



JD Edwards Architecture Redesign



Industry

Construction & Engineering –
Energy Infrastructure



Customer Profile

- Headquarters: Houston, TX
- Corporation: NYSE - WG
- Founders: David and Miller Williams
- Founded In: 1908
- Locations: US & Canada
- Operations: Global



Applications

- JD Edwards EnterpriseOne
- Oracle WebLogic
- Windows and SQL Server
- F5 – Load Balancing

WILLBROS GROUP INC.

The Company

David and Miller Williams started Williams Brothers Contractors in 1908, which later became known as Willbros Group Inc. From its humble beginnings, Willbros has grown to \$2 billion dollars in annual revenue, employing 8,000 people with 35 locations throughout the United States and Canada.

“The entire project took less than 6 months from start to finish. Immediately, we saw significant improvements in stability, performance, and productivity with the new distributed architecture. More importantly, we saw runtime performance improvements greater than 30% for UBE-related jobs, and overall throughput enhancement greater than 40% from the application servers to the SQL Server.”

*Jason Cradit,
VP of Information
Systems*

Willbros is a specialty energy infrastructure contractor serving the oil, gas, refinery, petrochemical and power industries. Their offerings include engineering, procurement and construction (either individually or as an integrated “EPC” service offering), turnarounds, maintenance, facilities development and operations services.

They have completed projects for 400 clients across 60 countries and are publically traded on the New York Stock Exchange (WG). The Engineering News-Record (ENR) ranks Willbros as the 36th largest contractor in the ENR 400 in their most recent report.

The Issues

After experiencing performance and stability issues caused by rapidly increasing data volumes and an outdated architecture, Willbros reached out to a few major consulting organizations for assistance, but decided on GSI based on their expertise with JD Edwards. GSI was able to come in and quickly stabilize their environment.

Subsequently, when Willbros started migrating to the latest version of JD Edwards and began seeing performance degradation, they brought in GSI to help them address the issue with an entire architecture redesign that would match the upgrade requirements. As a part of the architecture redesign, various third-party hardware and software components would need to be addressed.

Another major component of the architecture redesign would include transitioning from Oracle Application Server (OAS) to Oracle WebLogic Server (WLS). Windows and MS SQL Server would both need to be

upgraded to the latest versions.

There was also a need for a load balancing and high availability across the web and application server layers.



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JD Edwards Architecture Redesign

The Results

Jason Cradit, VP of Information Systems, was impressed with the achieved results of the architecture enhancement and redesign. "The entire project took less than 6 months from start to finish. Immediately, we saw significant improvements in stability, performance, and productivity with the new distributed architecture. More importantly, we saw runtime performance improvements greater than 30% for UBE-related jobs, and overall throughput enhancement greater than 40% from the application servers to the SQL Server."

Upon recommendations from GSI, Willbros also transitioned and replaced outdated OAS web servers with Oracle WebLogic. This transition coincided with the setup and distribution of six Oracle WebLogic servers and the implementation of F5 Big-IP for load balancing and high availability across the environment. Other recommendations included the expansion of UBE job queues, the execution of multiple security kernels, and the setup and configuration of a single print queue for all four application servers. The results of the overall architecture have been seamless and transparent to the business; while greatly enhancing performance, scalability, and reliability.

"Overall, we are very impressed with the results GSI was able to achieve as they were able to deliver the project one month ahead of schedule and under budget. As we look to upgrade JD Edwards in the near future or expand and enhance usage within the organization, we will definitely be reaching out to GSI."

GSI, Inc.

As a certified Oracle Platinum Partner and a recognized industry leader, GSI, Inc. (GetGSI.com) specializes in providing a broad spectrum of business, functional, and technical consulting services for Oracle JD Edwards, Oracle NetSuite, Oracle Cloud, Salesforce and other enterprise systems. The client-centric consultancy offers a comprehensive suite of solutions including AppCare, a 24/7 managed service; GENIUS, an advanced monitoring application; GENISYS, a solution for modeling, measuring and maximizing system performance; gShield, a security application; RapidReconciler®, its inventory reconciliation software and JDE Cloud®, a complete cloud-based hosted service. GSI consulting services are backed by its signature 100% guarantee. Founded in 2004, the rapidly growing company is headquartered in Atlanta with locations nationwide. GSI, Inc. was named to *Inc. Magazine's* Inc.5000 list of fastest growing companies for two consecutive years.

Services



- Address **Performance** and Stability Issues
- **Architecture Redesign**

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