

FACETED DATA:

Do you think this is a good approach to protect systems from data leakage?

Yes, it guarantees the traditional information flow security property of termination-insensitive noninterference, independent of any bugs, vulnerabilities, or malicious code in the client application. (Schmitz et al., 2016).

What are the pros and cons?

Pros:

Designed as an independent function

Does not require multiple systems for different levels of data secrecy

Cons:

Difficult to debug as there is less visibility

Additional checks results in decreased performance

References:

Schmitz, T., Rhodes, D., Austin, T.H., Knowles, K., Flanagan, C. (2016). Faceted Dynamic Information Flow via Control and Data Monads. In: Piessens, F., Viganò, L. (eds) Principles of Security and Trust. POST 2016. Lecture Notes in Computer Science(), vol 9635. Springer, Berlin, Heidelberg.
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