

UNLEASH POSSIBILITIES AT THE EDGE

5G and edge technologies are empowering a new era of digital innovation across industries.

To unlock 5G's potential to deliver new services and consumer experiences, businesses need a strong ecosystem where IT infrastructure, connectivity, and applications converge.

But navigating the ecosystem of solution providers can be complex for enterprises.¹ The Singtel-Intel collaboration simplifies the road to digital transformation success - bringing the right resources together for enterprises to deploy 5G edge faster and smarter.

Uniting best-of-breed knowledge and ecosystem partners

The Singtel-Intel collaboration unlocks the immense potential of 5G connectivity and high-performance computing at the edge.



5G

- Ultra-low latency
- Service assurance



High-performance edge computing

- Real-time responsiveness
- Scalability



Enhance operational efficiency and new business possibilities, leveraging innovations such as:

- AI inference
- AR/VR
- Real-time video analytics

How can Singtel and Intel help enterprises?



A leader in 5G deployment

- Singapore's first and most powerful 5G SA network
- High-speed connectivity for data-driven success
- Singtel Paragon - the industry's first all-in-one platform for multi-cloud orchestration, edge computing, and 5G.
- Enables businesses to implement 5G MEC solutions in a few clicks



An enabler for edge computing

- Provides a high-performance Edge video platform with Intel XEON Scalable Processors and Intel Data Center GPU Flex Series
- Powers edge compute with open 5G-Edge platforms for consistent developer experience
- Rich ecosystem programmes like the Intel Network Builder spur efficient deployment of end-to-end solutions
- World leader in CPU power with a wide selection of platforms for scalability
- Enables state-of-the-art sustainable technologies for MEC for sustainable Singtel edge computing platform

This alliance, combined with a strong global ecosystem, will propel the adoption of 5G.

Singtel and Intel are joining forces with application developers, infrastructure builders, and system integrators to unlock a world of new business solutions.

In today's competitive digital landscape, this strategic alliance will enable enterprises to adapt with ease and stay ahead of the curve.

Benefits for businesses

01

Innovating with one of the fastest 5G + edge

Singtel and Intel are building a next-gen MEC incubator to enable businesses to trial and refine their 5G edge use cases.

The MEC incubator is powered by Singtel's 5G edge, Intel's XEON Scalable Processors, Intel Data Center GPU Flex Series and other Intel offerings. As an added advantage, enterprises can plan the rollout of new experiences and services.

02

Accelerating content delivery

Consumer demand for content streaming is skyrocketing,² and current CDN infrastructure is too centralised to deliver a lag-free experience.³

Singtel and Intel offer an edge-enabled CDN that boosts content delivery performance with lower latency and reduced back haul. Beyond content streaming, other use cases include digital twin, mixed-reality and cloud gaming.

03

Digitalising sustainably

Nearly 50% still struggle to align sustainability and business goals.⁴

A world leader in CPU power and sustainable technology, Intel will collaborate with Singtel to enable sustainable technology from Cloud to Edge. By optimising power usage, this solution will help enterprises lower their carbon footprint.

Leading use cases for 5G & edge



Content Delivery Acceleration at the Network Edge

Accelerates content delivery by caching content at the edge, through a powerful synergy of Singtel Paragon's 5G MEC, high-performance CDN, and Intel's XEON Scalable Processors.

Through accelerated content delivery powered by MEC, OTT content providers can deliver 4K streaming at scale with outstanding QoE, on any device; digital twins can obtain high resolution video for business critical use cases.

Results:

- 46% better performance for high-definition streaming 4K videos over 5G MEC with startup time close to the second
- High reliability during traffic surges with Paragon's seamless scaling of the CDN in real-time



Immersive, Real-time MR Experience | Solution Provider: HTC

This immersive demo—jointly showcased by Singtel, Intel, and HTC—features an aircraft simulator designed for hands-on workforce training in an immersive virtual space.

Results:

- High-quality, real-time mixed reality data streaming with interactive 3D models
- Improved training and design efficiency
- Improved learning performance and engagement
- Enhanced workplace safety and security



Advanced Video Analytics for Industry 4.0 | Solution Providers: Axis Communications & Ipsotek

Powered by Singtel Paragon and Ipsotek's VISuite AI, this video analytics solution transforms existing IP cameras into intelligent devices on the edge.

Results:

- Enhanced situational awareness supports real-time response
- Smarter health and safety management with intelligent Unauthorised Path Deviation, Trip and Fall Detection, and PPE Detection



Sustainability for Edge Computing | Solution Provider: Quanta Cloud Technology (QCT)

As demand heats up for high-performance computing capabilities, energy-saving technologies are crucial to stay sustainable.

Based on Intel chip technologies, QCT's Liquid Cooling Solution enables power saving across cloud to edge—enhancing the energy-efficiency of Singtel's MEC.

Results:

- Power usage effectiveness (PUE) of 1.07 (without chiller) - 1.6 (with chiller)
- Smart optimisation of performance and power for dynamic workloads

 www.singtel.com/5gecosystem-Intel

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