



Agent Vi Enhances Safety at Hydro-Electric Dam Sites across Kansai, Japan

Product: savVi

Application: Real-Time Event Detection

Customer: Kansai Electric Power Co.

Location: Multiple Sites, Kansai Prefecture, Japan

Vertical Market: Critical Infrastructure

Agent Vi Partners:

Milestone – Video Management Software (VMS)

KT Workshop – Distributor

MEC – Certified Systems Integrator

Challenge

Established in 1951, Kansai Electric Power Co., Inc (KEPCO) is one of the nine major electric companies in Japan. KEPCO's service area covers 28,704 square kilometers in the central part of the main island of Japan, and KEPCO supplies electricity to 13.64 million customers.

KEPCO maintains dozens of hydro-electric dams across Kansai. It is important to ensure that there are no unauthorized people in the vicinity of the dams, as there have been drowning incidents in the past resulting from water discharges. Hence, keeping the dams clear of people is a serious safety challenge for the site operators. Moreover, erecting physical security systems at the dam sites is difficult as the sites are made up of water ways and heavy vegetation. Accordingly, KEPCO sought a trustworthy surveillance solution that does not require the presence of a person on-site.

Solution

Distributor KT Workshop and systems integrator Meteorological Engineering Center (MEC) designed and installed surveillance systems at multiple dam sites across Kansai. As a starting point, one to two cameras at a dozen of these medium-sized dam sites were enabled with savVi Real-Time Event Detection capabilities.

"We chose savVi as the product is easy to operate and Agent Vi's technical support is much better than what's offered by other analytics providers. savVi delivers a robust solution – we have a very low False Alarm Rate (FAR) even with the harsh vegetation surrounding the water channels at the expansive sites."

- President, KT Workshop

The solution is based on a mix of thermal and standard cameras to ensure the highest coverage during day and night. Fully integrated with Milestone XProtect Professional Video Management System, savVi has been configured to detect all instances of intrusion and to prompt an alert which appears in Milestone's Smart Client.

Result

Despite the challenging environmental conditions, the introduction of Agent Vi's video analytics has enabled effective on-site surveillance. savVi's real-time detections provide an optimal way to safeguard the unmanned, remotely monitored dam sites.

savVi serves as an early warning system to alert to the presence of people in the vicinity of the dams. This is of utmost importance as water is released periodically to undertake maintenance work or due to weather changes.

When savVi detects a person or vehicle in the dam area, a real-time alert is automatically generated. At smaller sites, savVi's detection triggers a loudspeaker which warns intruders to leave. At larger sites, the detection triggers the loudspeaker warning and generates an alert that is sent to a control center. The operator views an image and a video clip showing the breach, and when required, takes further action to deal with the situation. This has been highly effective demonstrated by intruders leaving the site in response to the loudspeaker warnings. Accordingly, there have been no safety incidents since savVi was installed at the sites.

Seiichi Kido, President of KT Workshop, stated "We chose savVi as the product is easy to operate and Agent Vi's technical support is much better than what's offered by other analytics providers. savVi delivers a robust solution – we have a very low False Alarm Rate (FAR) even with the harsh vegetation surrounding the water channels at the expansive sites."

Ariel Frischoff, VP Sales EMEA & APAC, Agent Vi, commented "We are proud to enhance the life-saving safety efforts of a leading Japanese utility company, and look forward to rolling out savVi at dam sites across Kansai. This project shows how video analytics can be used for safety-oriented use-cases beyond traditional security applications."



The sites are made up of heavy vegetation and waterways



savVi detecting a person loitering at one of the dam sites, displayed in Milestone Smart Client

savVi serves as an early warning system to alert to the presence of people. There have been drowning incidents in the past as a result of water discharges, and hence, keeping the dams clear of people is a serious safety challenge.

Agent Video Intelligence (Agent Vi™) is the leading global provider of open architecture, video analytics solutions. Agent Vi's comprehensive video analytics offering includes software products for on-premise installations as well as cloud-based SaaS, with capabilities ranging from real-time video analysis and alerts to video search and business intelligence. The solutions are fully integrated with a variety of cameras, encoders, video management systems and alarm automation software.