D

Database Trigger

Mikael Berndtsson and Jonas Mellin
University of Skövde, Skövde, Sweden

Synonyms

[Triggers](#)

Definition

A database trigger is code that is executed in response to events that have been generated by database commands such as INSERT, DELETE, or UPDATE.

Key Points

Triggers are code that are executed in response to events that have been generated before or after a database operation. They are sometimes separated as pre- and post-triggers in the literature. A pre-trigger can be used as an extra validation check before the database command is executed, whereas a post-trigger can be used as a notification that the database command has been executed.

Triggers can be classified according to trigger granularity: *row-level triggers* or *statement-level triggers*. In case of row-level triggers, each row will generate an event, whereas statement-level triggers occur only once per database command.

Overviews of database triggers can be found in [1, 2].

Cross-References

- ▶ [Active Database \(aDB\)](#)
- ▶ [Active Database \(Management\) System \(aDBS/aDBMS\)V](#)
- ▶ [ECA Rules](#)
- ▶ [Event](#)

Recommended Readings

1. Kulkarni KG, Mattos NM, Cochrane R. Active database features in SQL3. In: Active rules in database systems; 1999. p. 197–219.
2. Sudarshan S, Silberschatz A, Korth H. Triggers, chap. 8.6; 2006. p. 329–34.