

Turbocharge Software Development & Delivery



Introduction

Today's highly competitive and dynamic business environment gives rise to disruptive new business models and offerings, largely driven by software innovation. Software is disrupting and creating new value streams across all industries. To compete and stay ahead, application development and delivery organizations are adopting agile and DevOps methods that enable them to deliver continuous software innovation faster, better, cheaper.

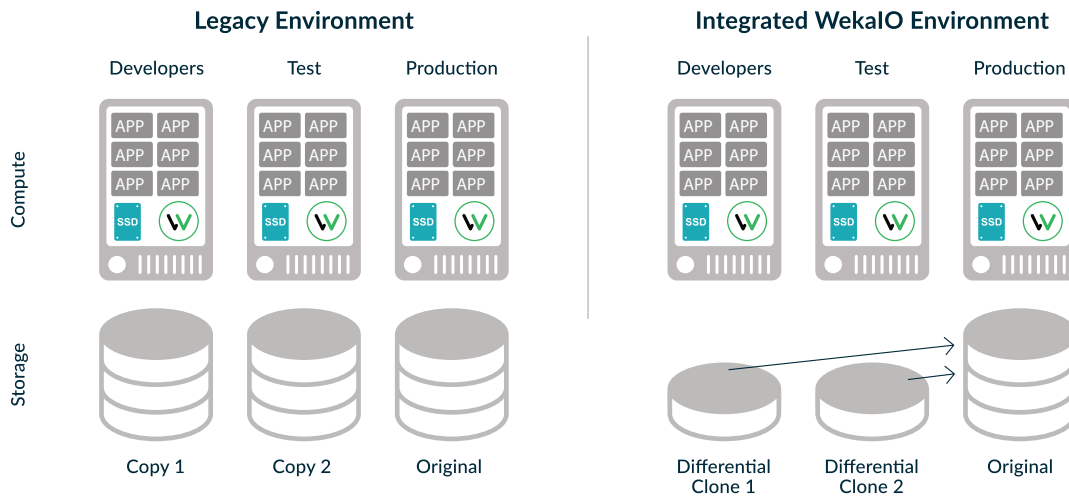
In a traditional application development process flow, a developer will develop and test the application, then give it to operations for deployment. Often, there is friction in running that application in production because the environments evolved to meet different needs. Developers want to make rapid changes that enhance the application over time and need the efficiency, flexibility and scalability of the cloud, while Operations need stability and reliability to keep the business running 24/7. For those responsible to make an agile technical solution, it can be challenging to implement an agile infrastructure using traditional systems.

GAIN FLEXIBILITY AND EFFICIENCY WITH A UNIFIED PLATFORM

Unifying the infrastructure supporting DevOps can deliver significant improvements in agility, flexibility, and efficiency. A key reason for separate environments was that the storage infrastructure did not have the performance to support both environments on the same system.

WekaIO's Matrix™ changes that by providing a strong storage foundation with the performance to build an integrated DevOps environment. As a software-only scalable, distributed storage solution, Matrix can run in hyperconverged mode on existing application servers, using containers or hypervisors, or in the cloud. These virtual environments are highly scalable and make provisioning resources up or down easy. They also create an isolation boundary at the application level preventing applications from interfering with one another throughout the delivery chain. Collaboration across different teams is now easier because they are all working with the same packaged environment. Support for S3, NFS, SMB, HDFS, and REST makes Matrix a single storage solution for DevOps and simplifies the unified environment.

Additional efficiency comes from reducing the overall storage footprint as shown in the diagram below. Dev/Test teams no longer need to make redundant copies of production data, they can now use clones or snapshots. Using fresh data to code and test against can improve application quality, speed upgrades, and enable faster issue resolution.



SPEND MORE TIME DEVELOPING AND ENHANCING APPLICATIONS

Matrix addresses performance needs with highly scalable on-demand shared storage designed to leverage the performance of flash using SATA, SAS, or NVMe SSD technology. Capacity and performance can be scaled independently at increments you decide. Regardless of file size or access patterns, Matrix delivers consistent, predictable performance or automated build processes and production environments. Global development teams benefit with distributed access and global caching that delivers near local SSD performance. Recent performance tests using SPEC® SFS 2014 show Matrix supports several times the number of simultaneous software compiles versus other solutions, enabling developers to spend more time creating new applications and enhancing existing ones.

KEEP THINGS RUNNING SMOOTHLY WITH DATA AVAILABILITY

When it comes to data protection, failure is not an option. Determining the right storage solution to support DevOps is foundational and demands the need for highly durable storage that is simple-to-use, cost-effective and portable across different environments. Matrix uses multiple layers of data protection to ensure the highest levels of data availability, performance, and resiliency. Data and metadata are distributed across nodes to maintain parallel paths for continuous data access. Recovery is automated, fast and efficient with all nodes in the cluster participating to ensure data remains accessible and performance is maintained to keep things running smoothly.

Conclusion

Time to market is critical for all businesses, and software development and delivery is now business-critical. IT organizations must be able to respond rapidly to changing user and application environments. Choosing the right storage to support your DevOps transformation is foundational to success. WekaIO Matrix is flexible, cost effective, high performance storage that is simple to deploy and use for the most demanding DevOps environments. As a software-only solution, Matrix readily adapts to your changing IT environment whether you are on-prem, virtual, or moving to the cloud.



2001 Gateway Place, Suite 400W, San Jose, CA 95110 USA T 408.335.0085 E info@weka.io www.weka.io

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