

## Case Study

### Operational Insight Allows Hydro Tasmania to Access Critical Data for Faster, More Informed Decisions



Honeywell listened carefully to our needs and provided us with a solution encompassing alarm management and a process data historian with powerful but easy-to-use Web-based visualization and reporting tools.

Gerard Flack, Manager of Integration Operations at Hydro Tasmania.

#### Challenge

Hydro Tasmania's internally developed alarm and process system was nearing the end of its lifecycle and depended on a few individuals with the appropriate knowledge. The Critical Systems department were responding to time-consuming requests for data rather than focusing on ensuring reliable operation of the control network.

#### Solution

Alarm Manager seamlessly collects and stores all alarm and event data, showing the current state of alarm management. Combined with Operational Insight, which serves as the window into plant data, the solution provides a web-based dashboard for all those who need to access the data.

Alarm Manager and Operational Insight are Powered by Matrikon, which represents vendor neutrality. These products work with third-party control systems and applications.

#### Advantage

- Improved data visibility for employees across all levels of the organization
- Centralized data access enhances staff efficiency, so Critical Systems remains focused on assuring network reliability.
- Improved decision-making with informative data support

#### Environmental and Operational Accountability

A cluster of 300 islands 240 kilometers (150 miles) south-east of mainland Australia, Tasmania is known for its natural beauty. It boasts more than 1,000 mountain peaks, pristine coasts and four mild seasons. Moreover, more than 40% of the main island is protected as national parks and reserves, which are home to some of the world's rarest animals. Tasmania has been extremely successful in protecting its largely unspoiled natural

environment. National Geographic Traveler Magazine's Sustainable Tourism Initiative ranked Tasmania third in the world for wise land stewardship. Hydro Tasmania plays a significant part in keeping the state clean. As Australia's leading renewable energy business, it contributes 50% of the country's electricity from renewable energy sources. Hydro Tasmania generates approximately 10,000 gigawatt hours (GWh) of electricity annually through 28 power stations, numerous lakes and over 50 dams.

#### A Web-Based View into Alarm and Process Data

Previously, Hydro Tasmania stored all historical alarm and process data in an internally developed database. The company's system was nearing the end of its life and depended on a few individuals with the appropriate knowledge. Only the Critical Systems department could access the data, requiring team members to respond to time-consuming data requests rather than focusing on ensuring reliable operation of the control network. Delays in providing data to others could often extend into weeks as IT personnel shuffled priorities. On top of that, it was nearly impossible for the team to create the custom reports needed to assess operational performance.

To increase efficiency, the power company looked at operations optimization solutions from Honeywell. Several key personnel from Hydro Tasmania attended the Asia Pacific conference, where they saw first-hand the benefits of Powered by Matrikon solutions.

Specifically, Hydro Tasmania looked at Alarm Manager and Operational Insight. Alarm Manager seamlessly collects and stores all alarm and event data and automatically generates web-based, standards-compliant Key Performance Indicator reports that give users an accurate look at the current state of alarm management. Operational Insight serves as the window into plant

data, providing a web-based dashboard for all those who need to access the data.

Honeywell assisted Hydro Tasmania in implementing Operational Insight as the visualization toolset, drawing data from Alarm Manager and the AspenTech InfoPlus.21 real-time data historian. Honeywell also developed a custom OPC-style interface to provide data to the AspenTech InfoPlus.21 data collection mechanism. The interface also provided access to Hydro Tasmania's Remote Terminal Unit (RTU) time-based data from across Tasmania, Victoria and South Australia. Honeywell configured more than 37,000 individual tags to be collected at a one-minute poll rate.

The dashboard provides a comprehensive view of all operations, showing lake levels and system, station and machine loads. Hydro Tasmania employees across all levels, from operators to senior managers, have configured their desktop dashboards to display the information they need for their various responsibilities. Instead of waiting for operations staff to provide data from the production database, employees are empowered to retrieve that data when they need it from their customized Operational Insight dashboards.

**“Previously, access to this data was limited to people with access to our production database, and hence delays were common for those without access,”** Flack said.

