
Migrating a database to a different computer

Use this procedure to migrate a database that resides on a UNIX or Windows operating system to DB2 Information Integrator on a different computer.

Prerequisites:

You must have SYSADM authorization.

If you are migrating from IBM DataJoiner, ensure that your total log file size is twice the size of the DataJoiner backup size of your database.

You must back up your databases by using the **db2 backup database** command.

If you are migrating from DataJoiner, DB2 Relational Connect, or DB2 Life Sciences Data Connect, ensure that DB2 Information Integrator and DB2 Universal Database for Linux, UNIX, and Windows are installed on the target computer.

Restrictions:

You can migrate databases from the following products only:

- DB2 Universal Database Version 6 or DB2 Universal Database Version 7
- DB2 DataJoiner Version 2.1.1 (for AIX, Windows NT, and the Solaris Operating Environment)

Procedure:

To migrate a database to different computer:

1. Issue the **db2 restore database** command:

```
▶▶ RESTORE DATABASE source-database-alias FROM directory-device ◀◀
```

The diagram shows the command structure with brackets indicating the parameters: `RESTORE`, `DATABASE` (with `DB` as a sub-parameter), `source-database-alias`, and `FROM` (with `directory-device` as a sub-parameter).

The `DATABASE source-database-alias` parameter is the alias of the database from which the backup was taken. The `FROM directory/device` parameter is the fully qualified path name of the directory or device on which the backup image resides. If the `FROM` parameter is omitted, the default value is the current working directory of the client computer. This target

directory or device must exist on the database server.

2. If you receive error SQL2519N, (which indicates that the database was restored but the database was not migrated), complete the following steps to migrate the database:

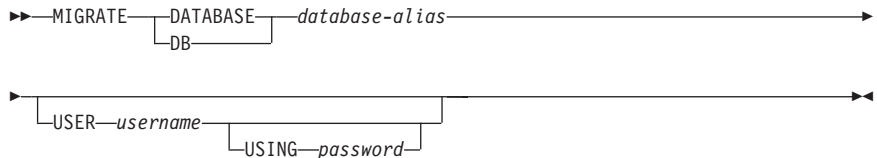
- a. Increase the total size for all log files:

- If you are migrating from DB2 Universal Database Version 6 or from DB2 Universal Database Version 7, double the values of the `logfilsiz`, `logprimary`, and `logsecond` parameters.
- If you are migrating from DataJoiner, the total size for all log files must be twice the backup file size of the database. Use the following formula to determine if you have sufficient log file space on your DataJoiner system:

$$(4096 \times \text{logfilsiz} \times (\text{logprimary} + \text{logsecond})) > 2 \times (\text{DataJoiner database backup file size})$$

4096 is the page size of the log file. `logfilsiz`, `logprimary`, and `logsecond` are database configuration parameters.

- b. Issue the **db2 migrate database** command:



The `DATABASE database-alias` parameter is the alias of the database that you want to migrate to the currently installed version of DB2 Universal Database. The `USER username` parameter is the user name that you want to use to migrate the database. The `USING password` parameter is the password for the user name. If you omit the password but specify a user name, you are prompted for the password.

- c. If the log file size is still not large enough, you receive the following error.

```
SQL1704N Database migration failed. Reason code "3".
```

Increase the log file size, and issue the **db2 migrate database** command again.

- d. Reset the `logfilsiz`, `logprimary`, and `logsecond` parameters.

3. Optional: Rebind the packages.

During database migration, all existing packages are invalidated. After the migration process, each package is rebuilt when it is used for the first time by the DB2 Universal Database Version 8 database manager. Run the **db2rbind** command to rebuild all packages that are stored in the database.

4. Optional: Revoke EXECUTE privileges on external stored procedures that contain SQL data access from PUBLIC.

During database migration, EXECUTE privileges are granted to PUBLIC for all existing functions, methods, and external stored procedures. This privilege setting can cause a security exposure for external stored procedures and allows users to access SQL objects. Revoke the privileges by issuing the **db2undgp - r** command.

5. Optional: Migrate DB2 Explain tables. See the topic Migrating Explain tables.
6. Optional: If you recorded configuration settings before you migrated, compare the premigration configuration settings to the current configuration settings to verify that the migration was successful. Verify the following settings:
 - Database and database manager configuration parameter settings
 - Table space and package records

During the migration process, the database configuration parameter *maxappls* is set to *automatic*. To set this parameter to a different value, change the *maxappls* parameter manually.

Related reference:

- “BACKUP DATABASE Command” in the *Command Reference*