Mobile edge computing (MEC) puts processing power and storage where it’s most needed: at the edge of the network, close to where data is generated. As part of a cloud computing solution, MEC helps enterprises and organizations reduce latency and—particularly when coupled with 5G—makes access to remote servers vastly more efficient.

But a public MEC itself is not a solution for every problem. Some applications require even lower latency, enhanced security, data sovereignty and control over computing and communications infrastructure. In those situations, a private MEC may be a more appropriate approach.

A private MEC essentially takes the public network out of the equation, allowing you to deploy an end-to-end solution with a fully managed on-premises cloud computing platform, tightly integrated with a private onsite 5G radio access network (RAN). For added flexibility and utility, a software-defined wide area network (SD WAN) can be integrated to securely connect to other locations or your existing data center.

Why a private MEC may be right for you
Cloud computing and MEC are powerful tools for digital transformation and appear in many public-facing applications. However, a private MEC may be the answer if you need the lowest available latency or enhanced security and data sovereignty for applications such as telemedicine, automated guided vehicles, intelligent logistics, predictive maintenance, robotics or factory automation.

A private MEC can connect a warehouse or manufacturing plant full of devices with a private onsite 5G network, processing and storing the data locally to support the most critical and sensitive applications. And when it’s necessary to connect with remote data centers or other locations, private MEC makes it happen over a secure SD WAN connection. You maintain control over your data and the overall private MEC solution, providing flexibility and peace of mind.

Possible applications for private MEC
There are many possible use cases for private MEC, where low latency, high bandwidth and enhanced security are important. Here are some of them:

- **Logistics quality** – Computer vision and machine learning (ML) ensure the accuracy of item picking
- **Predictive maintenance** – Data from IoT sensors and cameras combined with data analytics improve machine utilization
- **QA automation** – Low-latency computer vision combined with ML catches production defects before they reach customers
- **Automated guided vehicles (AGVs)** – Monitor and direct plant-floor AGVs in near real time to improve operational efficiency, enhance safety and reduce collisions
- **Airport ground operations** – Track, monitor and analyze activity around aircraft and integrate ground and flight operations, fleet planning, passenger reservations and aircraft maintenance
- **Critical infrastructure monitoring** – Improve management, reduce inspection costs, monitor safety in near real time and manage the physical condition of assets

Learn more:
To learn more about private MEC, contact your Verizon Business Account Manager.