IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, July 2022

Data Warehouse Security Threats and Issues

Akash¹, Nihal Rafeeq², Tushith Shukla³, T. K Koushik Chinnappa⁴, Dr. Manjunath Kothari⁵

Students, BE (Appearing), Department of Computer Science and Engineering^{1,2,3,4}
HOD, Department of Computer Science and Engineering⁵
Alva's Institute of Engineering and Technology, Mangalore, India

Abstract: In this review paper we analyzed the ever increasing trend for expansion of information technology which is undisputedly attributed to data warehouses, as its development and redefinition spanned over decades of research and tests. The major constituents of the data warehouses are its humongous amount of data drawn from multiple varied sources which are then feed into decisions makers for further analysis and development of these data. Data warehouses are very much relied upon for making strategic decision making processes. When huge amount of valuable data are stored using data warehouses security must be prioritized at all costs. The brief analysis posed for the security in terms of importance, various approaches and drawbacks regarding them are provided in this review paper.

Keywords: Data Warehouse (DWH), Data Marts, Security Techniques, Confidentiality, Integrity, Availability, Virtual Data Warehouse

REFERENCES

- [1]G. K Gupta, Introduction to Data Mining with case studies, Second Edition, Published by PHI Learnings New Delhi, ISBN:978-81-203-4326-9.
- [2] Jiawei Han and Micheline Kamber, Data Mining Concepts and Techniques Second Edition, Published by Morgan Kaufinann, San Francisco, ISBN: 978-I-SS860-901-3.
- [3] PaulrajPonniah, DATA WAREHOUSING, WILEY STUDENT EDITION, ISBN: 978-81-26S-0919-8.
- [4] Surajit Chaudhuri, UmeshwarDayal, An Overview of Data Warehousing and OLAP Technology (Appears in ACM Sigmod Record, March 1997).
- [5].ManyaSethi,DATAWAREHOUSING AND OLAP TECHNOLOGY, International Journal of Engineering Research and Applications (IJERA), 2012.
- [6] SeemaMaitri,Data Warehousing and Data Mining Concepts and Techniques. Published by NandaniPrakashan, New Delhi,2012.
- [7] John D. Porter and John J. Rome Lessons from a Successful Data Warehouse Implementation.
- [8] Oracle Corporation, Security and Data Warehouse, Oracle white paper, 200S
- [9] Ephraim Mbaka Timothy, Kavisha Duggal, Review on Security Levels of Data Warehouse, International Journal of Advanced Research in Computer Science and Software Engineering, November 2013.
- [10] Kimmo Palletvuori, Security of Data Warehousing Server.
- [11] Raj Rani, Data Warehouse Security Using Log Based Analysis: A Review, International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277 128X, April 2014.
- [12] S. Amritpal, Nitin Umesh Implementing Log Based Security in Data Warehouse, International Journal of Advanced Computer, 2013.
- [13] Lee, S. Y Low, W. L., and Wong, P. Y, Learning Fingerprints for a Database Intrusion Detection System.
- [14] Mario Piattini+, Jose Antonio Roderof, AUDITING DATA WAREHOUSE SECURITY ,0-7803-S247-S/99/\$1O.00 01 999 IEEE.
- [15] SAIQA ALEEM LUIZ FERNANDO CAPRETZ, FAHEEM AHMED, Security Issues in Data Warehouse.
- [16] P. Devbandu, and S. Stubblebine, Software Engineering for Security: a Road Map, Proceedings of Conference on the Future of Software Engineering, pp. 227-239. ACM Press, NY, 2000.
- [17] E.R. Weippl, Security in Data Warehouses, Data Warehousing Design and Advanced Engineering Applications: Methods for Complex Construction, L. Bellatreche (Ed.), Chapter IS, pp. 272-27, Information Science Reference, 20 I O.
- [18] F. H. Chin and G. Ozsoyoglu, Auditing and Inference Control in Statistical Databases, IEEE Transactions on

Copyright to IJARSCT DOI: 10.48175/568 99
www.ijarsct.co.in

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 2, July 2022

Software Engineering, Vol. 8, Issue 6, pp.S74S82, 1982.

[19] S.Triki, H. Ben-Abdallah, N. Harbi, and O. Boussaid, Securing the Data Warehouse: a Semi-Automatic Approach for Inference Prevention at the Design Level, Model and Data Engineering Lecture Notes in Computer Science, Vol. 6918, pp. 71-84, Springer-Verlag, 2011.

DOI: 10.48175/568

Copyright to IJARSCT www.ijarsct.co.in