Overview:** Cluster upgrades in environments with multiple API servers can be tricky. This feature acts as a safety net, redirecting traffic as needed during the upgrade process.
- **Operational Impact:** More confidence in rolling out upgrades without service disruptions. It's another step towards high availability and resilience.