



Case Study Overview: Maximo Upgrade

Maximo 5 to 7 Upgrade Project: Major Utility

Aqitas Solutions was contacted by a major power generation utility to upgrade its existing CMMS to the Maximo 7 Asset Management Maintenance solution. Aqitas consultants used their cross-industry experience to find solutions that fit within the client's hardware parameters to implement the new Maximo EAM solution without loss of daily operations. Following the Maximo upgrade, training was provided to key team members. After the internal team was up and running, Aqitas' Maximo EAM consulting team was available for support as the system was being fully optimized.

Customer Situation

A major power generation and deliver assessed their current maintenance processes and determined a need to upgrade their existing Maximo 5 system to the Maximo 7 Asset Management Maintenance system.

Aqitas Role

Aqitas performed an initial assessment of the company's current business requirements and the ability for Maximo 7 to meet its goals. Company representatives and Aqitas personnel discussed the technical and functional requirements necessary for a successful implementation. A review of the current Maximo 5 environment assisted with a knowledge transfer for continuing functionality in the 7 environment. Following the implementation assessment, Aqitas performed a Maximo 7 upgrade installation for the company. Aqitas was also responsible for the upgrade of the existing 5 database to the 7 database version. Aqitas then completed the data upgrade and migration of the company's current production data into Maximo.

Maximo Profile

- Maximo Version: Upgrade to Maximo 7.1.1.5
- Database: SQL Server 2005
- Application Server: IBM Websphere 6.1
- Reports: BIRT Reporting

Project Challenges

The identification of a company's business requirements can be a significant effort. Once the original business requirements are delineated, the implementation of the functionality frequently leads to the discovery of new requirements. For example, one requirement dictated the entry of the work order log before a work order was allowed to be completed or closed. Simply making the log file a required entry for a work order would have necessitated a log file entry upon work order creation. The log entry is used to document findings during work order executions hence, rendering this process invalid. This discovery led to new requirements and additional conditional expressions to further enhance Maximo functionality.

The company's limited hardware resources also presented a unique challenge for the implementation. One Production server existed with the current Maximo 5 environment with an additional 5 database server. A Test server, containing both the application and database, also existed and was reloaded with MS SQL 2005 and Maximo 7. Hands-on training was performed in the Test environment and all current data was migrated to the Test database just prior to the pre-determined Go Live date. While users operated in the Test environment, Aqitas performed the new installation of Maximo 7 on the original Production server. Since the Production environment database was stored on a separate server, this allowed for more resources to be available for daily operations. Upon completion of the installation, the current Test data was migrated to the new Production database.

Actions Taken

Preparation

Implementation workshops were conducted between the client and Aqitas consultants to review business and functional requirements and identify configurations and decisions necessary to set up Maximo EAM in support of the company's specific needs.

Installation and Configuration

Aqitas implemented several unique configurations based on the company's requirements, such as the development of Conditional Expressions for controlling field security and the use of Escalations to send notifications of records needing additional attention from specific security groups.

Other customizations included the implementation of Workflow for a purchasing management process based on Security Group Purchasing limits. The Workflow process will route the individual Purchase Requisitions and Purchase Orders to the appropriate group for approvals or allow the option to cancel and redirect the requests. The company engaged Aqitas to design and develop 5 custom BIRT reports to meet the business needs.

Finally, all configurations underwent unit testing and completely met the design needs stated by the business requirements.

Data Migration and Integration

Aqitas worked with the company to determine what data values from the company's various legacy systems should be migrated to the new Maximo 7 implementation. All identified data was validated and transferred through a Data Migration Mapping process and the development of Data Migration Scripts. This included the migration of Assets, Locations, PMs, POs, PRs, WOs, and Security. A data migration and upgrade was performed with current 5 data to the 7 database on the Test server. Upon completion of the Production server installation, the most current Test server data was then migrated to the Production database for a seamless transition.

Training and Support

A week of direct hands-on training was provided to key users in the company in the use of Maximo and its associated components using a Train-the-Trainer approach. The company requested that training materials not be developed prior to the training sessions. These materials were developed by the company after the system was operational. Following Go-Live Operations, Aqitas remained on-hand to provide immediate support during the stabilization and optimization phase.

Results Achieved

The combined, dedicated efforts of members from Aqitas and the client led to a successful Maximo 7 upgrade that was on time and on budget. Prior to Go-Live, the migration of legacy data through the customized Data Migration Scripts gave users ample time for hands-on training. The combination of these results deemed the Maximo EAM implementation a success.

- Immediate greater visibility of job costs in the maintenance department.
- Immediate greater visibility of material planning and purchasing process, including stock on hand and special items.
- Increased interaction between technicians, schedulers, engineering, and environmental personnel.
- Single repository for job planning and analysis of job processes (i.e. job plan evaluations).
- Ad-hoc reporting for power users to create their own information access.
- Location and Asset drilldown now providing an accurate view for everyone into plant structure.