Public Utility Leverages Metrics in Prometheus Planning & Scheduling for Maximo to Drive Productivity Up and Backlog Down

PROMETHEUS GROUP

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Company

👥 2+ Million Customers

📍 Southwestern United States

🔧 Utilities

Challenges

- Lack of metrics
- Limited data visibility
- Subjective prioritization
- Too much reactive work

Results

- Reduced backlog
- Optimized resource utilization
- Continuous wrench time improvement
- Increased efficiency despite reduced labor availability

Public Utility Leverages Metrics in Prometheus Planning & Scheduling for Maximo to Drive Productivity Up and Backlog Down

COMPANY BACKGROUND

As one of the primary public utilities in the southwestern United States, our client provides power and water and has been doing so for over a hundred years. This organization owns and/or operates several reservoirs, dams, canals, and power generating stations to deliver water and energy to millions of customers in several states, including Arizona, Nevada, and California.

CHALLENGES

Since it was founded over 100 years ago, there has been a lot of change in the organization's services, processes and tools in that time. Their Maintenance Manager (MM) has been through much of their most recent change.

He describes the planning and scheduling journey specific to the generating station site at which he works.

In the mid-1980s, this station was using PPMIS by IBM. As MM explains, this particular generating station has always had large annual overhauls with 10,000+ activities. Therefore, when it came to maintenance scheduling, the primary focus was on those overhauls, from the '80s well into the 2000s. But in recent years, as part of a reliability optimization initiative, they've been trying to shift the focus toward improving processes, increasing reliability, and managing daily work.

Says MM, "We could see the real benefits of work scheduling, but we've had difficulty finding the right tools." They started with a large magnetic progress board and held daily meetings to update the board. They first began electronic scheduling and used PPMIS, later replacing it with INDUS. A decade later, they implemented IBM Maximo. "Over the years, we've used various project management software, such as Microsoft Project to assist with their Maintenance Planning and Scheduling. Some of these tools were great for projects, but too cumbersome for daily scheduling."

Their primary challenges were:

Lack of metrics and usable data: Extracting data from their CMMS and having it in a readable, workable format has been their greatest challenge, says MM. He and his team were looking for a tool that would compile the data, define the metrics, and create reports quickly. As he says, "The problem we have always faced is getting the data out of the machine."

Limited visibility: Without consistent, easy-to-use tools that keep all the information in one place, the team had a fragmented and limited view of the work being completed and how often assets were failing.

Subjective prioritization of daily work and backlog: In the past, much of their daily work management was in the hands of frontline supervisors who reviewed the backlog and selected the work to be done next. This process was highly subjective and isolated; there was little to no input from Operations.

Too little planning, too much reactive work: This method of supervisors determining the daily work did not take into account asset criticality in their prioritization system. This led to a cycle of reactive work with little planning and virtually no Predictive Maintenance.
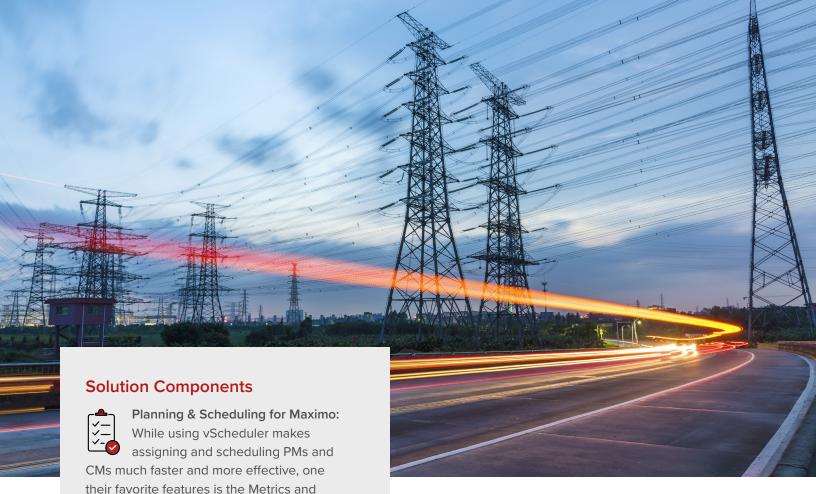
Inefficient use of time: Like many of our clients, this station was experiencing the "pain" of using tools that were not purpose-built for planning and scheduling. This meant it took Planners and Schedulers inordinate amounts of time to complete tasks vital to their work – tasks that they should be able to complete in a couple of quick clicks.

