AnyConnect

The *Smarter* Camera Platform

Remote Operator and Limp-Home-Mode for Autonomous Vehicles

Version 1.0 | As seen on Remote Operator and Limp-Home-Mode for Autonomous Vehicles

What happens when autonomous vehicles get stuck or break down? They need a little help from a human

“We are on the cusp of the largest, the most consequential disruption in transportation history,” said Tony Seba. He added. “And at that tipping point (2021), if you are not ready, you are out.” The race towards autonomy as indeed started with the deployment of autonomous fleets in several countries as well as enormous investments.

One of the main challenges of autonomy is how to manage edge cases and corner cases: vehicle failures, vandalism, a drifting caddy in a supermarket parking lot as well as the last few meters/yards. In those cases, autonomous vehicles might get stuck or might have to limp home.

AnyConnect provides a solution to manage edge cases and improve the way autonomous vehicles handle those edge cases.

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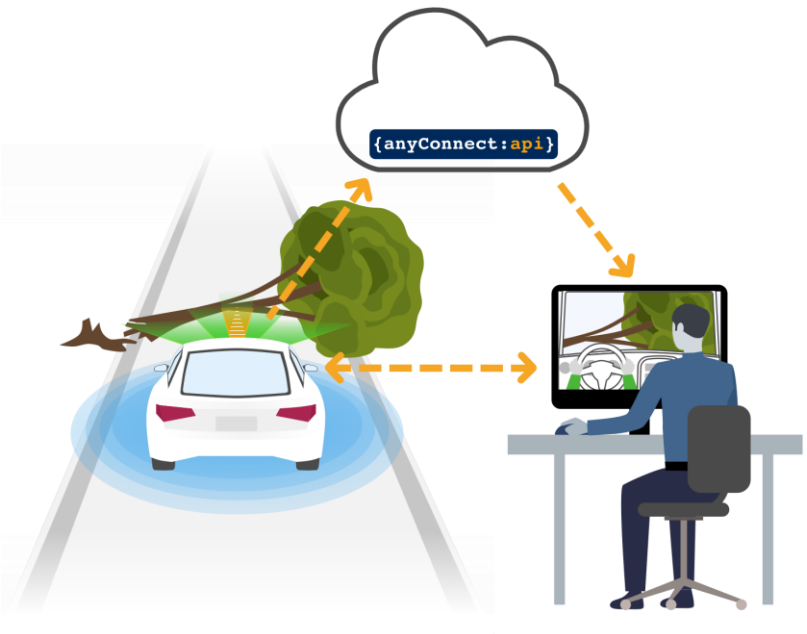
On-call, remote operator to help solve autonomous vehicles' edge cases



The AnyConnect Smarter Camera Platform enables connected, autonomous vehicles to request a human operator to intervene if the vehicle believes that there is a need to do so. Some reasons are that the autonomous vehicle:

– Got stuck (shopping cart, object on the street, vandalism, etc.)

– Detects potential passenger behavioral problems (assault, health problem, demand to speak to a human, etc.) for applications like Transporation as a Service (TaaS) & Mobility as a Service (MaaS).

– Has a technical failure and needs a remote operator to supervise it going back to its home for maintenance in limp home mode.

– Has to deliver/drop off something to a specific place, not programmed in the system, or challenging to find.

The AnyConnect platform leverages its proven technologies, such as Instant Connections, Adaptive Bitrate Streaming & Access Control, to enable human operators to assist autonomous vehicles in edge cases, by giving those operators access to live video, audio and data streams from the vehicle with the highest quality and the lowest latency based on the available link (4G/LTE & 5G). If necessary, the operator can have access to video, audio, and data recording a few minutes before the event.

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We are making Autonomous vehicles deal with edge and corner cases better

A human operator can interact with an autonomous vehicle in an edge or corner case with different interfaces. It could be as simple as a 2-choice question with an image on a smartphone, to speaking through the car loudspeaker to someone, up to an operator with a workstation and multiple displays or AR/VR headsets with a wheel and pedals.

In all cases, the system records all the operations performed by the operator for liability purposes and to provide new training data to train the car's deep neural networks, and over time reduce the need for remote operators.

Integrating AnyConnect Smarter camera platform with your autonomous or semi-autonomous vehicle is quite straightforward. On top of helping with edge and corner cases for autonomous vehicles, AnyConnect offers great functionalities for L1 to L4 vehicles, such as a connected version of Tesla Sentry Mode with instant notification and live video stream, an integrated dashcam with cloud video recording as well as aftermarket device free integration in Fleet Management Solutions with video telematics.

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Help me with remote operators for autonomous vehicles

Talk to an expert

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