

Enhanced Safety Through Innovation: The A86 Tunnel's Cutting-Edge AID Transformation

The A86 Duplex tunnel, operated by Cofiroute, is a unique structure to the west of Paris, used by tens of thousands of vehicles a day. With a length of 10 km and two superimposed tubes, it imposes gauge restrictions due to its limited height (2.5 m per tube) and generates specific risks in the event of an accident or fire.

The **Citilog Automatic Incident Detection (AID)** system, installed when the tunnel opened in 2007, was designed to guarantee optimum safety. This system, with its fully redundant equipment, has ensured exemplary continuity of service for many years. However, the age of the equipment made maintenance increasingly complex and limited the integration of new technologies.

The major challenge was to replace the AID servers analyzing the tunnel's nearly 400 cameras. The limited number of nights the tunnel would be closed, particularly in the run-up to the Paris Olympics, and the impossibility of updating the existing hardware made the migration particularly complex.

Citilog met this challenge by proposing an innovative progressive migration solution. A gateway was installed between the old and new servers, making them compatible with each other. This solution enables the system to be gradually migrated in several stages, without interrupting service, and minimizing the need for on-site interventions, particularly during night-time shutdowns.



The A86 Duplex tunnel

The installation of the first latest-generation analyzers now enables traffic operators to benefit from Citilog latest algorithmic advances, notably in incident detection based on Deep Learning. This revolutionary technology offers greater accuracy and reliability, helping to enhance the safety of the A86 Duplex tunnel.

In conclusion, **the gradual upgrade of Citilog AID system for the A86 Duplex tunnel demonstrates Citilog ability to offer innovative solutions tailored to the specific needs and constraints of its customers**, while guaranteeing an optimum level of safety for users.