

BT will use Ubuntu and OpenStack to power 5G

ABOUT BT

- The largest provider of consumer fixed-line voice and broadband services in the UK.
- The UK's largest mobile network operator.
- Serve global multinational organisations with security, cloud and networking services.

HIGHLIGHTS

- The speed at which software can be updated compared to replacing core network equipment will lead to a new way of working for the development of 5G services where BT can build new services in weeks and deploy in days.
- The full 5G Core is also a vital step on BT's convergence of network technologies, bringing together fixed, mobile and WiFi into one seamless customer experience.

“ Canonical is providing us with the ‘cloud-native’ foundation that enables us to create a smart and fully converged network. ”

Neil J. McRae
BT Group Chief Architect

Today, Canonical announces its Charmed OpenStack on Ubuntu has been selected by BT as a key component of its next generation 5G Core.

Canonical, the company behind Ubuntu, will provide the open source virtual infrastructure manager (VIM) as part of BT's Network Function Virtualisation (NFV) program, and the transition to a cloud-based Core network.

This open source cloud-based approach will ensure that BT can quickly deploy new services, and increase capacity to stay ahead of customer demand driven by 5G and FTTP. Canonical's OpenStack architecture will also facilitate the delivery of BT's full 5G Core network.

Openstack cloud software will enable the separation of network hardware and software, turning Core network components into software applications, meaning they can be updated faster with continuous integration and development. This separation allows different network applications to share the same hardware across data centres, making the network more resilient and scalable when additional capacity is needed. The speed at which software can be updated compared to replacing core network equipment will lead to a new way of working for the development of 5G services where BT can build new services in weeks and deploy in days.



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“Utilising open source and best-of-breed technologies will ensure we can deliver on our convergence vision, and enable a world-leading 5G and FTTP experience for our customers.”

Neil J. McRae
BT Group Chief Architect

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Mark Shuttleworth, CEO of Canonical, said: “BT has recognised the efficiency, flexibility and innovation afforded by an open architecture, and realises the value of such an approach in enabling its delivery of new 5G services. We’re delighted to be working with them to deliver the foundation to this approach, which will underpin BT’s 5G strategy.”

BT’s EE mobile network switched on 5G in six launch cities on Thursday 30th May 2019. Customers and businesses in London, Birmingham, Cardiff, Manchester, Edinburgh and Belfast are the first places in the UK to experience the benefits of 5G. BT has also outlined its 5G roadmap, which will see the cloud-based full 5G Core introduced from 2022.

The higher bandwidth and lower latency, coupled with expansive and growing 5G coverage, will deliver a more responsive network, enabling truly immersive mobile augmented reality, real-time health monitoring, and mobile cloud gaming. The full 5G Core is also a vital step on BT’s convergence of network technologies, bringing together fixed, mobile and WiFi into one seamless customer experience.

Further developments, able to be introduced with more agility thanks to the cloud-based architecture, will introduce Ultra-Reliable Low Latency Communications (URLLC), Network Slicing and multi-gigabit-per-second speeds. This phase of 5G will enable critical applications like real-time traffic management of fleets of autonomous vehicles, massive sensor networks with millions of devices measuring air quality across the entire country, and the ‘tactile internet’, where a sense of touch can be added to remote real-time interactions.