

11 signs you have an impossible cloud workload

The move to the cloud is on! Even in today's constrained environment, organizations continue to turn to the cloud for all sorts of workloads like web, mobile, gaming, backup, and even business operations. However, there are a core set of workloads with high data gravity, massive scale, and high performance that haven't yet moved - and it's starting to hold businesses back.

A classic example of an impossible workload is the massive explosion in Generative AI.

These applications rely on huge data sets and massive amounts of compute to train the models and widely distributed, high-performance compute to support validation and inference operations once the model is built. The logical place for these workloads is in the cloud as the fastest way to get started building a new GenAI application, get on-demand access to the latest compute and fastest networks, and enable rapid and global scalability.

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Give me a local feel (Low latency)

If your users and customers count on a real-time - "feels local" - experience. You might have an impossible workload.

10

If your HPC application is based on traditional monolithic architectures that rely on close coupling between compute and data storage over a high-speed network, you probably have an impossible workload.

Give me lots of random I/O

9

I need more bandwidth!

If you're unable to deliver the bandwidth your applications need - even after optimizing the network path - you might have an impossible workload.

8

Low GPU utilization is a sign your application has become I/O or throughput bound. Existing cloud storage systems are often too underpowered to break the bottleneck affordably. You might have an impossible workload.

My GPUs have long idle times, and it's costing me a fortune!

7

I'm provisioning more storage capacity to meet my performance requirements!

Overprovisioning storage resources to meet performance objectives is a classic sign you have an impossible workload.

6

If your cloud storage doesn't scale both up and down, ask yourself if it's really a cloud service and if this is really an impossible workload!

Spiraling costs part II

5

Lots of small files (The LOSF Problem)

Applications that process millions of tiny files act as tiny paper cuts, slowly draining legacy data architectures of their ability to perform. If you're dealing with the [LOSF problem](#), you might have an impossible workload!

4

If your data analytics pipeline is longer today than it was 6 months ago or a year ago, you might have an impossible workload.

Long (and getting longer) analytics pipelines

3

Undifferentiated Heavy Lifting

If your users and customers count on a real-time - "feels local" - experience. You might have an impossible workload.

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If your data engineers are spending more time "plate-spinning" and less time doing data analytics, you might have an impossible workload.

Hybrid clouds... multiple deployments

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Spiraling data transfer costs

If your data transfer costs are starting to spiral, you might have an impossible workload.

What do you do with your impossible workloads?

WEKA is all about making the impossible, not only possible but easy. The WEKA Data Platform was born in the cloud, originally launched for [AWS](#), and is now available for customers running their impossible workloads in [Microsoft Azure](#), [Google Cloud](#), and [Oracle Cloud Infrastructure](#). Our unique software-defined approach to data is capable of delivering the performance and scale your impossible workloads need to run affordably in the cloud.

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