

NAME

gbak — backup /restore Firebird database

SYNOPSIS

gbak -b [*backup option...*] [*common option...*] *source target*

gbak -c|-r [*restore option...*] [*common option...*] *source target*

DESCRIPTION

gbak is the tool for managing Firebird database logical backup and restore.

In backup mode *source* is the path to an existing database and *target* is the backup file name. If *target* is `stdout`, the backup is sent to the standard output.

In restore mode *source* is an existing backup file and *target* is the path to a firebird database. If *source* is `stdin`, the backup data is expected on the standard input.

COMMON OPTIONS

Most options can be abbreviated. Below are given the shortest abbreviations as well as the full versions.

-user *string*

User name to use when connecting to the database.

-ro *string*

-role *string*

SQL role to use when connecting to the database.

-pas *string*

-password *string*

Password to use when connecting to the database.

-se

-service

Use services manager when talking to the database.

-v

-verify

Report each action.

Displays verbose information about what metadata is being processed, what table is being backed up/restored and how many records are processed.

-y *string*

Redirects status/error messages to the given path.

-z Prints full program version number before doing anything else. Prints server and database version information after connecting to the database.

BACKUP OPTIONS

-b

-backup_database

Turns on backup mode.

-co

-convert

Converts external tables into tables.

Normally external tables are ignored during backup and restore. With the **-convert** option external tables are included in the backup as any other regular table. When such a backup is restored, these previously external tables are created as regular tables.

-fa *number*

-factor *number*

Blocking factor. Output is written in block of *number* bytes. Useful when backing up to a tape.

-g

-garbage_collect

Inhibits garbage collection.

Normally Firebird runs a garbage collector when reading through the tables. Since the backup process reads all the tables, this forces garbage collection of the whole database. Using this switch speeds up the backup process and also can help in some cases of backing up damaged databases.

-ig

-ignore

Ignores records with bad checksums.

This option should be used only when backing up damaged databases.

-l

-limbo

Ignores transactions in limbo.

-m

-metadata_only

Backs up metadata only. No table content is included in the backup.

-nt Uses non-transportable backup format.

Non-transportable backups can be restored only on machines using the same byte order.

-o

-old_descriptions

Saves old-style metadata descriptions.

RESTORE OPTIONS

-c

-create

Turns on restore mode.

target database will be created and must not exist.

-r [o]

-recreate_database [overwrite]

Like **-create_database**, but by adding *overwrite* any existing database is overwritten.

-rep

-replace_database

Turns on restore mode. Target database is overwritten if it exists.

-bu *number*

-buffers *number*

When creating target database, ignore information about database buffers stored in the backup and use specified number.

-e

-expand

Normally, Firebird uses RLE compression for strings when storing them on disk. This option turns this compression off.

-i

-inactive

Restore indexes in inactive state. This can be used to restore a backup, containing data inconsistent with foreign key/unique constraints.

Note that since version 3.0 gbak leaves any problematic indices in inactive state automatically.

-k

-kill

Does not restore database shadow files.

-mo *access***-mode *access***

Restores the database with given *access*.

Valid values for *access* are `read_only` and `read_write`. The default is to restore the database with its original access mode.

-n**-no_validity**

Restores the database without its validity constraints. This includes foreign key, unique and check constraints. Useful for restoring a backup, containing inconsistent data.

-o**-one_at_a_time**

Commits restoring transaction after each table.

-p *number***-page_size *number***

Override page size stored in the backup. Valid values are 1024, 2048, 4096, 8192, 16384 and 32768.

-use_**-use_all_space**

Normally, Firebird reserves some space on each data page for further use. This reserved space is used for newly inserted data and for keeping older versions of the data. Having space reserved for this purpose “near” to the data speeds up modifications. If the database will be used mainly for read operations, specifying this option will save disk space.

-fix_fss_metadata *string*

When restoring metadata, in case it is not valid UTF8, try to convert it from the specified character set. Useful when table descriptions are given in some national non-UTF8 encoding, which was possible with Firebird before version 2.5.

-fix_fss_data *string*

When restoring table data, in case a column defined with UNICODE_FSS character set contains no valid UTF8 (which was possible with versions of Firebird prior to 2.5), try to convert the data from the specified character set.

RESTORING TO MULTIPLE-FILE DATABASE

When the *target* argument is in the form *file_1 pages_1 ... file_N*, the restored database is written in several files with *file_i* not bigger than *pages_i* pages. This may be useful if the file system that holds the database file can't handle files above certain size.

Note 1: the file size limit is in **pages**.

Note 1: there is no limit on the size of the last file.

ENVIRONMENT**ISC_USER**

Default value for the `-user` option.

ISC_ROLE

Default value for the `-role` option.

ISC_PASSWORD

Default value for the `-password` option.

EXAMPLES**Backup a database into a compressed format**

```
gbak -b srv:/database.fdb stdout | gzip > database.fbk.gz
```

Restore a database from a compressed backup

```
zcat database.fbk.gz | gbak -c stdin srv:/new-database.fdb
```

SEE ALSO

isql-fb (1), **gfix** (1), **fbstat** (1).

Additional documentation about Firebird can be found on the Firebird Project website, <http://www.firebirdsql.org>.

AUTHOR

This manual page was written by Damyan Ivanov dmn@debian.org for the Debian project. Permission is granted to use this document, with or without modifications, provided that this notice is retained. If we meet some day, and you think this stuff is worth it, you can buy me a beer in return.