HOW IOT CAN HELP ELDERLY HOMES

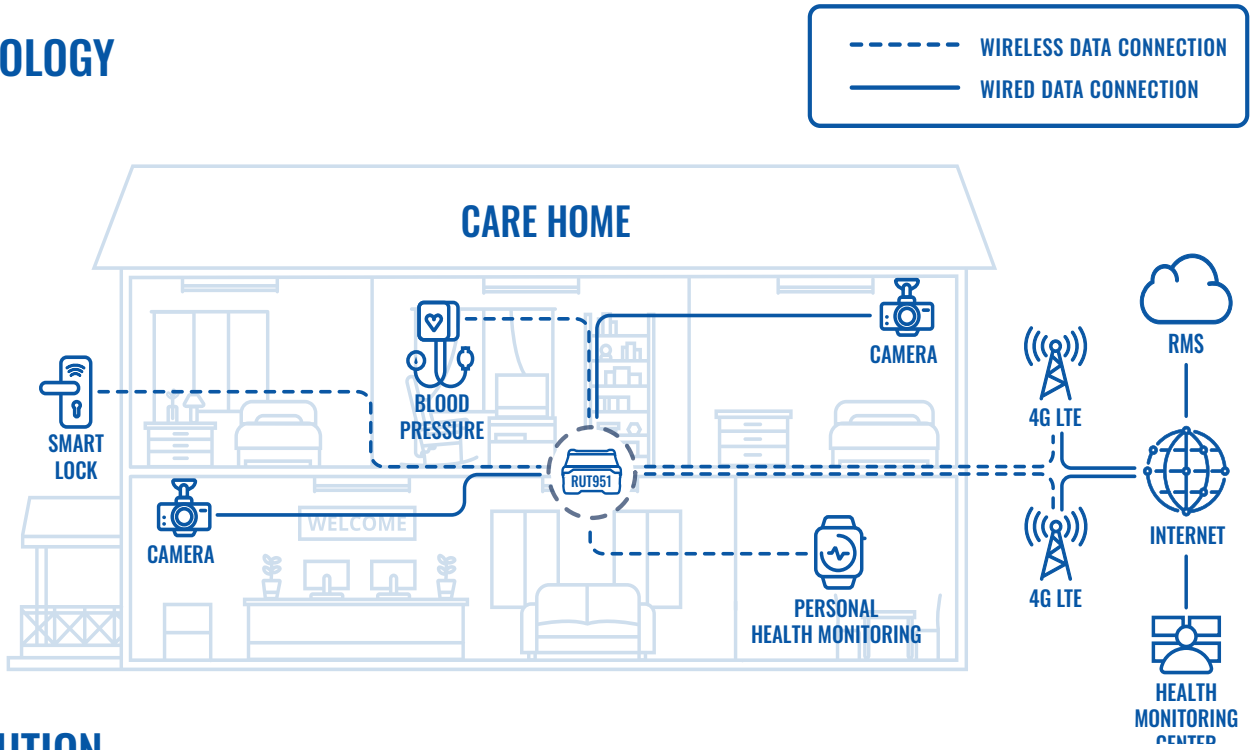
SUMMARY

In 2019 total world population exceeded 7.7 billion, out of which, about 800 million are considered elderly people. According to Worldbank, currently, about 10% of the world's population consists of people whose age is more than 65 years. A part of them requires constant supervision because of health problems and other reasons. There are many care homes across the world that provides accommodation and personal care for an elderly person. Personal care includes assistance making the food, socializing, dressing, taking medication. However, a care worker cannot replace a family and provide care and comfort for 24/7.

CHALLENGE

Today, as the world is still facing the novel Covid-19 crisis countries across the globe are enforcing quarantine and social distancing measures. One of the most crucial actions is to limit access to older adults since they are in a group of people who might be affected strongest. Because of this, the limitations include visiting restrictions. However, relatives still need to communicate with their family members, and care workers must be able to provide essential health services. Because of this, Internet-based IoT solutions used in elder care homes are growing in popularity. This includes health monitoring devices like blood pressure testing devices and portable personal health monitoring equipment. Besides, CCTV and smart lock solutions are used to enable remote monitoring and access. Finally, socializing is more important than ever; therefore, video conferencing with care workers and relatives is becoming a new norm. These solutions require stable and reliable and secure Internet access, which is a challenge both due to the lack of existing infrastructure, limited access of network installers available during the social distancing period, and technological competence of older adults.

TOPOLOGY



SOLUTION

The solution presented above revolves around a professional cellular router – RUT951, which provides essential connectivity for multiple health monitoring, security, and socializing devices. The internet source is 4G LTE and then RUT951 shares it wirelessly to blood pressure detection and personal health monitoring devices and forwards to remote health monitoring centers. Besides, wireless connectivity is used to connect the smart lock system, which enables care workers and relatives to access care home or their relative home in case of emergency and get notified if anyone else is at the door. Moreover, RUT951 provides wired access to CCTV cameras inside the home that enable visual monitoring to confirm if there's an emergency. Finally, socializing is an essential part of this solution, so the router can provide secure WiFi service to smartphones and personal computers that can be used for video calls.

BENEFITS

- Uninterruptable Internet – RUT951 is equipped with 2 SIM cards, with which you can use two different operators to create reliable internet source.
- WiFi – with RUT9 series products you can connect up to 100 users at a time, you can limit data consumption and make access restrictions.
- Easy to use – it will be simple to deploy the products since the simplicity of user interface is one of Teltonika's key advantages.
- Remote management – RUT9 series products are capable of supporting our software system – RMS, with which there is a possibility to preconfigure all devices.

WHY TELTONIKA?

Teltonika's values include helping people have better quality lives with the help of connected technologies. This use case shows how using a single professional router, you can take better care of their loved ones with the help of IoT and Internet connectivity. The showcased product – RUT951 is deployed in the most complex industrial and public solutions but is as easy to use as any consumer device in the market. In this case – it is an ideal and essential connectivity component to enable better lives of people at risk during these difficult times of the pandemic.