the delivery of shared computing resources over a network in a manner that makes accessing and configuring those resources convenient and largely independent of the use of a required location, device, and the like. Although paralleling in some ways the use of multiple terminals to access mainframe computers and client-server computer networks, cloud computing is distinguished from them by the relative ease of access to the computing resources, which may be shared by many individuals and organizations using a wide range of devices, and the relative ease with which these users may increase (or decrease) the type and volume of computing resources to which they have access. Cloud-computing resources, which include both hardware infrastructure, such as data storage, servers, and networks, as well as operating systems, computer programs, and services provided by such programs, are typically provided over the Internet by third-party companies.

Individuals, for example, may subscribe to services that allow them to use an Internet connection or a cellular phone network to upload and store files, whether documents, music, or pictures, on the services' computer servers. These files may then be accessed by the individual in another location on a different device, or the individual may permit others to access and download the files. Computers, tablets, and smartphones, using either web browsers or specialized applications, can be used to access the files as long as they can establish a connection to the service's network. Internet music services, blogging and social-networking websites, and email services all provide direct consumer services using the resources of cloud computing.

Businesses may subscribe to a range of cloud-computing services, such as offsite data storage, hosting services for running web applications, an email service, or a suite of business applications. Cloud computing allows a company to readily increase or decrease the computing resources to which they have access based upon the company's changing needs. Costs may be reduced if a company pays only for the software and hardware resources that they need at a given time instead of making significant investments in computers, software, and support personnel that may be underutilized much of the time. Companies may have concerns about the security and privacy of their data when it is stored on a provider's servers, but in the case of smaller companies, a large provider of cloud-computing resources may be better equipped to provide security. Another cloud-computing concern is the possible interruption of a company's access to its applications and data, though this can be avoided to some degree through the establishment of appropriate redundancies. Some larger companies create so-called private clouds to provide computing resources from a common corporate pool to individual business units within the company, with the provision of these resources based on the changing needs of the business units.
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