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CLOUD COMPUTING

Definition

"Cloud computing is Internet ('Cloud') based development and use of computer technology ('Computing'). The cloud is a metaphor for the Internet (based on how it is depicted in computer network diagrams) and is an abstraction for the complex infrastructure it conceals [1]. It is a style of computing where IT-related capabilities are provided "as a service"[2], allowing users to access technology-enabled services from the Internet ("in the cloud") [3] without knowledge of, expertise with, or control over the technology infrastructure that supports them[4]. According to the IEEE Computer Society "It is a paradigm in which information is permanently stored in servers on the Internet and cached temporarily on clients that include desktops, entertainment centers, table computers, notebooks, wall computers, handhelds, etc." [5]."

From http://en.wikipedia.org/wiki/Cloud_computing

Related concepts and technologies

- Grid computing
- Utility computing
- Autonomic computing
- Software as a service
- Web Services
- Rich Internet applications
- Virtualisation
- Peer to peer computing
- Web 2.

The service view of cloud computing falls under the IT Service Management body of knowledge.

Status and market potential

Cloud computing services are marketed by many companies, including Amazon, Google, Salesforce, Yahoo, IBM, Oracle, SAP, HP, Microsoft, Intel, Dell and AT&T.

The technology and its associated business model are still under development.

"In a May 2008 report, Merrill Lynch estimated that 12% of the worldwide software market would start using cloud technology in the next 5 years and that the annual revenue for cloud computing will increase to \$95 billion in the same period" (From <http://www.sys-con.com/node/632257>)

Standards

Web services standards are the cornerstone of Cloud Computing. These standards are principally developed by the IETF, W3C, OASIS, WS-I and JTC 1/SC6.

Grid computing standards are developed principally by the Open Grid Forum.

Utility computing standards are developed by the Open Grid Forum, the W3C, OASIS and the Distributed Management task Force (?). A software recoverability evaluation standard is also under development in JTC 1/SC7.

IT Service Management standards are developed by the OGC, itSMF and ISO/IEC JTC1.