

Dive deep into the world of stateful apps!

# UNDERSTANDING DATA PERSISTENCE IN KUBERNETES

Learn how data persistence works and why it's vital for stateful applications in Kubernetes.



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# WHAT IS DATA PERSISTENCE?

Ensures data remains available even after the app stops running. Think of it as your app's long-term memory.



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## STATEFUL VS STATELESS

Stateless apps forget everything after a restart. Stateful apps remember - crucial for databases, user sessions, and caches.



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# KUBERNETES BASICS

A platform to manage containerized applications. But what happens when containers, which are stateless, need to store states?



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# PERSISTENT VOLUMES (PV)

Kubernetes uses PVs as storage units linked to your cluster, granting your pods the ability to store and retrieve data.



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# PERSISTENT VOLUME CLAIMS (PVC)

PVCs are requests for storage by your app. Think of it as asking for a locker in which to keep your belongings.



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# DYNAMIC PROVISIONING

No need to pre-create storage.

Kubernetes can automatically provision storage based on PVCs, making scaling easier.



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# STORAGE CLASSES

Define storage types (fast, standard, etc.). Your app can request the needed storage type, ensuring efficiency and performance.



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## WHY IT MATTERS

Reliable, scalable, and efficient storage solutions are crucial to maintaining your app's longevity and data integrity.



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Essential for stateful apps

# MASTERING DATA PERSISTENCE IN KUBERNETES

Ensuring data persistence in Kubernetes is key for the stability and efficiency of stateful applications.

Start implementing today!



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