FUJITSU

White Paper

Is software or hardware defining your data center? Or is it your business?

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The impact of digitalization on data center architectures

The emergence of the software-defined data center (SDDC) raises a lot of key questions. For example: How will the new software-defined paradigm impact the platform architecture of modern data centers? Which technologies are suited to address the requirements of specific scenarios? How can you be sure that you have the best solution for your business? This white paper provides you with a brief overview and outlines crucial aspects of the SDDC.

As we all know, the digitalization of our world is progressing at breathtaking speed. Connected cars, smart homes, a large array of new intelligent devices and the increasing number of sensors are examples of the ongoing fusion of the physical and digital worlds. All of the data generated today is collected, aggregated and analyzed to help people make much better decisions. In the long run digitalization will lead to an intelligent, human-centric society, allowing us to improve our business processes and our private lives as well.

This progress will have a huge impact on our IT systems. In addition to the predominant IT architectures we have today, the so-called first platform based on mainframe environments and the second platform with client/server environments, a third platform is currently taking shape in the IT world. This third platform, a term coined by IDC analysts, is the enabler of the cloud, big data, enhanced mobility and the integration of social media.

Not surprisingly, the third platform needs to deliver extreme and flexible scalability – which is known as "hyperscalability." It has to deal with billions or trillions of connected users, devices and things. The third platform will be powered by modular industry-standard servers. And it will demand new types of hyper-scale storage. Finally, the third platform will transform a network into meshed fabrics that are called the "new IP."