



5 things you should know about computing outside your data center

With the dramatic increase in data generated by mobile devices and connected machines, centralized data centers and public clouds are too far removed from where the action takes place. To get the real-time insights you need, here are the five things you should know about computing outside your data center.

Cisco UCS® with Intel® Xeon® processors



*IDC estimates that nearly half of the servers in use today are located outside the data center.**

**Server Workloads: 2014 Models, IDC, June 2014.



1. The cloud is great,

Many cloud advocates are declaring that soon everything will be stored in the cloud. But while the cloud will surely be a means of IT innovation, there's a problem: bandwidth.

2. But every second counts.

People's phones and tablets—not to mention connected sensors and smart appliances—are creating more data than ever. But translating this data into action means that you need to analyze it on the spot. You need computing power right there in your stores, schools, businesses, and hospitals (to name just a few examples).



3. In a "smart" world,

Retailers can differentiate themselves by customizing the shopping experience while customers are still in the store. Cities can respond to data from sensors and use smart screens to communicate with citizens in emergencies. Connected manufacturing facilities can use real-time data to reduce manufacturing time, inventories, and supply-chain costs.

4. So look to the "fog"

Whereas the cloud holds data "up there"—distant and remote—the fog holds data locally. It's what makes real-time insights and action a local concept. But because each locale is fully connected to the much larger whole, you can manage everything as a single system.



By 2018, 40 percent of the data created by the Internet of Things (IoT) will be stored, processed, analyzed, and acted upon close to, or at the edge of, the network.

— "IDC Futurescape: Worldwide Internet of Things 2015 Predictions," IDC, Dec. 2014.



5. For the solution.

You need a platform small enough that you can put it nearly anywhere, but powerful enough that it can scale for real-time analytics. It needs to stand on its own while also integrating with the whole. And in a perfect world, it should use all the same management and automation tools as the rest of your computing platform.