

# [Database configurations](https://assignbuster.com/database-configurations/)

Running Head: Database Configurations Database Configurations and Section # of Multiple Database Configurations in an Organization The importance and usage of a database in an organization cannot be undermined. The basic purpose for any database in an organization is to serve the purpose of storing transactions and being able to produce reports effectively (Rob & Coronel, 2002). Although, most database analysts would agree with this simplistic definition of a database, there is more to uses of a database than what meets the eye in this definition. Most organizations do not rely on a single database configuration to be followed across the board. The purpose of having multiple database configurations and settings is similar to the principle of hedging or diversifying risk – the multiple configuration serve as barriers to employees who wish to internally cause damage, collect data about the company or use the information for unauthorized purposes (like selling to a third party). Multiple database configurations can come in various forms: having dedicated database servers, multiple platforms like SQL, Oracle and MySQL and a mix of the above. The idea is that organizations and their IT managers feel safer when information and their data sources are scattered across various configurations. This allows them to reduce the risks of data losses and hacking. The former is avoided because if there is a data failure, then it is likely to be restricted to the particular configuration only due to the fact that multiple configurations are often needed to be enforced across different physical data sources. As for hacking it is important to have different configurations because it restricts the success of hackers, viruses and other automated attempts to gain unauthorized access to data. Enforcing such configuration variations at the database level will ensure that any attempts from an external world to gather control over an organization’s data source will have to go through several complex configurations. Organization’s also enforce different configurations to enforce rights within an organization: employee-level, group-level and enterprise-level. Different configurations in such a situation mean that the data available to a particular person in an organization is limited to the extent defined by the rules and authority to which that employee belongs. It also helps to keep track of and pinpoint any data breach issues upfront within the least possible time (Rob & Coronel, 2002). Such configurations also assist managers to make different data available to different employees within their departments without having to worry about complex configurations – managing roles is done easily through initial configurations and leaves little room for loopholes to be exploited by most save the tech-savvy employees. It can however, be also considered as a flaw in times when there are changes in an organization – merging data sources and overlooking changes is a difficult process but of course the positive side is the high level of security that an organization can benefit from by implementing multiple configurations. It can thus be summarized well that organizations indulge in setting different database-level configurations because it provides them an edge in both internal and external security. Security and restricting data to relevant employees by means of roles allows an organization the liberty of keeping its sensitive information within the confinement of its secure databases. In addition, it allows IT managers to regularly identify the pros and cons of different configurations so that in the long-term the best configurations can be identified and adopted (Roddman & Jeremy, 2003). Therefore, the adoption of multiple database configurations across an organization will result in a highly secure environment with added challenges to hackers and malicious users trying to gain unauthorized access to data, information or control over systems. Bibliography 1. Rob, P., & Coronel, C. (2002). Database System, Design, Implementation & Management Fifth Edition. Thomson Learning. 2. Roddman, S., & Jeremy, I. (2003). Database Structures and Grouping. London: Oxford Publishers.