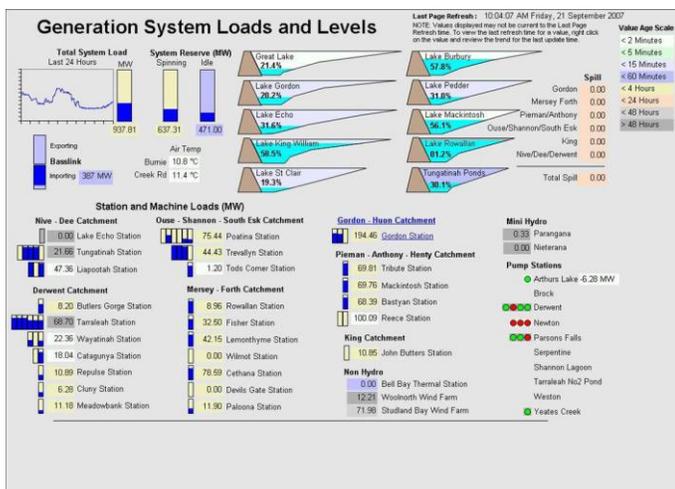
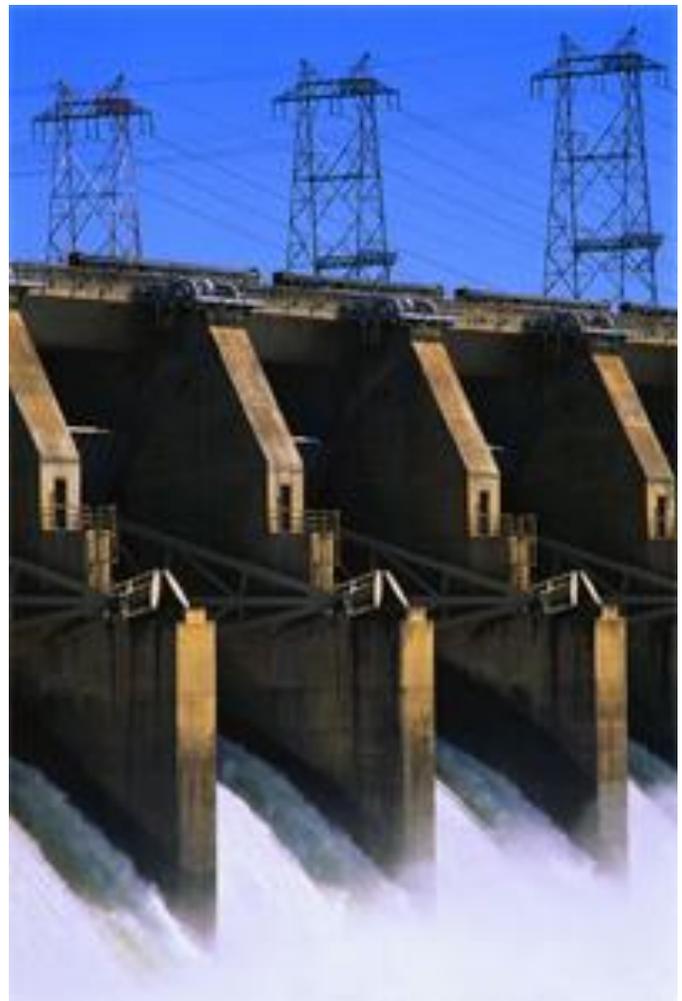


Figure 1 - The Operational Insight dashboard provides a comprehensive view of all operations, showing lake levels, and system, station and machine loads.

In addition, Honeywell imported seven years of historical data from the current historian into the IP.21 historian to allow users to access all previous and current data. The system can store approximately 15 years of data without the need for additional hard disk space.

### Data for Decision Support

Alarm Manager retrieves alarm and sequence-of-event data automatically and continuously and stores it for performance reporting. It allows operators to monitor operations and analyse contingent events, determining compliance with design and operating standards. All relevant parties, including those beyond operators, can access the data quickly from any web interface through Operational Insight. With Operational Insight, users trend time-based tag data and produce schematics, overview screens and dashboards.



The Honeywell solutions enabled Hydro Tasmania to realize its objective of extending data access, freeing the Critical Systems team to stay focused on its primary role of assuring network reliability. In addition to enhanced staff productivity, employees have the timely insight they need for decisions regarding asset management, which ultimately keeps operations safe and efficient.

“Data is now turned into valuable knowledge, making for more effective decision-making, and it continues to do so as more people tailor dashboards to fulfill their information requirements,” Flack said. “The rate at which people are seeking out accounts for the system is testimony to its value to the organization.”



#### **For More Information**

Learn more about Honeywell's Operational Insight visit our website [www.honeywellprocess.com/software](http://www.honeywellprocess.com/software) or contact your Honeywell account manager.

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