

## SUCCESS STORY

### Panama Canal Aerial



### Profile

A true engineering marvel that has earned its place among the seven wonders of the modern world, the Panama Canal has been providing a critical gateway for the world's shipping traffic for almost a century. Now, a \$5.25 billion expansion project is underway to double the canal's capacity and ensure that it can meet global shipping needs well into the future.

The official caretaker of the canal is the Panama Canal Authority or Autoridad del Canal de Panama (ACP), a government agency charged with its operation, administration, management, preservation, maintenance, and modernization. To encourage public support for the expansion program and maintain ongoing public awareness and interest in the project, the ACP turned to an important ally – ViewCast Corporation – a developer of industry-leading hardware and software for the transformation and delivery of professional quality video over IP and mobile networks. Using a state-of-the-art ViewCast Niagara® 7224 video encoding system, the ACP is streaming a wide variety of live and on-demand programming to the Panama Canal Web site to help provide historical documentation, public information, and training for the agency's 9,000-plus employees.

### Industry

Government

### ViewCast Corporation

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## The Panama Canal Relies on ViewCast for Streaming of Historic Project

### The Challenge

#### A Media Record for Posterity

Not since the Canal's original construction has the country of Panama seen a public works project of this magnitude. When completed by 2014, the Panama Canal expansion will enable ships to transit the canal in a new lane of traffic which has lock complexes at each end of the canal. In addition to doubling the capacity of the canal, the new course will shorten transit times from eight to six hours, and enable the passage of supertankers and other vessels that are too large for the current canal. With the potential to greatly expand Panama's economy, the expansion project was approved by voter referendum on October 22, 2006.

During the canal's construction at the turn of the 20th century, officials' ability to document the project for posterity was limited by the technology available at the time. As a result, only about 2,000 still photographs and 10 minutes of jerky, poor-quality film remain – the only visual testament to what was, at the time, the largest engineering project ever undertaken.

With the current expansion, the ACP saw an opportunity to take advantage of today's state-of-the-art video streaming technologies to capture every phase of the project — with the dual purpose of providing a historical record and keeping citizens informed of the expansion's progress. The ACP views its Web site, [www.panacanal.com](http://www.panacanal.com), as a window for the public into all of the day-to-day activities of the Panama Canal, including the ongoing progress of the expansion. Therefore, the agency set out to expand the site's streaming capabilities even further to document the expansion project.

### The Solution

#### The ViewCast Niagara® 7224 Streaming Appliance

To meet these objectives, the ACP chose a ViewCast Niagara 7224 streaming media solution. Specifically designed for multi-channel applications, the Niagara 7224 is a high-density media encoder for capturing, encoding, streaming, and archiving premium-quality audio and video on as many as eight channels at once.

The ACP is a strong believer in ViewCast products. For a number of years, the organization has used the ViewCast Osprey®-100 streaming video capture cards to capture Webcam images of vessels traveling through the Canal's three sets of locks. Still in use, the system provides updated images to the ACP Web site every 10 seconds. ViewCast products also played a key role in building public support for the expansion project when it was first announced in 2006. Within a two-week deadline, the ACP used ViewCast Osprey-230 cards to put together and stream an announcement presentation to the Web site. As part of a broader promotion, the presentation was viewed widely and helped contribute to the resounding success of the referendum vote in which the people of Panama approved the project.

Right after its purchase, the Niagara 7224 was put to the test. With minimal training on the system, ACP personnel were able to stream a live presentation by the CEO to employees throughout the organization. Facilitated by the Niagara SCX streaming management software, which comes standard on the Niagara 7224, the IT staff was able to stream the presentation with professional-grade quality.

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## The Solution

### The ViewCast Niagara 7224 Streaming Appliance - *continued*

The multi-channel capabilities of the Niagara 7224 have proven to be a boon to the ACP by enabling it to realize multiple video streaming goals. Today, the ACP Web site features numerous on-demand videos highlighting milestones in the expansion and charting its progress, such as the ceremony in which Panamanian President Martin Torrijos activated the explosions breaking ground on the project. Webcam views have been added to provide live streaming video from multiple construction sites. In addition, the ACP is preparing to launch a Webcast program to provide training and information on a variety of subjects to the more than 9,000 employees working on the canal throughout the Isthmus of Panama. Still other uses include streaming presentations from the ACP CEO, and streaming of a television program that provides weekly information updates on the Panama Canal.

## The Benefit

### Public Goodwill and a World of Interest in the Panama Canal

The ACP has discovered first-hand the power of streaming video to facilitate general communications, build enthusiasm for large-scale programs, and increase public knowledge and goodwill. One of the best examples is the story of a German citizen who was so enthralled by the Panama Canal that he timed his lunch break every day to coincide with daybreak in Panama, in order to watch the online Webcam views of ships going through the locks. The live video made such an impact that the gentleman, Wolfgang Bürgel, eventually scheduled a vacation to Panama to experience the canal in person.

Technology has come a long way since the building of the original canal, which left the ACP with only still photography and a small amount of film footage to document the event. Thanks to the advanced streaming technology provided by ViewCast the ACP will be able to deliver a wealth of content to their Web site to keep the public updated on all aspects of the Canal, including the expansion project, and to ensure that this monumental and historical event is recorded for posterity.

Panama Canal Expansion



Panama Canal Miraflores Locks

