

## Metadata as a service (MetaaS) model for cloud computing

### ABSTRACT

Cloud computing has become the most attractive field in industry and research. Metadata as a Service (MetaaS) is an emerging technique that could help the cloud users, and cloud service providers (CSPs) according their needs. The increasing of the speed of searching and acquiring against the number of the data services in cloud computing that has leads the researchers to think about implementing a new technique. MetaaS model uses to serve as a backbone for providing and searching for data storage in cloud computing. MetaaS model consists of three main layers as Metadata component, cloud users and CSPs. The Metadata components consists of six main components as Metadata Entity (ME), Metadata File Information (MFI), Metadata Catalog Service (MCS), Metadata Management Engine (MME), Metadata Capturing (MC) and Metadata Analysis (MA). In this paper, an approach for enabling searching, storing, accessing, retrieving, and capturing the data from Cloud Data Storage (CDS) based on MetaaS model is presented. Taking the production of CDS service as example, this paper gives formal analysis of system running and compares with other related work. The results show that the model presents good reference on the construction of cloud computing applications and services according to the cloud services functionalities and MetaaS components.

**Keyword:** Cloud computing; Cloud data storage; Cloud service provider; Metadata and metadata as a service