

Databases

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Wednesday, 12 December 2007
Last Updated Friday, 11 April 2008

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The database is the brain of the web hosting world. Anytime you fill in a text box on the web, odds are good that once you hit submit the data you entered went into a database. Databases provide a fast, reliable and orderly method of storing and retrieving data. In the web hosting world there are basically two choices for databases, MySQL and Microsoft SQL. MySQL is the world's most popular open source database. It is available on all of the most popular server platforms and is being used for everything from being a data store for personal blogs to helping power Google and Yahoo!. In the web hosting world, MySQL is primarily used to store data for sites written using PHP and is often associated with LAMP (Linux Apache MySQL PHP) hosting packages. MySQL is free software and because of this, even the cheapest hosting packages tend to offer a MySQL database. Web hosting providers primarily offer two versions of MySQL, 4.x and 5.x. MySQL 5.x is the newest version of MySQL. MySQL 5.x has three important features that 4.x does not, stored procedures, triggers, and views. Because these features are extremely useful, anyone who does not have a compelling reason not to should use MySQL 5.x. Microsoft SQL Server is primarily used with applications written in ASP and ASP.Net. It is fully featured, highly scalable, and very well supported both on the internet and by Microsoft. Microsoft SQL Server is not a free database software, so in the web hosting world it is usually associated with slightly more expensive hosting packages. Microsoft SQL is widely available in two versions, MSSQL 2000 and MSSQL 2005. The newest version, Microsoft SQL server 2005, incorporates a variety of features that make both reporting and management easier than they were in MSSQL 2000. For people who have a smaller website that is already using MSSQL 2000, there is no really pressing reason to upgrade to 2005. The upgrade process does usually go fairly smoothly, though, so don't be too worried about doing an upgrade. In order for a database to be used, a schema has to be applied to it and some data will need to be added to it. There are several tools that web hosting providers offer to help aid users in administering their databases. The most popular tool for MySQL is phpMyAdmin (www.phpmyadmin.net). phpMyAdmin is a web application that allows people to securely administer their MySQL databases. To use phpMyAdmin, a user will first login to the phpMyAdmin website (the URL will usually be sent to the user when their hosting package is set up). After logging in the user is presented with options to create, delete, or modify tables in the database, query the database, upload SQL to be ran against their database, and import or export data from their database. For Microsoft SQL Server there is a corresponding program called MyLittleAdmin that provides many of the same functions. The other method that hosting providers can use to give you access to your database is making an exception in their firewall rules that allows a specific IP address to directly connect to their SQL server on whatever port it is listening on. This option is used most often with Microsoft SQL Server because many developers prefer to use SQL Server Management Studio to manage their MSSQL databases rather than a web based tool. MySQL does offer a corresponding tool, MySQL Administrator, that gives developers some of the functionality offered by Management Studio.