



Case Study Overview: Maximo Implementation Services

Maximo Implementation Project: Pharmaceutical (Bio-Tech)

Aqitas Solutions was brought on to lead the implementation of Maximo with Calibration by a major Life Sciences Bio-Tech company. The project consisted of a number of consulting companies and ran for several years. Our Maximo implementation services replaced three legacy systems that included the Syclo Mobile Work Management 6.3 solution over multiple sites. Aqitas' Maximo consultants for the Life Sciences industry successfully implemented the Maximo solution and provided hands on training that positioned our clients for long-term success.

Customer Situation

A major Life Sciences Bio-Tech company was implementing Maximo with Calibration utilizing a number of consulting companies over a period of several years. This was a multi-site implementation replacing three legacy systems and included the Syclo Mobile Work Management solution.

Aqitas Role

Aqitas was initially engaged to develop custom Actuate reports and build Maximo Communication Templates required to provide e-mail notification for Maximo users of Work Flow In-box events, specifically for Job Plan and Data Sheet Template approvals and for Out of Tolerance event tracking. Over time, Aqitas' role expanded to include the following tasks: implementation readiness assessment, development of IQ protocols for building and validating a Disaster Recovery environment, Staff Augmentation technical, business and validation support, and migration of Job Plans and PM's from site's legacy GxP work order management system.

Maximo Profile

- Maximo Version: Maximo 6.2.3 New Implementation with Life Sciences Calibration 6.4
- Database: Oracle 10g
- Application Server: IBM Websphere 6.0.2
- Reports: Actuate 8 Reporting

Additional Technology

- Mobile Product: Syclo Agency Mobile Server 4.4.2.4 for Work Management (and Calibration) and SMART Work Manager 6.3.0.0 mobile device client

Project Challenges

Aqitas' initial association with this project was close to the end of the qualification phase for the base application and mobile solutions. Workflow and reports testing through performance qualifications protocols remained as critical path tasks. Working with limited detailed business requirements, Aqitas' Maximo consultants assisted in identifying gaps and providing recommendations and detailed business requirements based on an understanding of their intended usage of Maximo. Working with a multi-site implementation at this late stage in project required the ability to rapidly understand each site's unique business processes and make recommendations to streamline the business process to reducing complexity and improve data integrity.

Actions Taken

Preparation

Actuate Reports - Multiple remote workshops were conducted between the client and Aqitas Solutions' Maximo consultants to develop business requirements for customizing the IBM supplied reports and create new ones where

out-of-the-box reports didn't meet the client's needs. Reports were developed, reports specifications approved, data was developed and the reports were qualified per client validation guidelines and installed in the production environment.

Communication Templates – A detailed specification was supplied by the client which tied into the existing custom work flows for Data Sheet and Job Plan approval routing notifications. Several related to Service Requests and unscheduled work order notifications required additional requirements definition to build Escalations as trigger points for the Communication Templates.

Implementation Readiness Assessment – Pre-engagement start, a list of key validation documents was requested and meetings were setup to review the results of the assessment with key project stakeholders. A summarized list of findings categorized by functional area and risk to the implementation was developed. This information assisted the client in understanding where project risk were greatest based on the targeted go-live date.

Installation and Configuration

At the time Aqitas was initially engaged, the installation of the development and validation environments was already completed. However, due to some of the late stage development activities, additional Maximo installation and customization requirements were documented, approved and implemented. Specifically, a Disaster Recovery environment was installed and documented as the basis for validating and implementing a production Disaster Recovery environment.

Key required fields were identified for each application and configured to ensure data integrity and improve user acceptance of the system based on the client's workflows. 10 custom Actuate reports were designed, built and tested to meet the business needs. 12 communication templates were designed, built and tested to meet the business needs.

Finally, all configurations underwent formal qualification testing to ensure functionality met the design needs stated by the business requirements.

Data Migration and Integration

Aqitas worked with the company to map the 2nd site's legacy systems scheduling module to the relevant Maximo Job Plan and PM tables. Conversion scripts were developed, data migration plan developed and tested. All conversion scripts were built to be dynamic based on an uncertain cutover timeline. The data migration plan was successfully executed in the QA environment as a completed deliverable awaiting a lock down of a go-live date. Custom queries were also built from their legacy system to assist in monitoring the open work orders as part of an overall data work down strategy to minimize the number of open work orders at cutover and have a plan for completing them so the legacy system could be fully retired.

Staff Augmentation

General Staff Augmentation support was provided by Aqitas with activities directed by the IT Project Manager and Site Business leads. Efforts completed included:

- Troubleshooting functionality issues and escalating to IBM or Syclo as needed.
- Writing (and enhancing existing) Performance Qualification scripts to validate the Maximo workflows.
- Completing report specifications and developing data scripts to create the complex data required to fully test and validate key GxP reports, such as, the Work Order Details report, Calibration Certification and Reverse Traceability reports.
- Assisting in documenting validation deviations and corrective actions.
- Providing strategic guidance on Steering Committee presentations.
- Coordinated the activities of all Aqitas resources due to the short duration of some of the technical roles.
- Assist in reviewing and confirming adequacy of Maximo user license requirements based on site specific needs assessment.
- Providing recommendations on enhancements to the system to ensure ease of use and data integrity for standard business processes.
- Develop procedures for migrating Data Sheets (manual process) from Word Documents into the Maximo Data Sheet template application.
- Procedures for installing the custom workflows, communications templates and escalations into the Validation and Production environments.

Following Go-Live Operations, Aqitas provided remote support for any questions or issues that arose through the initial stages of production use at the first site.

Results Achieved

The combined, dedicated efforts of members from Aqitas and the client led to a successful Maximo implementation with the Life Sciences Industry Solution (Calibration 6.4) and Syclo Mobile Work Management with Calibration 6.3 in a validated environment. Prior to Go-Live, the migration of legacy data through customized Data Migration Scripts into a training environment gave users ample time for hands-on training. The combination of these results deemed the Maximo implementation a success.

- Implemented standardized business processes between the two facilities.
- Reduced complexity of original workflows and enhancement of key data requirements to reduce the risk of compliance events.
- Identification of Maximo bugs with compliance implications that were escalated to IBM and hot fixes applied to correct the defects.
- Identification of functional testing gaps and development of additional protocol test scripts to ensure the business processes when implemented would function as per the requirements improving user acceptance of the new Maximo system.
- Handheld Mobile implementation with calibration and electronic signatures eliminated paper based tracking and documentation requirements while enhancing calibration trending capabilities.
- Other client manufacturing and research locations have actively inquired about the Maximo implementation to leverage the common implementation methodology.