**SQL Queries Schema Design**

This information is about the Crowd database tables and some example SQL queries.

Crowd Database Schema

Crowd Database Table Information

| **Name** | **Description** |
| --- | --- |
| cwd\_application | All applications listed in Crowd. |
| cwd\_application\_address | Remote addresses currently assigned to each application. |
| cwd\_application\_alias | Alias information for a user |
| cwd\_app\_dir\_operation | Application-level permissions for adding, modifying and removing users, groups and roles from a directory. |
| cwd\_application\_attribute | Attributes for an application. |
| cwd\_app\_dir\_mapping | Directories assigned to each application. |
| cwd\_app\_dir\_group\_mapping | Groups assigned to each application. |
| cwd\_directory | All directories listed in Crowd. |
| cwd\_directory\_attribute | Attributes for a directory. |
| cwd\_directory\_operation | Permissions for adding, modifying and removing users, groups and roles from a directory. |
| cwd\_group | Groups from internal directories. |
| cwd\_group\_attribute | Attributes for a group. |
| cwd\_user | Users from internal directories. |
| cwd\_user\_attribute | Attributes for a user. |
| cwd\_user\_credential\_record | Hashed passwords for each user. |
| cwd\_membership | Group members from internal directories. |
| cwd\_token | User and application session tokens. |

**Example SQL Queries**

**Examples based on PostgreSQL**

The following examples are written for a PostgreSQL database. SQL syntax may vary for other databases.

**Finding Users that are Members of a Group**

|  |
| --- |
| select child\_name from cwd\_membership where parent\_name = '<group-name>'  and membership\_type='GROUP\_USER' and group\_type='GROUP'; |

Where <group-name> is the name of the desired group, e.g. crowd-administrators.

**Finding Attributes for a Specific Directory**

|  |
| --- |
| select directory\_name, attribute\_name, attribute\_value from cwd\_directory,  cwd\_directory\_attribute where cwd\_directory.id=cwd\_directory\_attribute.directory\_id  and directory\_name='<directory\_name>'; |

Where <directory\_name> is the name of the desired directory.

**Finding Attributes for a Specific User**

|  |
| --- |
| select user\_name, attribute\_name, attribute\_value from cwd\_user, cwd\_user\_attribute  where cwd\_user.id=cwd\_user\_attribute.user\_id  and user\_name = '<username>'; |

Where <username> is the account name of the desired user.

**Finding Attributes for a Specific Application**

|  |
| --- |
| select application\_name, attribute\_name, attribute\_value from cwd\_application,  cwd\_application\_attribute where cwd\_application.id=cwd\_application\_attribute  .application\_id  and application\_name = '<application\_name>' |

Where <application\_name> is the name of the desired application.

**Finding the Groups which have Administrative Access to Crowd**

|  |
| --- |
| select group\_name from cwd\_app\_dir\_group\_mapping where application\_id =  (select id from cwd\_application where application\_name='crowd') |

Other Useful SQL Commands

**Important --- Back Up your Database!**

Before making changes to the database via SQL, please ensure you have an immediate backup of the database.

**Resetting a User's Password**

The example below resets a user's password to "admin" (no quotes):

The hashed password below is using an SHA1 algorithm. Please make sure you are using the same algorithm before running this SQL on your 'admin' user.

|  |
| --- |
| update cwd\_user set credential='x61Ey612Kl2gpFL56FT9weDnpSo4AV8j8+qx2AuTHdRyY036xxzTTrw10  Wq3+4qQyB+XURPWx1ONxp3Y3pB37A=='  where user\_name='<username>'; |

Where <username> is the account name of the desired user.