

# HEAD IN THE CLOUDS

## THE FUTURE OF COMPUTING TECHNOLOGY

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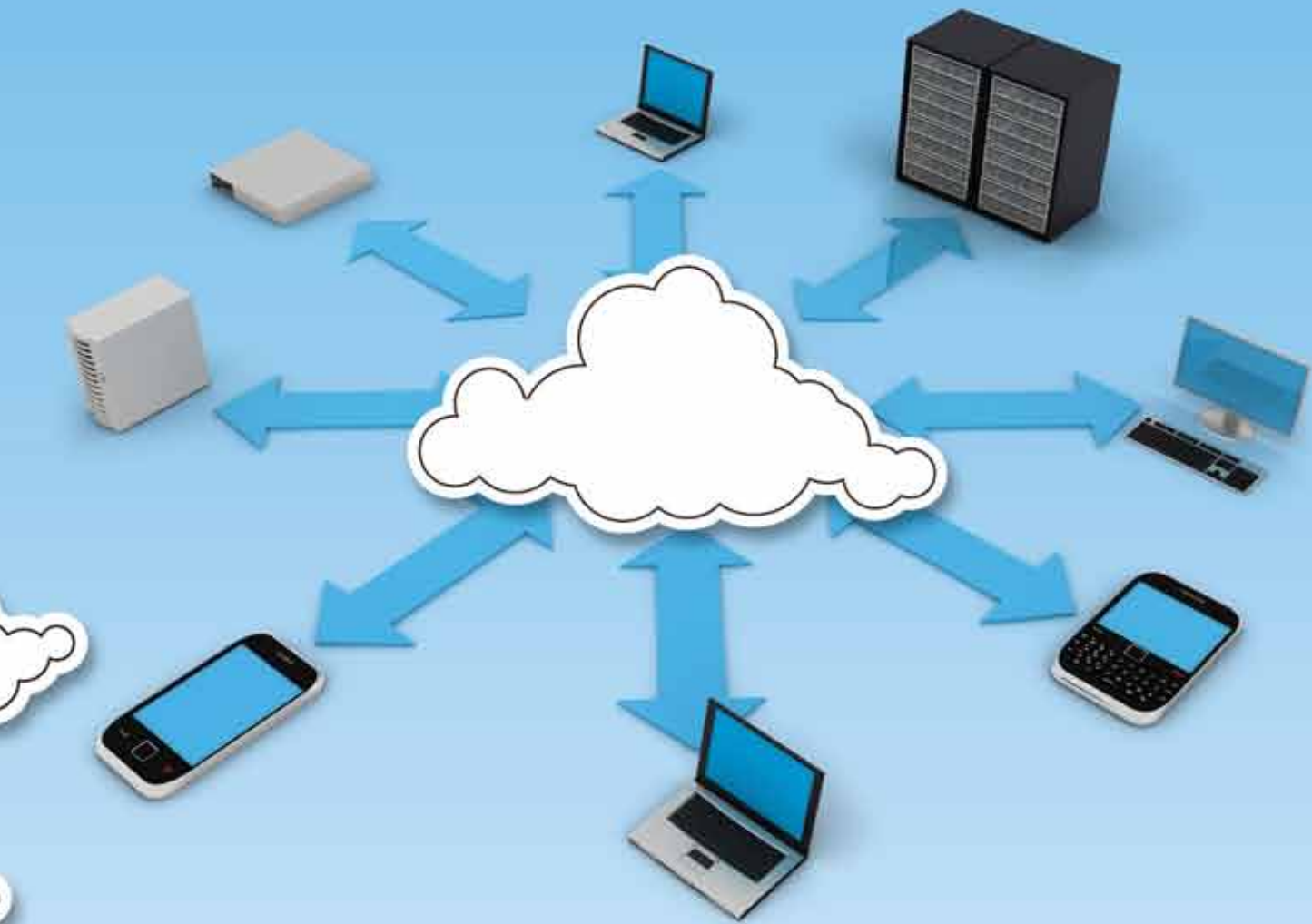
“CLOUD COMPUTING,” OR COMPUTING IN THE “CLOUD,” IS THE LATEST EMERGING TECHNOLOGY BEING OFFERED TO BUSINESSES LARGE AND SMALL, BUT IT HAS ITS ORIGINS WITH THE BEGINNING CONCEPTS OF THE INTERNET AS WE KNOW IT TODAY.

Robert Metcalfe is considered to be the inventor of Ethernet\* (not to be confused with the Internet). Ethernet was conceived as a method of allowing computers in different locations to communicate and share data with one another. Although the necessary infrastructure was not in place at the time, Metcalfe and others would offer this idea in the form of generalized sketches where various computers were drawn as icons, and lines from each of them extended to a drawing of a cloud. The cloud represented the wiring, cabling, and other equipment that would be required to support this communication.

Today, the Internet has evolved into a high speed conduit for millions of simultaneous connections. The continued advances in processor speed, connection speed, and data transfer methods have made the “cloud” that was envisioned years ago a reality. This includes what we know as the “World Wide Web.”

The term “cloud” has been applied to a number of areas, each with unique capabilities.





## CLOUD COMPUTING

This refers to the ability of one computer to use the computing capability of another remote computer. A single basic computer can harness the power of a larger computer or group of computers to do data analysis, for example, and then display the results on the basic one. This allows many people to harness the power of larger, more capable computing engines.

## CLOUD STORAGE

This term refers to the ability to store and retrieve large amounts of data on a remote computer or data storage device. Many companies are now providing cloud storage as a remote backup service, offering secure and spacious data storage to users of all sizes.

## SAAS

SaaS is an acronym for Software as a Service. This allows remote users to access and use programs that reside on another computer to perform selected tasks and return the results to the remote user. All of the capabilities of the software are available to the user as if the hardware and software existed on the user's computer. This leverages the use of what may be prohibitively expensive software and hardware for smaller businesses or those that do not need the entire software and hardware overhead all the time.

No matter how it's used to best suit a company's needs, cloud computing technology appears to be firmly established on the horizon in today's computing world.

*\*Ethernet is a communications protocol; the Internet is a conglomeration of hardware and software that, in many cases, uses Ethernet protocol.*

