Customer Case Study:
Ministry of Public Works – Kuwait

Kuwait’s Ministry of Public Works Uses Prolog® Manager to Save Millions in Claims by Creating a “Paper Zero” Project Management System for a $1B USD Hospital Project

As the contractor for the government, Kuwait’s Ministry of Public Works (MPW) executes a wide range of State projects, including the construction of schools, clinics, hospitals, mosques and government buildings, and the development and maintenance of infrastructure projects like sanitary drainage, water networks, wastewater treatment, roads and highways. A few examples of MPW accomplishments include the Amiri Diwan, the Diwan of His Highness the Prime Minister and the Telecommunication Centre. While the Diwans are great monuments representing the official centres of the State of Kuwait, the Telecommunication Centre (Liberation Tower), is a well-known landmark located in the heart of Kuwait City.

In 2010, Kuwait launched approximately 18B KD ($64B USD) in new, MPW-executed construction projects. Among those projects is the Jaber Al Ahmad Al Jaber Al Sabah Hospital, which will be the largest medical centre in the Middle East and will serve a projected population of 600,000 in the South Surra area. To reduce the risks associated with the four-year, $1B USD project, including claims by the contractor, MPW needed a project management system that would deliver strong document control, cost control and reporting functions.

The MPW’s Mega Projects Sector had been using Prolog Manager from Meridian Systems since 2008, mainly for document control. But Ali Nadoom, Project Engineer for the Jaber Al Ahmad Hospital project, had another approach in mind. “In general,” he explains, “we are trying new things on this project. For example, we have live Web cameras connected to the job site. From anywhere in the world, you can open a Web browser and see how our hospital project is progressing. We are also using new approaches to training and educating our staff. And we wanted more than just document control software. We wanted to use the full power of a project management tool to manage our project.”

Before choosing a solution, MPW invited several vendors, including Meridian, to demo their software. After Tahani Al-Daihani, founder and president of Ultimate Solutions, a Kuwait-based project management consulting firm and Meridian Value Added Reseller (VAR), completed her company’s Prolog presentation and demo, MPW was sold on the Meridian solution. “Not only was Meridian well-represented by Ultimate Solutions,” Nadoom states, “but they made us feel like they were part of our project team. We

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A 30-Day Go-Live Plan
Nadoom wanted a very fast-track implementation of Prolog: initial functionality had to be live in just 30 days, and additional capabilities would be quickly phased in. “Once we purchased Prolog,” he says, “I made the decision that, one month from today, we are going to have Prolog implemented. And from that date on, no more paper would be accepted on the project.” Although there was some resistance to this mandate, Nadoom didn’t want to risk having six months go by with no forward progress. Since the project was already underway – and paper was piling up – a lengthy Prolog rollout was not an acceptable option.

“When Ali asked me to crush the implementation schedule to 30 days instead of the standard 90 days, I told him it was risky,” Al-Daihani recalls. “But he convinced me that the plan was worth the risk because the speed would give the end users less time to resist the new technology – and he was right! But we couldn’t have accomplished this amazing feat without Ali’s leadership. He demonstrated the authority and determination needed to achieve success.”

Ultimate Solutions handled the configuration, implementation and customization of Prolog, along with end-user training. The consulting firm tailored Prolog to comply with the government’s rules and regulations and support the internal workflow of MPW. Customizations included adding, removing and renaming specific Prolog fields, and the addition of many other functions, such as:

- An Executive Dashboard for top management
- Security features to Prolog forms designed to decrease disputes and claims by preventing closed documents from being edited
- Digital signatures to forms
- Prolog-based access to the project’s Web camera snapshots

To support MPW’s goal of having one system of record for the Jaber Al Ahmad Hospital project, Ultimate Solutions also integrated Prolog with AutoCAD, Microsoft Office and the Ministry’s scheduling software.

“Paper Zero” Project
On June 1, 2010, the Jaber Al Ahmad Hospital became a “Paper Zero” project. Nadoom instructed all project parties to utilize Prolog for project documentation and to no longer route hard copy documents. The users struggled at first and some mistakes were made, so Ultimate Solutions set up an in-house training lab to help ease the transition. Several weeks of group training sessions were followed by individual, roles-based training.

Helping the users mentally accept the new project management system hasn’t been easy, especially among the senior members of the team. “Change is hard,” Nadoom says, “but we are finding different ways to encourage this change.” Today, more than 70 people utilize the Document Management and Field Administration capabilities within MPW’s Prolog solution, which is deployed to the extended project team via Citrix. As the Jaber Al Ahmad Hospital project progresses, that number is expected to climb to nearly 400 and new modules, such as Cost Control, will be activated.

