World Wide Technology (WWT)

ALM Octane and Vertica team up to deliver data-driven insights into application testing effort for digital transformation project

Overview
WWT is a technology solution provider with $10.4 billion in annual revenue and more than 4,600 employees. It serves the technology needs of large public and private organizations around the globe, including many of the world’s best-known brands.

Challenge
Oracle e-business suite (EBS) is the backbone of WWT’s operations, with its key modules managing a highly complex warehouse and logistics system. When WWT decided to upgrade its Oracle implementation and move it from an on-premise installation to the cloud, it realized this would be a major undertaking.

Walter Whitaker, Quality Assurance Manager for WWT, explains: “We regard this as a re-implementation with new core functionality. We’ve taken the opportunity to map and simplify our business processes to limit customization in our new Oracle implementation. The testing requirements associated with a project of this scale are huge. Thankfully we have ALM Octane to support this. Our teams are already using agile development and testing through our DevOps model and this project follows the same approach.”

Although ALM Octane is perfectly suited to the scale testing required, the WWT team struggled with reporting. Moving through the test cycles, reporting becomes more complex and involves increasingly more test data. Whitaker: “Our ambition is to become much more data-driven. We use Tableau for a lot of our reporting, and were leveraging an Open Source relational database to extract ALM Octane data. We prepare hourly reports and find that it takes 20secs to pull down the data required, and another 20secs to extract it. This 40secs response lag will only become worse over time. At the moment we’re querying 11,000 rows of test data, and this is growing by 1,000 data rows every day. Our solution just isn’t robust enough for this. We need an enterprise-level data analytics solution that gives us a much more real-time and scalable experience.”

At a Glance

- Industry
  Software and Technology
- Location
  Missouri, USA
- Challenge
  Managing the testing requirements of a large-scale Oracle reimplementation project with effective and scalable data analytics support
- Products and Services
  Application Lifecycle Management (ALM) Octane
  Vertica Analytics Platform
- Results
  + Visibility and streamlined teamwork through ALM Octane
  + Data-driven decision making with Vertica enterprise-scale data analytics
  + User-friendly ALM Octane interface and open API structure for easy integration

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WALTER WHITAKER
Quality Assurance Manager
World Wide Technology

Customer Success Story
Application Development, Test and Delivery
Vertica
“Vertica enables us to become far more sophisticated in our reporting capability. We can get more granular with a real-time view of our velocity. A burn-down chart shows us whether we’re ahead or behind in certain areas; a great management tool for us.”

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Quality Assurance Manager
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Solution
Micro Focus® Unified Functional Testing, LoadRunner, and StormRunner Load are leveraged in conjunction with ALM Octane to optimize the automated testing effort. The project has gone through development and functional testing, involving over 1,300 test cases. It is now in the first system integration testing phase and this is where things become complex, with full end-to-end testing across different systems and organizational work streams. The WWT team worried about hand-offs of tests and how to track everything. ALM Octane enables different teams to work together, including a large off-shore team in a different time zone. By organizing tests into different test suites and using the comment fields to hand-off tasks between the team member preparing the test and the team member executing it, everything is tracked and transparent to all.

Defects are linked to requirements and their associated testing activity, so the status is always clear. Requirements are defined when an Oracle functionality needs customizing. Every requirement, and this project contains thousands, has its own agile testing process.

Whitaker likes the straightforward ALM Octane administration: “For this large project, we’re really leveraging ALM Octane’s single sign-on capabilities. We have 800 ALM Octane users and it’s very easy to add users or change permissions. People are in teams, but can also be aggregated into sub-teams for the purpose of this project. The interface is clean and modern, and our users all like working with it.”

WWT uses ServiceNow as its application development platform and ServiceNow output data is combined with ALM Octane test data for further analysis and reporting. A vital part of becoming a data-driven organization is the support of an enterprise-scale data analytics solution. Following market research, Vertica was identified as the scalable solution WWT needed, as Whitaker explains: “As we continue our testing phases, we’re adding test data and putting more strain onto our database. We report on a wide variety of metrics; from defects and incident reports, to complex dashboards evaluating the testing quality, test coverage, user errors, severity of reported issues, and so on. Vertica enables us to become far more sophisticated in our reporting capability. We can get more granular with a real-time view of our velocity. A burn-down chart shows us whether we’re ahead or behind in certain areas; a great management tool for us.”

Results
With a multi-year project, ALM Octane really comes into its own, as Whitaker describes: “We manage all our scale testing through ALM Octane and its ease of use has been so helpful. A clean and smart, browser-based, user interface enables us to quickly execute simple processes. The open API makes it easy to integrate with other systems, giving us much-needed flexibility.”

He concludes: “As a data-driven organization, we’ll continue to leverage Vertica far beyond this particular project. It helps us set goals and measure against them. We like the flexibility of generating any report we want because the data is easily available to us.”