**PostgreSQL Research**

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Technical:

PostgreSQL, also known as Postgres, is an open-source relational system that has the ability to both use and extend the Structured Query Language, SQL. The system is designed to include many features, such as helping “administrators to protect data integrity and build fault-tolerant environments, and help you mange your data no matter how big or small the dataset” (*PostgreSQL: About*, n.d.). PostgreSQL has the capacity to construct custom functions, as the system is incredibly multifunctional. The long list of offered features that are associated with PostgreSQL encourage its reputation of high performance and functionality. The system is designed in a fashion that offers “full support for client-server network architecture” (Peterson, 2023). PostgreSQL is a client-server system because of two key factors: a server that runs the program and a client that requests information from the server in order for the operations to be performed correctly. Other features include that of its compatibility with varying platforms, standby server, sophisticated mechanisms and so many more. PostgreSQL also supports many programming languages.

In order to download PostgreSQL, one can visit the website “[www.postgresql.org/download](http://www.postgresql.org/download)” before going on to select the specific Operating System (OS) that is compatible with their device. Next, download the installer and then select the PostgreSQL Version that is most relevant. The file will then download and complete this step of the process. If there are any errors with the downloading process then the user can follow any prompts that appear in order to better the issue, or restart the download process altogether. By default, PostgreSQL runs on port 5432, however, if the port is somehow unavailable it is common practice to use the next free port, that being port 5433.

In order to install PostgreSQL on Windows10 follow the following steps: “open the downloaded file > specify installation directory > select components > select data directory > set password > read pre installation summary and finally click on the next button to begin the installation process” (*How to Download and Install PostgreSQL*, n.d.). Although, there are more ways in which one can alter the configuration options (i.e. performance settings) to better, or merely change, the to the specific needs of the user.

References

*How to download and install PostgreSQL*. (n.d.). https://commandprompt.com/education/how-to-download-and-install-postgresql/#:~:text=To%20install%20PostgreSQL%20on%20Windows,to%20begin%20the%20installation%20process.

Peterson, R. (2023, February 18). *What is PostgreSQL? Introduction, Advantages & Disadvantages*. Guru99. https://www.guru99.com/introduction-postgresql.html#3

*PostgreSQL: About*. (n.d.). The PostgreSQL Global Development Group. https://www.postgresql.org/about/