5G ECOSYSTEM

POWERED BY

RETELIT | opNet

ENABLES **SMART ENTERPRISE AND FACTORY 5.0**


SMART SOLUTIONS FOR FACTORY AUTOMATION
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Fanuc Experience Center 5.0

AI AND 5G AT THE SERVICE OF THE DIGITAL FACTORY IN THE NEW EXPERIENCE CENTER 5.0 BY **FANUC ITALIA**

Fanuc Italia, the Italian headquarters of the world leading company in the field of **robotics, numerical control and industrial automation**, inaugurated the **Fanuc Experience Center 5.0** in **Milan** on the occasion of the **Technovation Forum 2023** whose leading theme was "**Artificial intelligence in the industrial sector**".

Fanuc Italia's showroom and test center area became a **5G ECOSYSTEM** powered by **Retelit** and **OpNet**.

5G Ecosystem

DIGITAL FACTORY, ROBOTS AND INDUSTRIAL AUTOMATION: A MODEL FOR INTEGRATION OF SKILLS

Retelit and **OpNet**, in collaboration with **Cnext**, have created a system of specific and converging skills to create an automated and robotic factory never seen before, in which **5G SA network, IIoT applications, AI** and **intelligent robots** communicate and coexist.

The Showroom shows this synergy at work based on the digital criterion and versatility, which - together - trigger various enabling technologies: **VR, AR, Metaverse, Preventive, Predictive Maintenance** and much more. All active, one next to the other, inside the **factory**.

It is a concrete example of integration of skills that gives shape to **robotic manufacturing**, thanks to a new matrix approach, with very high levels of efficiency in production.

5G Ecosystem powered by Retelit & OpNet

INTEGRATION = MULTIPLICATION OF VALUE

FANUC

Definition of **use scenarios** (control, action, maintenance, etc.) and triggering of:

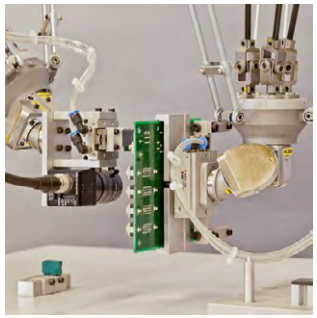
- **5G Robot**/Device and Robot/Application communication **requirements** according to a logic of differentiation of communication profiles consistent with the logic implemented on the **factory subnetworks**.
- **development requirements** for edge applications on cloud-based architectures open to integration with **factory IT systems**.

OPNET

From **wireline** to **5G Wireless LAN** with **low latency** and **high reliability** for fixed and mobile objects: design, installation, configuration and management of the **customer's 5G network** based on the coverage needs, functionality, quality, sizing and security requirements required from the **factory subnetsdiam**.

RETELIT

Edge computing applications distributed for proximity (FANUC Data Center) and central (Retelit Avalon3 DC) to create **real-time analysis**, control and command, **predictive maintenance**, etc. scenarios. of the plurality of connected objects and integration with corporate and software platforms (**MES**).



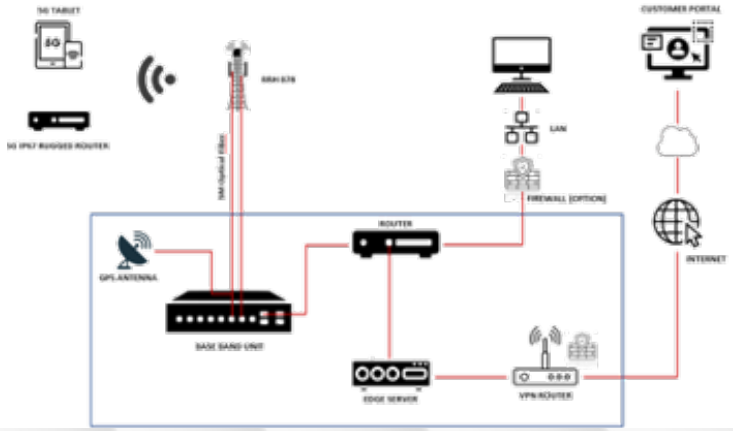


5G at the service of the Digital Factory

ROLE OF **OpNet**

OpNet provided the **Private 5G SA network** that supported the remote-control, **AI** e **VR** applications for all "robots expositions areas" developing logical connections between robot/device 5G and robot/application servers.

A **successful experience** for OpNet which is a concrete example of **integration of skills** that shapes robotic production, thanks to a new approach to sharing responsibilities with **partners** and **customers**.



5G at the service of the Digital Factory

THE VOICE OF THE CUSTOMER

Thanks to **5G connectivity** we have the opportunity to offer greater flexibility and efficiency to the entire manufacturing sector. **The winning combination of robotics, 5G and artificial intelligence offers companies the possibility of automating their production and optimizing human-machine collaboration** for a working environment in which safety, satisfaction and innovation go hand in hand.

I believe that **investing in automation** is among the most strategic choices that a **manufacturing company** can make to maintain a leadership position. These are strategic choices that are also successful from an economic point of view: the data confirms how investments in automation pay off in less than a year.

***Marco Delaini**, management director of Fanuc Italia and vice president of Fanuc Europe.*

5G at the service of the Digital Factory

FROM THE VOICE OF THE CUSTOMER, A CLEAR VISION OF THE POTENTIAL OF 5G NETWORKS IN MANUFACTURING AND ROBOTICS:

5G now allows machines to be managed even more easily from a tablet, starting **processes** and **applications** and taking the **automation of production processes** to a **higher level**. Among the main advantages: **faster, more stable, reliable and secure connectivity**; exchanging large amounts of **data** in real time between numerous IoT devices and connected sensors; and remote management of industrial and robotic systems efficiently and without the constraints of physical cables.

*FOR A T**RULY INTELLIGENT DIGITAL FACTORY**, WHICH ALLOWS CLIENT COMPANIES **TO REDUCE PRODUCTION COSTS AND IMPROVE PRODUCT QUALITY**.*

5G ECOSYSTEM powered by **Retelit** & **OpNet**
Enables **Smart Enterprise and Factory 5.0**

Let’s get into Experience Center 5.0

THANK **YOU**