Protecting Your Database by Securing Your Functions

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Overview

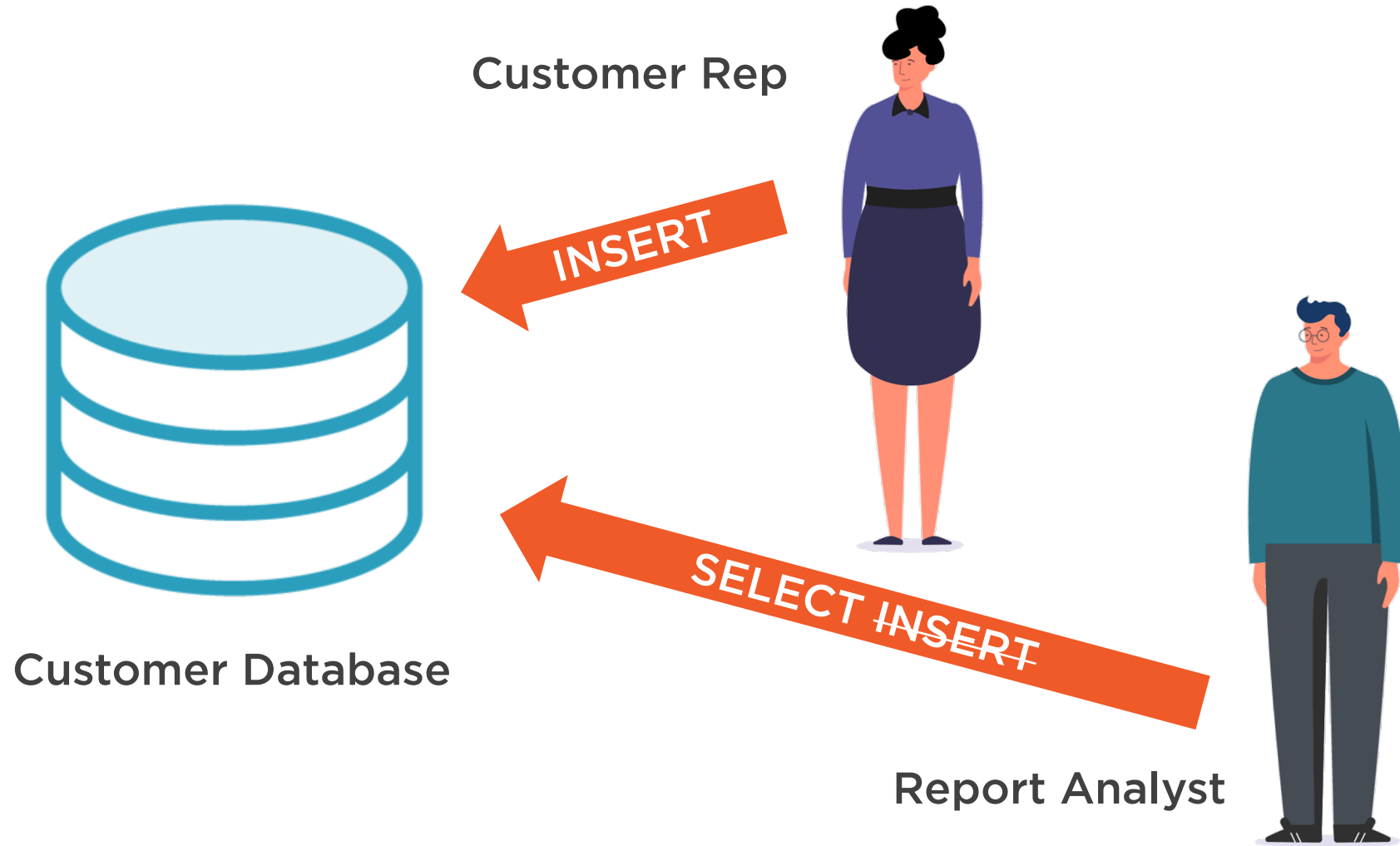- What is function security?
- Principle of least permission
- Implementing double abstraction
- Specifying function attributes
- Using schema qualification
- Functions as proxies

Principle of Least Permission

Double Abstraction

Customer Rep Permissions | **Customer Rep Users'**

Customer Rep Permissions	Customer Rep Users'
SELECT	Lucas
INSERT	Leah
UPDATE	Hans
DELETE	Benjamin
	Ray

Demo

Double abstraction

Function Attributes

Volatility

IMMUTABLE, STABLE, VOLATILE, LEAKPROOF

Privileges

SECURITY INVOKER | DEFINER

NULL parameters

CALLED ON NULL INPUT or RETURNS NULL ON NULL INPUT

SET search_path

Demo

Function attributes

Create your functions in schemas!

Demo

Using Schemas

Summary

Securing your functions

Principle of least permission

Double abstraction

Function attributes

Using schemas