

**MASTER'S PROJECT (SRING 2015)****TOPIC:** *VCSS: A Virtual Cloud Storage Service for Multiple Cloud Service Providers***PRESENTOR:** Kirti N. Dighe**ADVISOR:** Dr. Haiping Xu**DATE & TIME:** Friday, May 1, 2015, 9:30 AM**LOCATION:** Woodland Commons**COMMITTEE MEMBERS:** Dr. Firas Khatib and Dr. Shelley Zhang**ABSTRACT**

Cloud computing provides us the means to store data in the cloud so that we can access the data from anywhere at any time. With cloud-based storage, the data accessibility and reliability can be greatly improved. Current major cloud data service providers such as Dropbox and Box, usually provide free services with limited storage sizes. For a typical user to take advantage of the free services, the user has to switch back and forth between a numbers of service providers, and must memorize where a certain file has been stored for efficient data access. To make people's life much easier, there is a pressing need to provide a cloud storage system with a unified interface for cloud services provided by different vendors. We consider a number of cloud services together as a Virtual Cloud Storage Service (VCSS), which may provide a user enough free space for data storage. The interface of the VCSS is transparent to users, so users do not need to memorize which service was used to store a certain file. In this project, we have implemented such a prototype using three major cloud service providers. The goal of this project is to use more free space to store user files in the cloud, as the free space in one cloud is limited. Our approach is scalable as we can easily add a new cloud service into the prototype by plugging in an interface for that service. Since the prototype was developed in Java, it is portable and can run on different platforms including Windows, Mac OS, and UNIX operating systems.