Abstract

A cloud is a virtual space available for the users to deploy their applications. A cloud service has three distinct characteristics that differentiate it from traditional hosting. It is sold on demand, typically by the minute or the hour; it is elastic. A user can have as much or as little of a service as they want at any given time; and the service is fully managed by the provider (the consumer needs nothing but a personal computer and Internet access). Significant innovations in virtualization and distributed computing, as well as improved access to high-speed Internet and a weak economy, have accelerated interest in cloud computing. Information technology for healthcare providers needs long-term image archive solutions that balance cost, image volume,
storage capacity and access demand. Computing and storage in the cloud seem to be a natural solution to many problems we face today for long-term medical image archives. It includes a Digital Imaging and Communications in Medicine (DICOM) server to store/query/retrieve requests; this intern stores the data onto the SQL Azure database using DICOM image indexer. The web user interface is used for searching and viewing archived images based on patient and image attributes.

References

- A Medical Image Archive Solution in the Cloud, Chia-Chi Teng, Jonathan Mitchell, Christopher Walker, Alex Swan, Cesar Davila, David Howard, Travis Needham, IEEE, 2010.
- B. J. Liu, F. Cao, M. Z. Zhou, G. Mogel, L. Documet, &quot;Trends in PACS image storage and archive&quot;, Computerized Medical Imaging and Graphics.
- http://dicom-cs.sourceforge.net/
- S. Hamm, &quot;How cloud computing will change business&quot;, Business Week, June 2009. http://www.businessweek.com/magazine/content/09_24/b4135042942270.htm

Index Terms

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Keywords

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