**Provable Data Possession with Outsourced Data Transfer**

**Abstract:**

With the rapid development of cloud computing, more and more enterprises would like to upload and store their data in the public cloud. When the parts of the business of an enterprise are purchased by another enterprise, the corresponding data will be transferred to the acquiring enterprise. For the usual case, how to outsource the computation cost of data transfer to the cloud? How to ensure the remote purchased data integrity? Thus, it is important to study provable data possession with outsourced data transfer (DT-PDP). In this paper, for the ﬁrst time, we propose the novel concept: DT-PDP. By taking use of DTPDP, the following three security requirements can be satisﬁed: (1) the other un-purchased data security of acquired enterprise can be ensured; (2) the purchased data integrity and privacy can be ensured; (3) the data transferability’s computation can be outsourced to the public cloud servers. For the security concept of DT-PDP, we give its motivation, system model and security model. Then, we design a concrete DT-PDP scheme based on the bilinear pairings. At last, we analyze the security, efﬁciency and ﬂexibility of the concrete DT-PDP scheme. It shows that our scheme is provably secure and efﬁcient

**SYSTEM REQUIREMENTS:**

**HARDWARE REQUIREMENTS:**

* System : Pentium Dual Core.
* Hard Disk : 120 GB.
* Monitor : 15’’ LED
* Input Devices : Keyboard, Mouse
* Ram : 1 GB

**SOFTWARE REQUIREMENTS:**

* Operating system : Windows XP/UBUNTU.
* Implementation : NS2
* NS2 Version : 2.28
* Front End : OTCL (Object Oriented Tool Command  Language)
* Tool : Cygwin (To simulate in Windows OS)