What is Nokia Scene Analytics

The conventional technology of today, equipped with standard capabilities, is preprogrammed and purely tells a system what to look for. The Nokia solution eliminates the issue that over 99 percent of video, audio and sensor data records normal behavior. Nokia Scene Analytics (SA) focuses on the future state: it uses Machine Learning to "learn" what is "normal", enabling it to recognize and record only the behavior that might be of interest for safety, security and other services by itself. This reduces the amount of data needing to be processed and alerts more quickly and efficiently personnel to incidents. SA will be used as a tool for the specialist. They will be alerted to an anomaly, but it will be up to them to make sense of this and determine what to do.

This way, they save time by not having to look at screens or listening to recordings 24/7. It is also capable of extracting information from older, low-resolution CCTV cameras, building on the more cost-efficient aspect.

SA provides multi-modal stream processing using the Nokia Bell Labs World Wide Streams platform. It makes real time streaming with access to several data silos like video, audio and social media, possible.

Furthermore, unlike many security solutions that must be preprogrammed to recognize security scenarios, SA's machine learning software can learn what is normal. It's a transition from acting based on the detection of specific, predicted use cases to making a decision based on an unbiased, possible unpredicted observation constructed by algorithms. On top of that, Room40 will not only be able to leverage existing Nokia algorithms, but also train the system and develop and implement their own algorithms in real-time, taking minutes rather than months. Enriching this with their own Room40-workshops.

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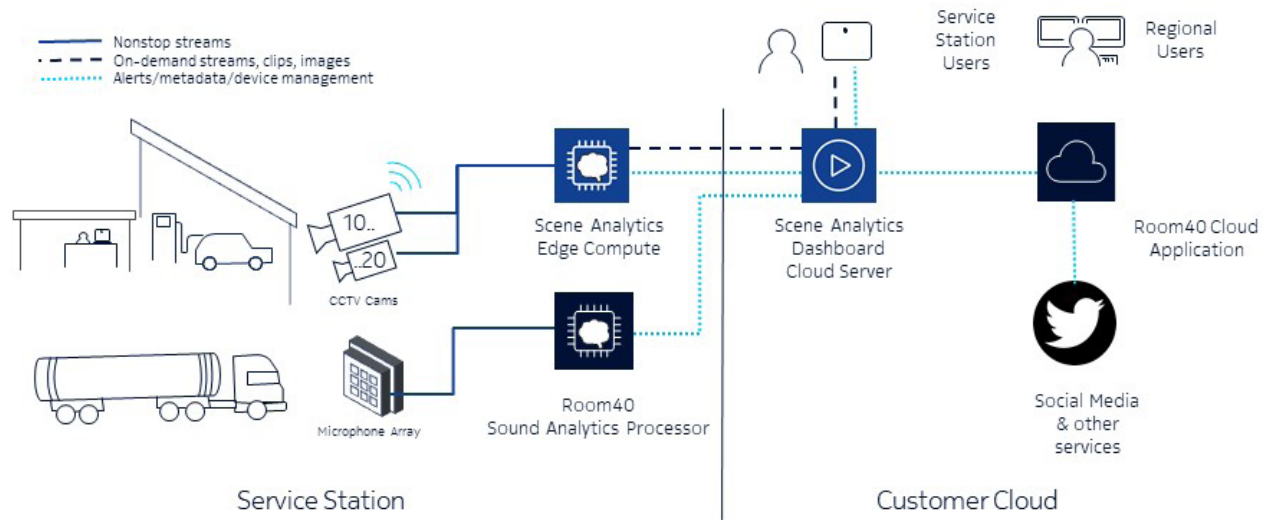jacques.vermeulen@nokia.com
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Nokia and Room40
Machine-learning based video, audio, IoT analytics

Nokia and Room40

Machine-learning based video, audio, IoT analytics

Service stations along highways are often used as rest stops by long-haul drivers. They are also the site of vandalism, theft and coordinated drug and human traffic. Unfortunately, the problem of 24/7 video and audio monitoring, either by personnel directly, private companies K9's or using software processing in the core cloud, is prohibitively expensive. Room40 and VIAS, the Belgian knowledge center for road safety and security, are jointly tackling safety and security solutions on Belgian highways using the Nokia Scene Analytics solution.

Who is Room40

Room40 is a Belgian start-up specialized in contextual solutions for information overload by using text, video, images and sound. These solutions are made by an experienced team of specialists with various backgrounds and expertise. For more information, visit the Room40 website: www.roomfourzero.com

Nokia Scene Analytics High Level Architecture
Sound & Video Analytics Alerting

Nokia Scene Analytics High Level Architecture
Call Flow