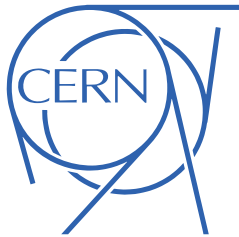


CASE STUDY: CERN

World's leading particle-physics lab relies on Wowza Streaming Engine



Tens of thousands of scientists and engineers from hundreds of research facilities and universities collaborate on experiments hosted at the European Organization for Nuclear Research (CERN). When the sophisticated broadcast system CERN operates to share its work with the world was due for an upgrade, Wowza Streaming Engine™ software was the solution.

INDUSTRY



Government

USE CASE

Research & collaboration,
live events

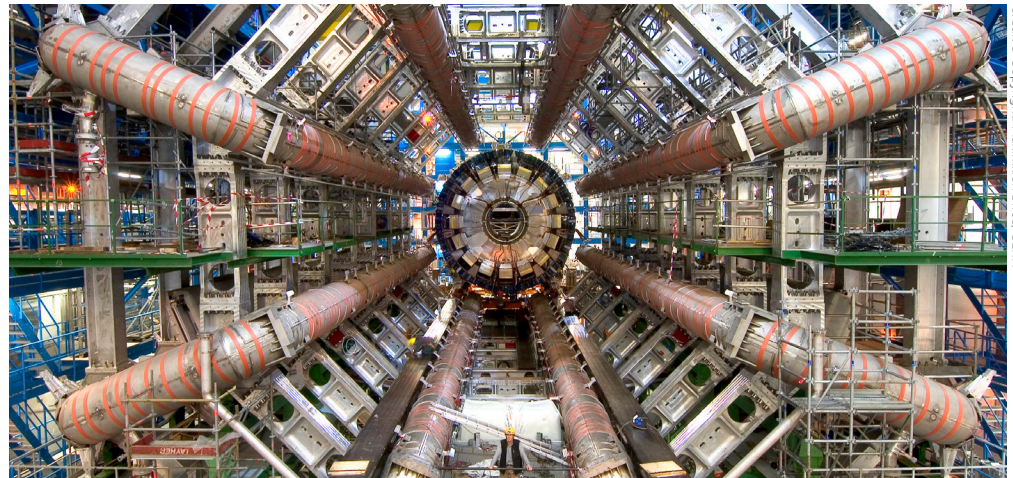
PRODUCTS/SERVICES



Wowza
Streaming
Engine



Wowza
Transcoder



Credit & Copyright: Maximilien Brice, CERN

CHALLENGE

CERN needed a media-streaming solution on par with its research capabilities to meet its internal requirements as well as the public's expectations. To accommodate the growing number of viewers on a wide range of devices, CERN began investigating solutions with three key requirements:

- The capacity to handle global delivery to any device, anytime
- Exceptional reliability
- Easy deployment and management with minimal infrastructure configuration

SOLUTION

Powering an expanded streaming program with Wowza Streaming Engine software was the solution. Wowza Streaming Engine helped power the global broadcast of one of the most monumental discoveries in CERN history—a new particle consistent with the Higgs boson, an elemental particle that is fundamental to virtually all matter.

SOLUTION (CONT.)

With Wowza™ software in place, CERN is able to achieve the following:

ENGAGING CONTENT DELIVERY: For the Higgs boson announcement, CERN streamed two simultaneous feeds—one of the speaker and one of the slideshow presentation—giving viewers a more complete and engaging experience.

STREAMLINED DELIVERY TO ANY DEVICE: Wowza software's built-in transcoding capability transforms live streams for delivery across a wide array of network conditions and devices anywhere in the world, which is vital for engaging CERN's global audiences.

SOCIAL MEDIA OUTREACH: "We were surprised by the high number of connections from mobile devices [on the day of the Higgs boson announcement]: many people saw the webcast link in social media on their smartphones and clicked on it to watch it directly that way," explains Marek Domaracky, webcast manager, CERN.

"Switching to Wowza allowed us to significantly increase our number of webcasts....

We don't have to worry about the number of connections or viewers. We're confident the infrastructure will support the load."

—Marek Domaracky, webcast manager, CERN

BENEFITS & RESULTS

Wowza technology enables CERN to offer more frequent and more robust events than were possible before. Since adopting Wowza Streaming Engine software, CERN has streamed many important announcements, drawing thousands of concurrent viewers.

GLOBAL BROADCASTING WITH CONFIDENCE: Wowza technology allowed CERN to stream the Higgs boson event at **5Gbps over more than 5,000 simultaneous connections**, including a live feed to hundreds in attendance at the world's biggest particle-physics conference.

MORE EVENTS WITH LESS EFFORT: "We organize around **300 [events] per year** now because we can do it with greater efficiency and larger capacity," says Domaracky.

EXCEPTIONAL SCALABILITY: The first-ever TEDxCERN event drew **more than 10,870 unique viewers to the live simulcast**, including viewing parties held at 27 institutions around the world. Domaracky recognizes, "With Wowza, we now have the capacity to support 6,000+ concurrent connections and can scale larger if needed."



To learn more about how others are using Wowza streaming technology, visit wowza.com or contact sales@wowza.com.