

Effective End-of-Life Management of Assets in Organization by Snowflake Integration

Dr. J. M. Patil¹, Prof. N. N. Ghuikar², Surabhi Lahoti³, Aditya More⁴, Kunal Chandore⁵

Assoc. Professor, Department of Computer Science and Engineering¹

Asst. Professor, Department of Computer Science and Engineering²

Students, Department of Computer Science and Engineering^{3,4,5}

Shri Sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra, India

jaimpatil1011@gmail.com, ghuikarnayana@gmail.com, sglohathi123@gmail.com

yashmore1209@gmail.com, kunalachandore@gmail.com

Abstract: To preserve device stability and security in today's industrial environment, vulnerabilities must be found and fixed. Asset managers face issues in managing End-of-Life (EOL) statuses, which are subject to constant change, and in traversing many data sources. It is challenging to have uniform view into important data without a centralized dashboard.

We suggest putting in place a scraping method to collect data from various sources in order to overcome these issues. After the EOL data has been thoroughly verified and updated, the results will be shown on a consolidated, scalable, and dependable dashboard that easily links into the current systems. Advanced data slicing and dicing techniques will be used, utilizing Snowflake's capabilities, to handle enormous datasets efficiently. This all-encompassing strategy seeks to improve asset management procedures, strengthen device security, and offer useful information for defensible decision-making

Keywords: End-of-Life (EOL), Centralized Dashboard, Data Slicing and Dicing, Asset Management, Snowflake

REFERENCES

- [1] Muyan Jiang, Ying Chen, Xin Chen, Javad Lavaei, and Anil Aswani "Optimal Contract Design for End-of-Life Care Payments" <https://doi.org/10.48550/arXiv.2403.15099> arXiv:2403.15099 (math) 22 Mar 2024
- [2] Wayes Tushar, Dustin Niyato, Tapan K. Saha, H. Vincent Poor, and Chau Yuen "Blockchain-enabled Circular Economy: Collaborative Responsibility in Solar Panel Recycling" <https://arxiv.org/abs/2403.09937> 15 Mar 2024
- [3] Craig Jacobik "Asset Ownership Identification: Using machine learning to predict enterprise asset ownership" 15 Dec 2023 <https://arxiv.org/abs/2312.10266>
- [4] Rohan Mohapatra "Large-scale End-of-Life Prediction of Hard Disks in Distributed Datacenters" 20 Mar 2023 in 2023 IEEE International Conference on Smart Computing (SMARTCOMP) <https://doi.org/10.1109/SMARTCOMP58114.2023.00069>
- [5] Damjan MALETIČ¹, Marta GRABOWSKA², Matjaž MALETIČ¹ "Drivers and Barriers of Digital Transformation in Asset Management" March 2023 Management and Production Engineering Review - pp. 118–126 DOI: 10.24425/mper.2023.145370
- [6] Extracting High-Quality Data Through Web Scraping: <https://www.forbes.com/sites/forbestechcouncil/2023/03/24/extracting-high-quality-data-through-web-scraping/?sh=583dfe4e8c67>
- [7] Prakash, Vijay, Sicheng Xie, and Danny Yuxing Huang. "Software Update Practices on Smart Home IoT Devices." SCORED'22: Proceedings of the 2022 ACM Workshop on Software Supply Chain Offensive Research and Ecosystem Defenses November 2022 Pages 93–103 <https://doi.org/10.1145/3560835.3564551>
- [8] Mike McNeil Forbes Councils Member "How to Prepare Your Organization for The Future of Device Management" Forbes Technology Council Aug 29, 2022
- [9] Shweta More and Priya Daniel "AN ANALYSIS OF SNOWFLAKE: A PIVOTAL TOOL IN THE FIELD OF DATA ANALYSIS" IJFANS International Journal of Food and Nutritional Sciences Volume 11, Issue 10 (2022)

- [10]IEEE: A. S. Bale, N. Ghorpade, R. S, S. Kamalesh, R. R and R. B. S, "Web Scrapping Approaches and their Performance on Modern Websites" 2022 3rd International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2022, pp. 956-959, doi: 10.1109/ICESC54411.2022.9885689.
- [11]Dr Zena Assaad and Dr Mina Henein "End-of-Life of Software How is it Defined and Managed?" White paper April 2022
- [12]Emin Ozyoruk, Nesim Kohen Erkip, C, ađın Ararat "End-of-Life Inventory Management Problem: Results and Insights" arXiv:2101.09729v2 [math.OC] 26 Oct 2021
- [13]Ikechukwu Onyenwe "Developing Products Update-Alert System for e-Commerce Websites Users Using HTML Data and Web Scrapping Technique" International Journal on Natural Language Computing 2 Sep 2021 <https://doi.org/10.48550/arXiv.2109.00656>
- [14]Wang, Dingding, et al. "A Measurement Study on the (In) security of End-of-Life (EoL) Embedded Devices." arXiv preprint arXiv:2105.14298 (2021).
- [15]Sunny Mehta, Prof. Gayatri Pandi (Jain) "An Improving Approach for Fast Web Scrapping Using Machine Learning and Selenium Automation" International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 8, Issue 10, October 2019, ISSN: 2278 – 1323
- [16]The Snowflake Documentation: <https://docs.snowflake.com>