SOLUTIONS

In 2012, the team saw a demonstration of Prometheus Group's Planning & Scheduling for Maximo. As their Maintenance Manager tells it, "A strong suit is its adaptability. It was evident that the product could easily adapt to meet our needs. What was particularly convincing for us was that this included developing metrics."

> *No software is ever going to get immediate buy-in from the masses. And at [our organization], it was no different. Some people were apprehensive about learning a new tool. In this solution, there's lots of ways to do different things; which is great because it can suit your process. I think overall, they could see how this was going to save them time and give them abilities to do things they couldn't do before."*

Solution Components

Planning & Scheduling for Maximo: While using vScheduler makes assigning and scheduling PMs and CMs much faster and more effective, one their favorite features is the Metrics and Reporting Add-On. "In the past, we struggled to get usable metrics. We've tried many different things, including hiring an in-house data analyst. The exception to that is the Prometheus Planning & Scheuling for Maximo Metrics. It's easy to pick and choose the metrics you want to see and when."

vCalendar: vCalendar allows the team to document exceptions in their resource availability, allowing for more accurate scheduling based on true resource availability. The ability to schedule to net available hours is consistent with the site's philosophy of assigning to the individual person, not simply at the craft level. It also enables them to do multiple exception on any given day or days in bulk, which saves their Schedulers' and Supervisors' time.

Benefits

Time savings: Saving time during Work Execution so that they have more capacity to conduct site visits and review job plans is vitally important for them. "We are reducing the time it takes to create a schedule. Using vScheduler, our supervisors are getting faster every day."

Consistent prioritization: With formalized Planning and Scheduling tools that provide better visibility and increased communication between the Maintenance and Operations teams, it's easier to prioritize the backlog in an optimal manner.

Metrics and other new tools: What impressed MM about Scheduler initially was the highly visual, user- friendly elements, such as the Gantt and the heatmaps. But he has been pleasantly surprised by other features of the tool. "Discovering Daily Work Sheet (add-on for vScheduler) was a pleasant surprise. It's a wonderful tool that I think our Supervisors will greatly enjoy using. I also think the PM Forecast is a great feature."

RESULTS

Doing more with less: As he explains, "We believe that we are saving time because of Prometheus Planning & Scheduling for Maximo." Though their workforce has decreased, they are "still able to drive the backlog down while keeping the units running."

Metrics: "The metrics are my favorite aspect. The other solutions out there that don't have metrics, well, they're just a work list. With Prometheus Planning & Scheduling for Maximo, I can easily pick and choose from the 50+ metrics available and create layouts to see the data that I want to see. We've just started using the Schedule Compliance and Break In/Break Out Reports. I hope it will help us understand when and why our schedule is breaking."

Optimized resource utilization and improved wrench time: MM explains how before vScheduler "we were unable to allocate/load resources throughout the work week. Now that we can use these solutions to do this, we can optimize how our resources are used. I believe wrench time has improved and continues to improve daily."

Learn more about how Prometheus Group can help your organization today

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About Prometheus Group

Prometheus Group is a leading global provider of comprehensive and intuitive enterprise asset management software solutions that work within ERP systems and span the full work management life cycle for both maintenance and operations. Developed jointly with end users, Prometheus software enhances the customer experience for planning, scheduling, and executing work for both routine maintenance and shutdowns and turnarounds, all while protecting the workforce with safety solutions and electronic permit to work. Our straight-forward functionality, graphical visualization, and simple processes enable customers to increase productivity, reduce costs, and improve reporting. For more information, please visit www.prometheusgroup.com.