

This is an integrity and provision level model which aims at guaranteeing the integrity properties about business information and provides a platform for analyzing security business applications. This is according to (Blake, 2000)

Clark-Wilson security model is an integrity, application level model which attempts to ensure the integrity properties of commercial data and provides a framework for evaluating security in commercial application systems

The model's functionality: The model is primarily concerned with formalizing the notion of information integrity, which is maintained by preventing corruption of data stored security systems due to either error or malicious intent. Clack-Wilson security model is partitioned into two;

- Constrained data items (CDI)
- Unconstrained data items (UDI)

CDI are objects that the integrity model is applied to. UDI are objects that are not covered by the integrity policy. Two procedures are then applied to these data items for protection. The first procedure integrity verification procedure (IVP), verifies that the data items are in a valid state, that is, they are the original data stored by the owner of the system.

The second procedure is the transformation procedure (TP), which changes the data items from one valid state to another. If only the TP is able to change data items, the integrity of data is maintained. Therefore, data items are only changed by transformation procedures. This ensures integrity is maintained. This model is still widely used.

The model has the following Limitation

Focuses on integrity only, thus it considers access control only. It does not focus of confidentiality.

If a subject and process are interchangeable, a single person could use multiple processes to violate Clark-Wilson simple security condition.

Current trends in the model are;

The current trend, not only in Clark-Wilson security model, but also in every security model is to join secrecy and integrity concerns in every security system. There is no widely accepted formal model that is able to achieve this compromise.