

b-com *Wireless Edge Factory*

A 5G Mobile Edge private connectivity enabler



b-com *Wireless Edge Factory* is a cloud native wireless private network solution offering end-to-end tailored communication services that are deployed and run in a fully secure manner. The solution allows to build optimized, cooperative and coordinated networks and Edge Clouds for verticals.

{key features}:

- ◆ **Security:**
 - Unified SIM-based WLAN/Cellular authentication (EAP-AKA, EPS/5G-AKA)
 - Orchestrated security policies
 - Network slice based isolated services
- ◆ **Cellular Technologies:**
 - 4G, 5G
 - NB-IoT
- ◆ **U-Plane Management:**
 - Traffic steering
 - Service Function chaining
 - Data plane QoS enforcement
 - Unified DHCP for cellular & WLAN
- ◆ **Deployment:**
 - Compatible to Commercial Off-The-Shelf Wi-Fi Access Points, eNodeBs and 5G-NR gNodeBs
 - Deployment on standard IT equipment

{benefits}:

- ◆ **Compact & cost effective solution for private/corporate operators**
- ◆ **Service continuity between RANs**
- ◆ **Automatic network capacity scaling**
- ◆ **Fast installation and provisioning procedures**
- ◆ **Fully secure and reliable communications**

{applications}:



Industrial & Academic Research for private networks prototyping and demonstration.



Rolling out private Cellular/WLAN networks in corporate or **industrial sites** where people need to access to both the internet and company collaboration tools.



Smart cities with heterogeneous communication facilities spread out in various places such as parks, schools, universities, malls, and government buildings.



Hospital, laboratories and military camps when confidentiality and security are key.

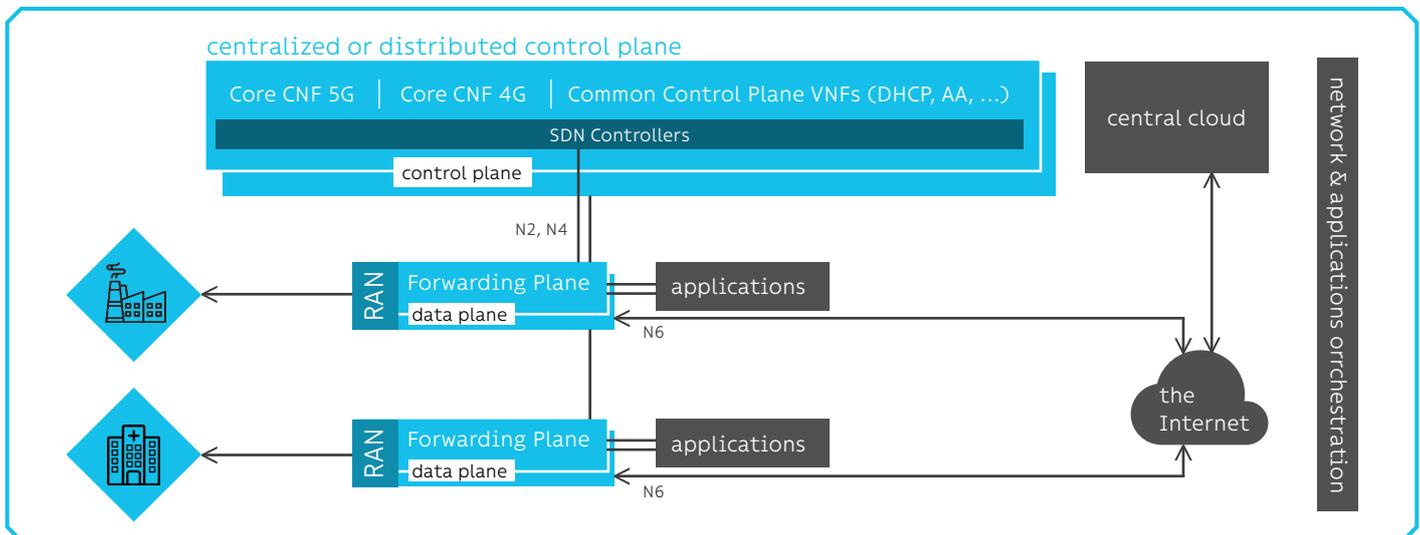


Venues, festivals or densely populated places where people could benefit from additional and coordinated radio resources.

{specifications}:

- ◆ SDN (Openflow, OpenDaylight controller)
- ◆ VIM : Kubernetes
- ◆ Orchestration: ONAP
- ◆ Preloaded with:
 - LTE EPC (MME, S/P-GW, HSS), 5G-NR NSA supported
 - 5G NGC (AMF, SMF, NRF, AUSF, UDM, UPF) decomposed in micro-services
 - WLAN 802.1x Core
 - NB-IoT Core
 - LoRa Core Servers (NS, AS, CS)

{overview}:



{about b com}:

A technology pioneer and provider for companies that want to digitally boost their competitive edge, b<com> addresses several industries: culture & creation, digital infrastructures, health, defence and industry 4.0. Its laboratories bring together talented people from a variety of disciplines and cultures in areas like artificial intelligence, immersive video and audio, content protection, 5G networks, the Internet of Things, and cognitive technologies. b<com>'s researchers and engineers, drawn from the ranks of industry and academia, work at its Rennes campus and at its sites in Paris, Brest, and Lannion. Thanks to its world-class engineering team, its technology platforms and its unique mix of scientific and industrial knowhow, b<com> offers its clients technology solutions that give them invaluable competitive edge.