



Solution: Velocity EC-810 • **Industry:** Manufacturing

Use cases: Edge computing | Node-RED | LMR integration

Manufacturing plant selects Velocity for integration into their critical communications network reducing down time and increasing productivity

BACKGROUND AND CHALLENGES

The large manufacturing paper plant, based in Scandinavia, produces high quality paper from a range of renewable sources. The plant currently operates across numerous sites in difficult forestry settings and uses a mobile radio network for providing critical communications throughout the area for strong and reliable coverage as well as providing operational safety for their employees. One of their key challenges was the ability to send time critical group calls from the existing mobile radios. They also required to send short data messages (SDMs) from their extensive fire alarm system over the mobile radio network to portable radios. The plant required a mechanism for operators to check if an alarm raised was false thereby allowing the alarm to be reset before setting the main site alarm.

SOLUTION

With the Velocity EC-810 intelligent communications platform deployed, along with remote support provided by Simoco engineers to configure Node-RED workflows, the manufacturing plant is now able to send group calls to its mobile radios whether those are in fixed environments or in vehicles. Using Node-RED inside Velocity, specifically designed workflows have been setup to send SDMs from the plant's fire alarm system to any radio user on site. The customer now benefits from a safe working environment for its workforce and consequently the new solution saves the plant from shutting down and evacuating the premises in the event of a false alarm.

BENEFITS



Edge Computing

Edge Computing is at the heart of the Velocity platform providing the manufacturing plant a secure, reliable and critical communications coverage platform. The integration of Velocity into the current mobile radio network solves the issue of sending time critical group calls and SDMs to the mobile radios. The use of Edge Computing technology in Velocity means that data can be processed where it is needed rather than having to send everything back to a centralised location and then processed. This saves valuable time and reduces the amount of data that needs to be carried back and forth connecting people, equipment and, data to enable faster, smarter decision making for better outcomes. Ultimately this technology enhances smarter operations which are safer, efficient and continuously reproducible.



Integrating Velocity to send messages from the fire alarm system

Due to the size and nature of the manufacturing plant, safety is paramount, and a mechanism was required to link the fire alarm system into the existing mobile radio network. The ability to respond to an incident is paramount, in order to ensure the safety of everyone in the plant. The plant required a comprehensive integration of their fire alarm system to send messages to staff in the event of a fire or unusual heat source. The intelligence of Node-RED workflows in the Velocity solution allowed messages to be sent direct from the fire alarm system to the radios that enhance the performance and response of safety teams on site.



European characters in radios

Upon request from the customer, Simoco were able to provide Swedish characters from the SDM mobile radio and able to integrate the Velocity EC-810 into the existing mobile radio network solution thus providing a seamless integration and passing of SDM messages.



All in one intelligent communications platform

Velocity is now at the heart of the company's communication system and has provided operational efficiencies by allowing the plant to integrate its current critical communication network with Velocity and the customer is delighted with the solution. The company is now looking to make use of the additional features within Velocity such as Wi-Fi hotspots and Bluetooth interconnectivity.

For more information, please visit <https://www.simocowirelessolutions.com/products/velocity/>



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