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DEFINITION

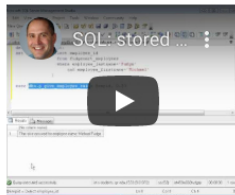
stored procedure

A stored procedure is a set of [Structured Query Language \(SQL\)](#) statements with an assigned name, which are stored in a [relational database management system](#) as a group, so it can be reused and shared by multiple programs.

Stored procedures can access or modify [data](#) in a [database](#), but it is not tied to a specific database or object, which offers a number of advantages.

Benefits of using stored procedures

A stored procedure provides an important layer of security between the [user interface](#) and the database. It supports security through data access controls because [end users](#) may enter or change data, but do not write procedures. A stored procedure preserves [data integrity](#) because information is entered in a consistent manner. It improves productivity because statements in a stored procedure only must be written once.



Creating SQL stored procedures.

Stored procedures offer advantages over embedding [queries](#) in a [graphical user interface \(GUI\)](#). Since stored procedures are modular, it is easier to troubleshoot when a problem arises in an application. Stored procedures are also tunable, which eliminates the need to modify the GUI [source code](#) to improve its performance. It's easier to code stored procedures than to build a query through a GUI.

Use of stored procedures can reduce network traffic between clients and [servers](#), because the commands are executed as a single batch of code. This means only the call to execute the procedure is sent over a [network](#), instead of every single line of code being sent individually.

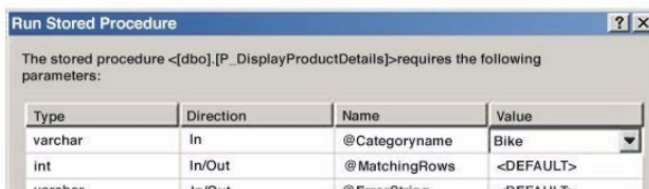
Stored procedure in SQL

Stored procedures in [SQL Server](#) can accept input parameters and return multiple values of output parameters; in SQL Server, stored procedures program statements to perform operations in the database and return a status value to a calling procedure or batch.

User-defined procedures are created in a user-defined database or in all system databases, except for when a read-only (resource database) is used. They are developed in [Transact-SQL \(T-SQL\)](#) or a reference to [Microsoft](#). Temporary procedures are stored in tempdb, and there are two types of temporary procedures: local and global. Local procedures are only visible to the current user connection, while global procedures are visible to any user after they are created. System procedures arrive with SQL Server and are physically stored in an internal, hidden-resource database. They appear in the SYS schema of each system, as well as in a user-defined database.

Posted by: **Margaret Rouse**
WhatIs.comContributor(s): [Adam Hughes](#)

How to run a Stored Procedure



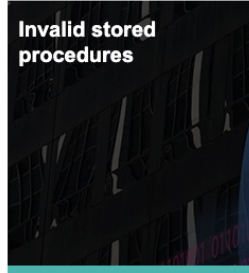
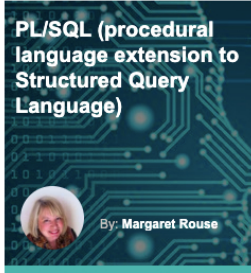
 How to run a stored procedure

DI /SOI /procedural language extension to Structured Query

PL/SQL (procedural language extension to Structured Query Language)

In Oracle database management, PL/SQL is a procedural language extension to Structured Query Language (SQL). [See complete definition](#)

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Margaret Rouse - 21 Sep 2005 11:38 AM

What's your primary use for stored procedures?

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Naveenkomar - 17 Apr 2017 7:08 AM

The main purpose of Stored procedure is reusability
Stored procedure are executed on server.

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Myfaces04 - 10 Aug 2019 12:48 AM

They are more secure as compare to query.
Stored Procedures are stored in pre-compiled format so we dont need to compile them everytime we execute them.
They are fast as compare to SQL Query.

Reply

Achlath

- 13 Oct 2018 3:18 PM

What is the difference between stored procedures and Functions?

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