Partner

Dell EIVIC and RedZinc



Demonstrating medical emergency ambulance services over next-generation 5G mobile networks.

Background

Dublin company RedZinc developed a wearable video application, called BlueEye. In collaboration with Dell EMC, their technology was demonstrated at CIT's Sigma research lab, as part of the H2020 EU funded SliceNet project at the end of 2017.

The Need

Next generation communication technologies are being explored as part of the delivery of future emergency ambulance services. However, in such life critical situations, the robustness of the network becomes mandatory. Future 5G mobile networks provide this robustness, through the promise of guaranteed higher bandwidth, with less network delay, and for many more devices.

This development will permit new services to be delivered in life critical situations. For example, ambulances will be able to transmit live high-definition video back to the hospital, enabling clinicians to observe the patient in real-time, and to advise the paramedics on treatments to administer, ahead of the patient's arrival at A&E. To this end, RedZinc offer a wearable video device called BlueEye. In collaboration with Dell EMC, CIT's Sigma research lab was identified as suitable for demonstration of their SliceNet enabled emergency service.

The Solution

Emergency 5G

The demonstration involved the use of RedZinc's BlueEye technology, coupled with Dell EMC's cloud infrastructure and Sigma's simulated Accident & Emergency lab. The solution was based on real-time video live-streamed from the BlueEye camera back to the Sigma lab over the Dell EMC cloud infrastructure.

Critical Success Factors

This collaboration forms part of an EU funded H2020 research project, called SliceNet, and the three Irish partners are driving forward services that exploit the project's innovative 5G slicing technology, which aims to advance medical emergency management use cases, such as mission critical ambulance services of the future.

Benefits of the Engagement

The Sigma Lab at CIT specialises in the use of machine learning and artificial intelligence for connected eHealth and life sciences applications. By showcasing the SliceNet project results to Sigma's partner network, RedZinc gained invaluable exposure of their BlueEye technology.

"A&E departments are more and more seeking to move triage pre-hospital. Red Zinc is delighted to work with Dell EMC and CIT using its BlueEye wearable connected video to help optimise pre-hospital triage in healthcare." - Donal Morris, CEO at RedZinc.

"As the essential provider of ICT infrastructure and solutions Dell EMC is playing a key role in the development of the 5G architecture. This joint work with RedZinc and CIT demonstrates how critical health services will benefit from advanced features offered by 5G services." - Donagh Buckley, Senior Director, Dell EMC Research Europe.

