

Fortress Data Centers Use Case.

Content Delivery Networks, Edge and 5G





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Introduction

It is true that in the delivery of content via the internet, the closer the data is to the user, the faster and typically better the experience. There are exceptions such as when data is changing on a near real-time basis where a central system needs to feed the latest information but even in this case, historical data can be stored on the Edge. An example is with stock market prices. It is not practical to put all real-time data on the Edge but having a historical graphing system close to the user could be useful for older data and traders.



Content Delivery Networks like Akamai have been around for decades and have led the way in getting content data to the Edge. The new paradigm is pushing the Edge even closer to the end user as illustrated by the use cases here. While Edge typically meant distributed server farms or large data centers, now it means everything from light pole based micro-servers to cell phones and local data centers. In the future, it will also mean anything smart and embedded with smart capabilities. Smart is defined here as things that can be connected to a local area network or the internet and provides services such as data processing or storage. With CDNs requiring immense data storage, the movement to anything man-made having smart capabilities will be required to build personalized data clouds around the user.





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Use Case

Social media networks use CDNs that are set up on servers located across the world. We see our Instagram pictures and those we follow with little latency when requested. But with the advent of video and now, more concentrated resolutions like 4K. 8K as well as virtual reality and 360° content, the demands on the networks are increasing incrementally. 5G networks though carriers like Verizon, T-Mobile or AT&T will improve the ability to have better and faster experiences but more content is on the way so the demands on 5G will continually increase.



Scenario

Jane Doe is a work-from-home YouTube video star. She creates videos on fashion trends and has several hundred thousand fans across the world. She relies on aettina her content to her fans quickly because her competition is vying for a similar fan base. She also hosts live events where her followers can ask her questions about trends and do virtual meet-and-greets and virtual photo ops. YouTube and Google have one of the most extensive server systems in the world but also need to get to the local light pole server at some point in order to be even closer to the end user. With Fortress Data Centers, the carrier neutral Meet-Me Room acts to bridge the hyper-local such as light pole servers to the local data center to the cloud.





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Use Case

In the work environment, distributed knowledge workers also mean that there are employees that have the knowledge to do the work but are typically not at the place it is needed. Using systems that have supported and non-supported guidance along with video, still imagery and integrated local sensor data allow companies to better respond to job challenges. A CDN with a local Edge serving environment connected via 4G or 5G provides a solution that saves the telecom company time and money. It also means customers are better served providing long term customer value and retention.



Scenario

Jack Doe supports a national telecom team of maintenance workers. This includes teams that are sent out into the field to fix outages and upgrade infrastructure. They use augmented reality see-what-I-see to give Jack a first-hand look at the challenges the team members face. Many times, these in-field workers are young, newly hired employees with minimal training so having access to Jack and locally served content speeds up their efficiency and effectively at getting the job done. More static data such as how-to and checklist guides are at the Edge while Jack dynamically supports over the improved network.

Like with the YouTube star, Fortress Data Centers is a link in the chain of improved performance of data serving with Edge Data Center services including Meet-Me Room and Mission Critical Colocation.

