- A '%' or blank Host value means “any host.”
- A '%' or blank Db value means “any database.”

The server reads the db table into memory and sorts it at the same time that it reads the user table. The server sorts the db table based on the Host, Db, and User scope columns. As with the user table, sorting puts the most-specific values first and least-specific values last, and when the server looks for matching rows, it uses the first match that it finds.

The tables_priv, columns_priv, and procs_priv tables grant table-specific, column-specific, and routine-specific privileges. Values in the scope columns of these tables can take the following forms:

- The wildcard characters % and _ can be used in the Host column. These have the same meaning as for pattern-matching operations performed with the LIKE operator.
- A '%' or blank Host value means “any host.”
- The Db, Table_name, Column_name, and Routine_name columns cannot contain wildcards or be blank.

The server sorts the tables_priv, columns_priv, and procs_priv tables based on the Host, Db, and User columns. This is similar to db table sorting, but simpler because only the Host column can contain wildcards.

The server uses the sorted tables to verify each request that it receives. For requests that require administrative privileges such as SHUTDOWN or RELOAD, the server checks only the user and global_privilege tables because those are the only tables that specify administrative privileges. The server grants access if a row for the account in those tables permits the requested operation and denies access otherwise. For example, if you want to execute mysqladmin shutdown but your user table row does not grant the SHUTDOWN privilege to you, the server denies access without even checking the db table. (The latter table contains no Shutdown_priv column, so there is no need to check it.)

For database-related requests (INSERT, UPDATE, and so on), the server first checks the user's global privileges in the user table row (less any privilege restrictions imposed by partial revokes). If the row permits the requested operation, access is granted. If the global privileges in the user table are insufficient, the server determines the user's database-specific privileges from the db table:

- The server looks in the db table for a match on the Host, Db, and User columns.
- The Host and User columns are matched to the connecting user's host name and MySQL user name.
- The Db column is matched to the database that the user wants to access.
- If there is no row for the Host and User, access is denied.

After determining the database-specific privileges granted by the db table rows, the server adds them to the global privileges granted by the user table. If the result permits the requested operation, access is granted. Otherwise, the server successively checks the user's table and column privileges in the tables_priv and columns_priv tables, adds those to the user's privileges, and permits or denies access based on the result. For stored-routine operations, the server uses the procs_priv table rather than tables_priv and columns_priv.

Expressed in boolean terms, the preceding description of how a user's privileges are calculated may be summarized like this:

```
global privileges
OR database privileges
OR table privileges
OR column privileges
```