Abstract

The business of civil construction and real estate development is booming of late in Asia and all over the world. Studies peg the estimated valuation of work-in-progress of such projects to be more than billions of dollars at current market rates. In order to rationalize costs and maximize productivity at every stage, companies are beginning to rely heavily on information technology. Cloud computing offers businesses an option to scale their investments in IT services based on their needs and demands. However, in order to remain competitive, construction companies need to have their engineers working at remote locations, to be up to date with the latest data and also empower them to feed in changes to design and construction in real time. In this paper, we present a proposed architecture which we call the Billboard Manager based BIM cloud environment. In this model, we use Citrix technologies to offer high-quality and reliable links to various BIM applications hosted either on private or on a hybrid cloud setup. Our proposed model has been designed to enable access to BIM applications from any geographic location over the Internet. In this paper, we also show how Billboard Manager can effectively manage storage and retrieval of data in conjunction with BIM applications.
A New Approach in Delivering Building Information Modeling Applications and data to Remote Users over Cloud through Billboard Manager

References

- Debabrata Sarddar, Rajesh Bose, Secure Co-processor and Billboard Manager Based Architecture Help to Protect & Store the Citrix Xenserver Based Virtual Data, COMPUSOFT, An international journal of advanced computer technology, 3 (1), January-2014 (Volume-III, Issue-I).
- Praveen Ram C, Sreenivaasan G, Security as a Service (SaaS), Securing User Data by Coprocessor and Distributing the Data, 978- 1-4244-9008-0/10/$26. 00 ©2010 IEEE.
- Applying cloud computing technology to BIM visualization and manipulation, Tien-Hsiang Chuang1, Bo-Cing Lee1, and I-Chen Wu1*
- A critical review on new advancements in implementation of it in construction industry: Integration of BIM with cloud computing Vasu Kathi1, Srinivas Vasam2, K. Jaganadha Rao3, M. V. Seshagiri Rao4
- Cloud BIM: Management of BIM data in a cloud computing environment T. H. Beach, PhD / Research Associate, beachth@cf.ac.uk Y. Rezgui, PhD / Director BRE Institute of Sustainable Engineering, rezguiy@cf.ac.uk O. F. Rana, PhD / Professor of Performance Engineering, o.f.rana@cs.cf.ac.uk Cardiff School of Engineering, Cardiff University, Wales, UK
- Cloud computing for the architecture, engineering & construction sector: requirements, prototype & experience Thomas H Beach1*, Omer F Rana2, Yacine Rezgui1 and Manish Parashar3

Index Terms

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