

Review of the book  
”*Security for Cloud Storage Systems*”  
by Yang Kan and Jia Xiaohua  
Springer Briefs in Computer Science, 2014

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## 1 Summary of the review

At first, I thought of reading a independent research papers. But, after reading the *preface*, it's clear about the motive of this book with reference to Springer Briefs in Computer Science. Each chapter is related to another chapter like chapter 3 discuss about single authority while next chapter discuss multi authority scheme. I can say that the *Springer Briefs* is a series that combines research in a book format nicely.

## 2 Summary of the book

**Chapter 1** This chapter is indeed an introduction for reading further chapters. It starts with what is cloud computing, characteristics of it, service models of it and deployment models of it. In a brief, this chapter discusses the following services in the cloud environment

- Software-as-a-service
- Platform-as-a-service
- Infrastructure-as-a-service
- Cloud Storage-as-a-service
- Storage Auditing-as-a-service (Chapter 2)
- Access Control-as-a-service (Chapter 3,4)

**Chapter 2** This chapter discusses the proposed approach for the auditing services in the cloud called TSAS (Third-Party Storage Auditing Service). It starts with framework for auditing, existing literature survey, proposed scheme and ends at the analysis of the proposed scheme. Thereafter, the extension for TSAS for the multi owners and multi cloud is given.

**Chapter 3** This chapter is about access control-as-a-service in the cloud storage. In this framework, data owners encrypts the data based on the policy. This means, the efficient multicasting as compared to conventional cryptosystems like symmetric key, public key. The proposed scheme in this chapter also works in the attribute revocation, ciphertext update (for newly joined user to access old data).

**Chapter 4** As the previous chapter is about single authority, thus entails limitaion of it viz. (i) computation overhead on the single central authority (ii) susceptible to key escrow problem. Therefore, in this chapter authors extends their scheme to the multi authority environment in the cloud system.

### 3 Comments and Recommendations

As this book is about security in cloud storage, it would be helpful by showing the utilization of the proposed schemes in real time cloud services mainly in some of the applications. This can be helpful for researches to get to know the insights of cloud service and deployment of it like web services. Also, it would be nice if there is section in each chapter on further findings on the respective chapter or topics.

On an average, this book gives the undergraduate students (of final year), postgraduate students, researchers, scientists and so on to motivate and also to study further in the storage systems for cloud computing. Surely, I suggest this book as first hand book for cloud computing researchers.

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