

# THE FUTURE OF THE DATA CENTER: ARE YOU READY?

The software-defined era is fast approaching. To stay ahead of the competition, you need to keep up with the times. Leveraging the flexibility of a software-defined data center can help you move innovation forward. Take a look at how far we've come and where we're going.

## The Evolution of the Data Center

Mainframe computers of the past opened the door to new technologies. These once-new technologies revolutionized computing. Today, they could stand in the way of delivering flexible and efficient technology-based services.



1940s Early mainframe computers come on the scene.

#### 1960s

Mainframes go mainstream. Compute functions are partitioned (virtualized) to improve use.

#### 1970s

ARCNET<sup>\*</sup> and ARPANET<sup>†</sup> are early precursors of the internet.

#### 1980s

The personal computer arrives. Early virtualization technologies are abandoned as multitasking moves out of the data center.

### Late 1990s

The emergence of the internet creates an explosion in demand for data centers with advanced capabilities.

1990s Client-server computing begins. Computing moves to the data center.



#### Early 2000s

Internet demands catch up with the data center, creating massive power and efficiency challenges.

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Traditional data centers with silos of computer,
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storage and networking are now too complex and
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rigid for modern IT demands.

#### Mid 2000s

x86 server virtualization arrives to help improve utilization of the internet-era data center.

#### Early 2010s

Virtualization extends to storage and networking.

#### Late 2000s

Software as a Service (SaaS) and "the cloud" arrive. Multitasking functions begin to move back into the data center. Modular data centers appear and advanced virtualization opens the door for the cloud.

> Today Cloud technologies are increasingly automated and hybrid in nature.

By moving into the software-defined era, data centers can leverage new and helpful technologies of the 21st century.

A software-defined data center (SDDC) can help you keep up with the times and stay ahead of the competition. Discover how in our white paper, <u>The Future of the Data Center Is Software Defined.</u>

\* Attached Resource Computer NETwork (ARCNET or ARCnet) is a communications protocol for local area networks, the first widely available networking system for microcomputers. † Advanced Research Projects Agency Network (ARPANET) was an early packet switching network, the first network to implement the protocol suite TCP/IP, both contributing to the technical foundation of the internet. © 2016 Dell Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. Dell<sup>™</sup> and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.