

OVUM OPINION

Oracle WebLogic Server 12c spotlights the cloud

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OVUM VIEW

Summary

By assigning the suffix "c" to its branding, Oracle is declaring that the dominant theme for the next generation of Oracle Fusion Middleware will be support for the cloud. A couple months after announcing the first new-generation product, Oracle Enterprise Manager 12c, it is taking the next step with the unveiling of Oracle WebLogic Server (WLS) 12c. While Oracle Enterprise Manager 12c added support for lifecycle management of applications in the cloud, Oracle WLS 12c simplifies the ability to package up WebLogic instances for cloud deployment. Other highlights of the new release are support for the latest versions of the Java framework, which have been brought back to life under Oracle's watch. WLS 12c is being released in a mature market where open source technologies have commoditized the entry level, while IBM has defined different scale-up and scale-out architectures at the upper end. Architecturally, application middleware customers have clear choices; for Oracle, the brass ring is not necessarily to win more WebLogic market penetration. Ovum estimates that at least half of the WebLogic installed base has yet to adopt Fusion Middleware, so Oracle has a broad upselling target.

Oracle follows a familiar script

Oracle is starting the 12c generation of Fusion Middleware in the same way that it did with 11g, by beginning with the core infrastructure building blocks. It kicked off the release with Oracle Enterprise Manager for application management, preparing the way for the release of Fusion Middleware products, beginning with the core component, WebLogic Server (WLS). In the case of the 11g generation, Oracle released the rest of the Fusion Middleware portfolio over an 18-month



period following that of WebLogic. Oracle is repeating this scenario with 12c; Ovum expects Oracle to start to refresh the rest of the middleware stack beginning in the second half of CY2012.

The 12c release will emphasize cloud enablement

The key to Oracle's Fusion Middleware portfolio release themes is in the brand suffix. Where "g" was used for the last two generations of Oracle Fusion middleware to denote support for scalable grid deployment, the "c" in the latest release underscores that cloud enablement will be the core theme of the new generation.

For WLS, the core of the cloud enablement strategy is the upgrade of Oracle Virtual Assembly Builder, which now enters its second generation. This utility, which debuted in the 11g release, allows WLS customers to provision WLS instances or containers to what Oracle calls "virtual appliances." In effect, this means deployment to an environment where resources are pooled, such as a grid or private cloud. Oracle is not the only provider of such capability; for instance, IBM WebSphere Cloudburst delivers cloud provisioning of WebSphere containers, but requires a specialized appliance to do so.

This first of several differences in this latest release is that Oracle Virtual Assembly Builder has automated a number of previously manual steps. Additionally, it is exposing its provisioning capabilities as services that are callable from Oracle Enterprise Manager and deployable on Oracle Exalogic-optimized private cloud machines. It is supported by related new features in Oracle Enterprise Manager that add metering and chargeback functionality, which are useful for managing private clouds.

Additionally, WLS 12c adds load-balancing integration with the Oracle Exalogic platform, which supports elasticity and reduces processing bottlenecks. Specifically, Traffic Manager, a new feature in WLS, integrates directly with Exalogic's Traffic Director facility, which routes and load balances throughput on its high-speed Infiniband backplane. For now, this capability will only be available with Exalogic; after release, Oracle will gauge if there is sufficient customer demand to support Traffic Manager with non-Oracle platforms.

Revived Java platforms are another core theme of WLS 12c

The Ovum report *Oracle Refreshes Sun's Java Strategy* discussed in detail Oracle's roadmap for advancing Java platform releases, which had stalled under Sun. This year at Oracle OpenWorld, the JavaOne pavilion had much greater attendance and third-party vendor turnout. Oracle is harnessing this energy by resuming WLS's traditional position of aggressive support for the latest Java frameworks. In WLS 12c, Oracle has caught up with IBM WebSphere in supporting Java EE



6 and leapfrogged it by becoming the first commercial Java platform to support the recently released Java SE 7 framework. Oracle is also planning to support Java EE 7 in this generation of WLS product when it becomes generally available.

Admittedly, being the first to support the latest Java frameworks is not as important as it was when the Java platform was first evolving. Eventually, each of Oracle's rivals will support the new frameworks when their installed base is ready, while Oracle will keep WLS current with the latest versions. The significance is that Java has a realistic roadmap once again and Oracle is aggressively supporting it.

Java platform customers have a real choice

In spite of its maturity and evidence that the standards process is alive and well, Java platform providers are offering an array of choices that begin with a common base of standards. This is in response to forces that have reshaped the Java platform over the years, as:

- alternative frameworks such as Spring provided simpler alternatives to the highly complex, earlier versions of Java EE, in turn prompting the Java Community Process (JCP) to take Java EE on similar paths; and
- open source containers such as Apache Tomcat provided viable alternatives for implementations that did not require the highly distributed capabilities of the Java enterprise platform.

IBM and Oracle are the obvious rivals for the high-end appserver market, and offer varied paths to scalability. Oracle emphasizes the Exalogic platform as a large, optimized system that is an elastic-scale strategy using data grid and clustering to offer a scale-out solution. By contrast, while IBM supports WebSphere on the z Series, it is promoting distributed, specialized edge appliances that each performs dedicated tasks in a scale-out architecture. In between, there is JBoss, which is building an open source middleware platform from the ground up. At the other end, there are purely open source, entry-level alternatives such as Apache Tomcat or Glassfish (which is primarily used as a reference platform for the latest Java frameworks), and a number of server-less enterprise service bus alternatives from commercial and open source providers.

Given that the appserver market is mature and the alternatives are well established, most of the sizable WLS installed base that remains today has already made its architectural choices. Aside from customers whose organizations are in transformational situations and that could reopen platform deals, such as the aftermath of a merger and acquisition or a core rethinking of their application architectures, the bulk of attrition that could happen to the WLS base has already happened. For Oracle, the challenge is not so much to guard against defection of the WLS base,



but to upsell the portion that has not yet implemented other products in the Fusion Middleware stack. Ovum estimates that at least half of the WLS installed base represents such greenfield middleware sales opportunities, so Oracle has a very wide upselling target.

APPENDIX

Further reading

Oracle Refreshes Sun's Java Strategy, OI00124-032, (April 2011).

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