Azul Systems aims to supercharge Java through growth equity investment

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By John Abbott

Having successfully made the difficult transition from hardware appliances to pure software, the vendor has raised fresh funding for rapid business expansion. Java runtime platforms remain relevant, but there's continued demand for higher performance.

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Introduction

Two private equity (PE) firms, Vitruvian Partners of London and Lead Edge Capital of New York City, have taken a majority stake in veteran high-performance Java software house Azul Systems. Shareholders will receive a consideration of $340m and the new owners will invest an undisclosed amount of capital into the business, the company says. It's an indication of the continuing relevance (after several decades) of Java not only as an established application environment for enterprises, but also as a runtime environment for new applications, particularly at the edge.

Snapshot

ACQUIRERS	Vitruvian Partners and Lead Edge Capital
TARGET	Azul Systems
SUBSECTOR	Java runtime systems
DEAL VALUE	$340m
DATE ANNOUNCED	March 4, 2020
CLOSING DATE, EXPECTED	April 1, 2020
ADVISERS	Shea & Company and Trigon (Vitruvian)

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Launched in 1990, Java is now 30 years old – with Java Enterprise Edition available since 1998 – and continues to be a central technology for enterprise and cloud customers as a platform and as a language. Sun's decision to open-source the technology in November 2006 under the GNU general public license helped ensure its continued evolution, relevance and longevity. Oracle's acquisition of Sun Microsystems led to stricter commercial terms for enterprise users, but also strengthened the platform, particularly in its security aspects. However, it also left room for third-party experts such as Azul to offer alternative commercial support offerings and additional technology innovations. Azul has some influential customers that rely on it for enterprise-grade Java infrastructure, not the least Microsoft, which uses the firm's Java runtimes to power the Azure cloud.

Deal details

Vitruvian Partners and Lead Edge Capital have purchased a majority stake in Azul Systems for $340m, buying stakes from its longtime venture investors, which include Accel Partners, Austin Ventures, Meritech Capital Partners, Redpoint Ventures and Worldview Technology Partners, many having first funded the company over 15 years ago. The biggest single investor is JVax Investor Group, which came in as a backer in 2007. Together the investors contributed over $209m in funding, most of it in the early years when the vendor's R&D expenses were much larger.

Azul will continue to be run by current management, including cofounders Scott Sellers (CEO) and Gil Tene (CTO). Vitruvian has put its special partner Bill Coleman in place as chairman of the board. Coleman is an industry veteran best known for founding BEA Systems, a Java application server provider acquired by Oracle in 2008 for $8.5bn. Lead Edge also gets a seat on the board and has put forward Ron Gill, the former CFO of NetSuite. The deal is expected to close within a few weeks.

Target profile

Azul Systems began life in March 2002 as a hardware supplier. It built a high-end offload acceleration appliance specifically for Java workloads, powered by a custom-designed multi-core CPU, the 48-core Vega 2. In its largest models, up to 16 Vega CPUs could be deployed as a 768-core system. The company's founding president and CEO, Stephen DeWitt, was best known for selling an earlier appliance specialist, Cobalt Networks, to Java creator Sun Microsystems for $2bn in 2000. The business was closed down a few years later.

By 2010, it was evident that continued development of proprietary hardware would be unsustainable, and Azul released its software-only product, the Zing elastic runtime platform for Java applications. Transitions from hardware to software businesses are always tricky, but Azul managed it gradually over the next few years. In 2014, it introduced Zulu, a commercialized and fully supported version of the OpenJDK open source Java standard. Azul runtimes help power the cloud infrastructure of Microsoft, Netflix, Workday and Priceline; software made by Adobe, Software AG and SAS; and the operations and products of Avaya, BMW, Credit Suisse, Deutsche Telekom, LG and Mastercard. Still based in Sunnyvale, California, the company now has about 160 employees.

Acquirer profile

London-based Vitruvian Partners was founded in 2006 as a PE firm interested in leveraged buyouts and growth capital investments. Its initial funding of €925m (about $1.1bn) was raised in 2008. A second tranche of €1.2bn followed in 2013 and a third of up to €2.4bn in 2017. European tech investments include Snow Software, Skyskanner, Bitdefender, Darktrace and Transferwire. But there's a growing interest in broadening out to the US market, with SnapLogic, Pindrop and Marqeta as recent examples.

Lead Edge Capital, founded in 2009, raised a $520m round in 2018, following on from previous funding rounds of $52m and $290m. It has made some high-profile investments in Alibaba, Spotify and Uber, as well as (more recently) Delivery Hero and Duo Security, the latter acquired by Cisco in 2018 for $2.4bn.

Deal rationale

Azul Systems has three product lines. Zing is its high-performance proprietary runtime that relies on the Java expertise it built up via the development of its appliances. The core customer base for the appliances were large financial customers that needed low latency and high throughput, and most importantly, deterministic performance. That meant completely reinventing Java's garbage collection to make it pause-less. Zing generates the largest portion of revenue for Azul, roughly 40% of the total, and it's a sticky product, as customers rely on it and increase their spending as their infrastructure grows.

Yet it's the second offering, Zulu, that has the highest growth rates and the broadest opportunity. Zulu is a commercialized version of the open-sourced OpenJDK Java development kit. It comes as a free version or as a fully supported build. This is Azul's equivalent to the Red Hat Linux business model. It's intended for commercial Java applications where stability, solid commercial support and more competitive pricing are the primary requirements. And it provides an alternative to Oracle, which ended free long-term support for OpenJDK after January 2019. A subscription is now required to use Java in production for commercial applications, and Oracle offers updates only to the latest commercial releases. Zulu is aimed at customers requiring long-term support, including older versions (particularly JDK 8 and JDK 11, both still in widespread deployment). Azul provides backported updates and defined SLAs. Customers can choose the moment they want to upgrade and continue using older versions for as long as they like. There's a completely free version (Zulu Community) and the commercially supported Zulu Enterprise.

Azul's third product is Zulu Embedded, which is intended for use in cars, smart meters, and various industrial and consumer edge devices, a rapidly expanding market segment. It can also be deployed by third-party independent software vendors looking to bundle a Java development kit in with their application code, which simplifies installation.

Competition

Azul Systems both competes and cooperates with Oracle: Some of its large cloud and software provider customers clearly feel more comfortable dealing with an independent company than direct with Oracle, most likely a rival. Pivotal's Spring Runtime package was also released in response to Oracle's changing OpenJDK licensing requirements. Red Hat has an OpenJDK build oriented toward integration with its Linux OS. A more recent threat to Azul is Amazon Web Services, which reaffirmed its long-term support for Java 8 and Java 11 in October 2018, and in January 2019 introduced Amazon Corretto, a free, production-ready distribution of OpenJDK, now the default OpenJDK on Amazon Linux. It's likely to be employed mostly by customers of AWS cloud services.

Meanwhile, Red Hat and Oracle are developing new GC technologies like Shenandoah and ZGC that will address performance issues and improve the garbage collection capabilities of OpenJDK. Plus, Oracle is looking to enhance the performance of its own proprietary implementations with GraalVM EE, which was released for production in May 2019 and can be added to its Java SE subscriptions.