



HOW DIGITAL SOLUTIONS ENHANCED REMOTE ACCESS FOR OK TEDI MINING IN THE DENSE RAINFOREST OF PNG

Industry

Mining

“Accruent’s RedEye has helped us modernize how we deliver engineering solutions. We’re excited by the possibilities and continuing to work with Accruent.”

– Mark Thompson, General Manager

900K
FILES
CENTRALIZED

82%
DUPLICATE
REDUCTION

16X
PRODUCTIVITY
IMPROVEMENT

THE COMPANY

Ok Tedi Mining Limited operates the longest running open-pit copper, gold, and silver mine in Papua New Guinea (PNG). Managing a mine 2,000m above sea level in a dense rainforest brings many logistical and communications challenges - not the least of which is low-bandwidth.

The Ok Tedi team sought a drawing management solution that would perform reliably in these conditions. The solution needed to manage digital files from Ok Tedi's legacy drawing library and data assets from future projects and upgrades.

THE CHALLENGE

Ok Tedi Mining Limited operates the longest running open-pit copper, gold, and silver mine in Papua New Guinea.

A major producer of copper concentrate for the world smelting and refinery market in Germany, India, Japan, South Korea and the Philippines, Ok Tedi contributes around 7.4% to PNG's Gross Domestic Product (GDP).

The mine is located at Mt. Fubilan, 2,000m above sea level in an area of dense rainforest where rainfall can reach up to 10,000mm per annum.

Following a long legacy of overcoming the logistical and communications issues associated with continuous operations in one of the world's most remote areas, the Ok Tedi team realized it was time to gain more control of their engineering and capital projects.

"It became clear that we needed to get the foundations of our engineering business processes right. That meant getting our drawing management right and regaining control of the documentation."

– Brendan Gowdie, Engineering Manager

THE SOLUTION

Ok Tedi chose Accruent's cloud-based solution, RedEye to do the job.

Several pilot projects were initiated to validate that RedEye would work in Mt. Fubilan's challenging conditions. Ok Tedi's crews were able to operate and work without interruption by using the low-bandwidth and offline features of RedEye.

These features allow an operator to download relevant drawings from RedEye to a mobile device when they are connected to the Internet. They can then move to a low or zero-bandwidth area and mark up changes on the digital image. Once they have Internet access again, RedEye automatically synchronizes the updated drawing into the system. These pilot programs gave the Ok Tedi team the confidence to proceed with their first cloud-based solution.

The Ok Tedi team's initial plan to drive drawing change management was to locate, improve, and upload their legacy drawing library through a manual process, whilst incorporating a new platform into any new activities (such as new capital projects and brownfield maintenance upgrades).

"We realized manual processing wasn't an option after we identified more than 900,000 digital files to process in our legacy drawing library," said Senior Draftsman Mark Kelly.

"We took advantage of RedEye's bulk data management tools to automatically remove duplicate files, quickly add metadata, and 'fold' multiple versions into single identifiable drawings."

"The cloud-based platform performs as well in the remote mountains of PNG as it does from our Brisbane office."

– Brendan Gowdie, Engineering Manager

THE BENEFITS

During the project establishment and data improvement phase, RedEye de-duplicated and reduced the number of files from 900,000 to 165,000 – a reduction of 82%.

More importantly, Ok Tedi was able to increase the speed of their data management activities from 50 to 800 artifacts a week. They continue to use RedEye for uploading new project drawings and maintaining a reliable, up to date, duplicate-free dataset.

"We saved a large amount of time using RedEye's built-in tools. When we look back and see how far we've come, the benefits of RedEye are clear," said Mr Kelly.

Continual Improvement

After the initial work improved the quality of their drawing database, the Ok Tedi team now has simple and clear processes for managing engineering change. "It's been important for us that Accruent realized this was a journey of improvement," said Mr Kelly.

"Our Accruent Customer Success Manager is regularly in touch, supporting us as we continue to invite contractors into the system, and ensuring our new projects are set up correctly."

"After initial processing and upload, we have continued to reduce our file count by folding in and ordering revisions," said Mr Kelly.

Business Transformation

Ok Tedi management used a number of technology solutions to encourage a cultural shift across their business. Quick and easy access to engineering drawings, using the RedEye solution, is an example of a simple technology change that can improve process, encouraging a shift in thinking. The team is also looking to the future, finding productivity benefits as they move to a more mobile workforce.



“As we continue to improve our network onsite, my goal is to introduce tablets to my team,” said Mr Gowdie. “Having the RedEye mobile app installed will have a positive impact on productivity.”

Where to From Here?

The Ok Tedi team recognizes the productivity boost from controlling their drawings and making them accessible. Staff are coming to realize that technology can, and should, play a more significant role in day-to-day operations. “We have a long history of global collaboration and practical, onsite engineering up here,” said General Manager Mark Thompson.

CONTACT FOR A DEMO



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