Strengthening the ownership rights on outsourced relational database is very important in today’s internet environment. Especially where sensitive, valuable content is to be outsourced. Let us take an example of university database, weather data, stock market data, power consumption consumer behaviour data, and medical and scientific data. The increasing use of databases in applications beyond “behind-the-firewalls data processing” is creating a need for watermarking relational databases. Watermarking for relational data is made possible by fact that real data can very often tolerate a small amount of errors without any significant degradation with respect to their usability. In this paper, we present a mechanism that is resilient or insensitive to additive attacks, how to embed and detect watermark in relational database. In additive attack the attacker simply inserts his/her own watermark in original data. In our proposed system we can draw graphs and original ownership claim can be resolved by
locating the overlapping regions of the two watermarks in which the bit values of the marks conflict and determining which owner’s mark wins. The attacker must have inserted the watermark later. Clearly having more marked tuples increases collisions and hence we can easily identify the owner of the data.

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Index Terms

Computer Science Data Security

Key words

Watermarking Resilient ownership rights robust