Enterprise and Cloud Storage

Delivering True Enterprise Value with AMD EPYC Processors

Bill Basinas

Biography

Bill Basinas is Senior Director, Product Marketing at Infinidat (https://www.infinidat.com) and has been focused in the storage industry since 1994 when he joined Legato Systems as the first field systems engineer.

He was also an early employee at Avamar and spent time at enterprise companies such as EMC and HPE Storage in Global Marketing and Engineering roles.

Bill blogs at https://www.infinidat.com/en/blog

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Abstract

Today's customers want their enterprise systems to be faster, more performant, and capable systems that use less power and less data centre space, fuelling better OPEX, a smaller carbon footprint, and more successful outcomes for the business. At the launch of Infinidat's new G4 family of InfiniBox® platforms, the company told the industry about how it had shifted to a new controller node server platform, powered by the AMD EPYC™ CPU. In this article, the author explains what its next generation of products deliver to its customers, and AMD EPYC processors fit the requirement so very well.

Introduction

When we announced the launch of the new G4 family of InfiniBox® platforms in May 2024, we told the industry about how we shifted to a new controller node server platform, powered by the AMD EPYC™ CPU. We described how our powerful software defined storage, InfuzeOS™, gives us flexibility in what our underlying architecture can support. Couple that capability with the addition of driving a PCIe gen 5 bus architecture, and now you've essentially put a fuel sipping dragster engine on a superhighway. In the world of technology, this level of
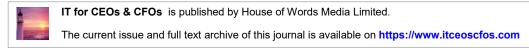
performance is what we strive for, especially today. We all want faster, more performant, and capable systems that use less power and less data centre space, fuelling better operating expenses (OPEX), a smaller carbon footprint, and more successful outcomes for the business.

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As we look at what our next generation products deliver to our customers, we keep this thinking top-of-mind – and AMD EPYC processors fit the requirement very, very well. We went from a dual socket CPU complex with a total of 48-core (Intel) to now a single socket 64-core AMD EPYC CPU that helps the G4 InfiniBox platforms reduce overall power consumption per core by 20%. This is NOT insignificant, especially with the additional capabilities it provides. It brings more speed and throughput right out of the box – just like putting a new engine and transmission in a dragster, it will go faster! Yes, with AMD EPYC CPUs in our InfiniBox G4 solutions, we deliver up to 2.5x performance than our 3rd generation offerings.

But like any team building a dragster, you don't drop the new engine and transmission in and immediately go 300 MPH down the drag strip. It's very similar to enterprise class storage, because the last thing a racing team wants to do is to blow up an engine and transmission. We want to make sure that the true enterprise value and architecture we bring is stable, reliable, and fully supports our guaranteed SLAs for 100% availability, performance, and cyber resilience. There are some things you don't sacrifice one iota, and at Infinidat those are what we do and stand behind as the "golden enterprise standard" we deliver for our customers.

"Enterprises globally are looking to have enterprise storage solutions that deliver real world application performance with guaranteed SLAs," says Eric Herzog, Chief
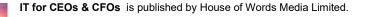
Marketing Officer, Infinidat. "Leveraging the latest AMD data centre technologies, we not only have maintained our unmatched 35 microsecond latency, but also have increased our IOPS and bandwidth performance up to 2.5x from our third generation platforms. Our G4 hybrid and all-flash solutions not only deliver these huge performance increases, but also provide comprehensive cyber storage resilience and recovery with our award-winning InfiniSafe family and seamless hybrid multi-cloud support for AWS and Azure deployments."

"We share a vision with Infinidat to deliver leadership performance, energy efficiency, and advanced security features for our customers," adds Kumaran Siva, Corporate Vice President, Strategic Business Development, Server Business Group, AMD. By integrating AMD EPYC CPUs into their next-generation enterprise storage solutions, Infinidat is tapping into leadership performance for highly demanding, business critical workloads."

Even a racing team takes the time to refine, test, tune and adjust – Yes, us too! We have a great engine and transmission in our new controller node and got a strong boost in performance. Our plan is to continue to tune InfuzeOS to take even more advantage over what AMD EPYC CPUs and associated PCIe Gen 5 and DDR5 memory all bring together. We are learning how we can leverage what we have without compromising what the biggest and most demanding enterprises expect from our platforms – to be that keystone of what their businesses run on.

Leading IT analyst Marc Staimer, President of Dragon Slayer Consulting, noted, "Enterprises are seeking today high-performance storage with extensive cyber resilience, on-prem or multi-cloud support, and Storage-as-a-Service. Infinidat's G4 next-gen storage arrays with advanced software capabilities delivers that exact perfect balance they are seeking. The new Infinidat all-flash and hybrid G4 family and hybrid storage systems are a major leap forward in high performance cyber-resilient storage. It is ideal for those organizations that need peak storage performance and an exceptional last line of cyber defence."

I once heard the phrase "with great power comes great responsibility" from a movie most of us have probably watched a time or two. Our responsibility is to take this powerful platform and continue to build the "Standard in Enterprise Storage."

Announced only at the end of May, it is safe to say that the new G4-based InfiniBox platforms have received global industry acclaim and are the fastest selling solutions that Infinidat has ever delivered. We have even more options now with our F1400T models scaling down to 155TB/310TB of usable/effective capacity, flexible scale-up architecture with 60%, 80%, and 100% populated models of InfiniBox G4 SSA, and consumption models that fit all business needs, with more to come. We have exciting plans as we continue through 2024 and 2025 as we continue to build and bring meaningful solutions to the storage industry that deliver unrivalled performance, guaranteed 100% availability and the best guaranteed cybersecurity!