

**THE CHINESE UNIVERSITY OF HONG KONG**

Department of Information Engineering

*Seminar***Cloud-Centric Media Network (CCMN):
Empowering Rich Media Experience Social Interactive Features**

by

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Singapore**Date : 2 June, 2011 (Thur.)**
Time : 2:30-3:30pm
Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong*Abstract*

Latest market research indicates that media contents are being consumed across all devices, including TV, computer and mobile phone, at a record pace. Specifically, People in China spend on average 170 hours per month on media consumption. This passion toward media contents fuels an exponential growth of Internet traffic, as suggested by Cisco's report on video index. This growth results in a tussle between the network cost and the quality of service in existing media networks, which are mostly based on content distribution network (CDN). Due to its limitation in resource allocation, CDN solution cannot scale well with dynamic demand.

In this talk, leveraging resource virtualization technology in cloud computing, we propose a cloud-centric media network (CCMN). In CCMN, IT resources, including computing, storage and bandwidth, are allocated elastically to meet application demand in the most economical fashion, while maintaining a high level of quality of service. Carved out of a hybrid media cloud via an Infrastructure-as-a-Service (IaaS) model, CCMN provides two types of media services. One is called Software-as-a-Service (SaaS), including media applications directly offered to content consumers and content-delivery-as-a-service (CoDaaS) for content providers. The other is called Platform-as-a-Service (PaaS), providing a set of application programming interfaces (API) for any third-party developer to design and launch novel media applications, preferably with social interactive features.

Our research focuses on analytically modeling CCMN for optimized system architecture and developing a PoC platform that will be deployed in Singapore. We believe that this platform will have value propositions for all the participants in media industry value chain.

Biography

Yonggang Wen is currently an assistant professor with school of computer engineering at Nanyang Technological University in Singapore. Previously he has held R&D positions with a few large networking companies in the USA, including Cisco and Lucent. Dr. Wen obtained his PhD from MIT in 2008, and his MPhil degree from Chinese University of Hong Kong and BEng degree from University of Science and Technology of China in 2001 and 1999, respectively. His research interest is in field of computer communication and networking, with special attention to cloud computing, content networking and green networks.

**** ALL ARE WELCOME ****