In Kuwait, three distinct parties are involved with construction projects. The consultant designs and supervises the project. The contractor, who is the primary user of Prolog, builds the project. And the owner makes sure the other two parties are doing their jobs properly. At MPW, access to Prolog begins with the Undersecretary, who works directly under the Minister and uses the custom Prolog Executive Dashboard to monitor the project. The Assistant Undersecretary delves deeper into the project details, and the head of the construction department digs even deeper into
project issues. Next is Nadoom, who, as the Project Engineer, serves as the owner’s representative. He reads and responds to every piece of project correspondence and oversees the consultant and contractor.

“Prolog makes my life much easier,” Nadoom says. “I no longer have to carry paper files with me or make phone calls to get project updates. Instead, I can monitor the project from my computer at home or while traveling.”

**Saving Time and Money**

After going live on Prolog, MPW was soon reaping the rewards of having a centralized, secure and paperless project database. “We recently had a fire at one of our projects and all of the paper documentation was destroyed,” he says. “I don’t have to worry about that because our information is regularly backed up and stored off-site.” Other Prolog benefits reported by Nadoom include:

**Instant, real-time reporting.** “Before Prolog, if the Minister or Undersecretary asked for a financial report, I would have to create it by hand, which could take three days. Now, with the push of a button, I can generate any report in Prolog.” Top MPW management can also log in to Prolog and, using the Executive Dashboard, view detailed project data in real-time.

**Better project visibility and oversight.** “With traditional project management methods, it is sometimes difficult to access information. Nothing is hidden anymore, which allows us to carefully monitor every aspect of the project.”

**Increased efficiency.** “Prolog makes everything faster. Instead of printing, copying and distributing paper, for example, I can instantly send a document to 100 people. And no one can say that they didn’t receive this document or that document because we have a record of it in Prolog.”

**End-of-project savings.** Whether work is being performed in Kuwait or any other country across the globe, end-of-project contractor claim requests can impact the final project cost. “The most important factor when fighting unwarranted claims is good documentation. Prolog keeps our documentation well organized, which could save us millions because we can easily prove our position in any dispute.” While reducing potential claims promises significant savings, eliminating paper also saves money. “By the end of this project, we will have saved several thousand Dinars in paper costs.”

**The Full Power of Prolog**

As construction continues on the Jaber Al Ahmad Hospital, Nadoom is looking forward to utilizing the full power of Prolog to manage this and other projects, while protecting the interests of MPW and the State of Kuwait. “When this four-year project is over,” he states, “I hope to have a tailored Prolog solution that fits the needs of MPW and reach a level where everyone at MPW feels comfortable using Prolog on their projects.”

Toward this goal, the project team is committed to fostering a long-term partnership with Meridian and will rely on Ultimate Solutions for ongoing support of their Prolog software. “Prolog has many capabilities that make our lives easier, but we can’t discover those on our own,” Nadoom concludes. “That’s why we are depending on Ultimate Solutions to guide us through each step.”

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**Meridian Partner Profile**

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Jaber Al Ahmad Al Jaber Al Sabah Hospital Profile

Jaber Al Ahmad Al Jaber Al Sabah Hospital is located at the North West Gateway in Kuwait’s South Surra Government Zone. When complete, the Jaber Al Ahmad Al Jaber Al Sabah Hospital will be the largest medical centre and trauma unit in the Middle East. The 1,168-bed hospital will provide state-of-the-art medical services using the most advanced medical equipment.

Key Project Elements

› A hospital, dental centre, central plant, residences, shelter and underground parking totaling more than 720,000 sq. meters in floor space

› A 300-seat auditorium with conference rooms

› A Medical Mall, which connects the patient towers and treatment facilities, and creates a public space for administrative offices, lounges, roof gardens, cafeterias, gift shops, auditorium lobby and prayer rooms

› Interior design that focuses on sustainability, flexibility and the use of natural light

Project Cost: $18 USD
Project Start Date: December 2009
Estimated Completion Date: December 2013

Anticipated Results: The Jaber Al Ahmad Hospital will be a major contribution toward the Kuwait Ministry of Health’s long term strategy to provide the highest quality health care available to the people of Kuwait. In addition, the hospital’s technologically advanced auditorium and sophisticated conference rooms promise to advance the field of medical education by providing ample space for lectures and seminars on various medical practices.