

NAME

gfix — miscelenous Firebird database maintenance

SYNOPSIS

gfix *command* [*option...*] *database*

DESCRIPTION

gfix is a program that allows the Firebird administrator or database owner to perform various maintenance tasks.

COMMANDS

-ac

-activate_shadow

Activate database shadow file.

-b *number*

-buffers *number*

Set database buffer size, in pages.

-co *number*|all

-commit *number*|all

Commit a limbo transaction with a given number or all limbo transactions.

-h *number*

-housekeeping *number*

Set the housekeeping interval. When the difference between the oldest interesting transaction and the current transaction exceeds *number*, an automatic garbage collection (sweep) process is started to make possible increasing of the oldest interesting transaction number.

When *number* is 0, there is no automatic sweep and OIT advancement should be arranged by other means, e.g. **gfix -sweep** via **cron** (1).

-icu

Fix the database to be usable with the available ICU version.

Some collations in Firebird are bound the the version of the ICU library. When such a collation needs to be used in an environment with a different version of ICU, an error occurs. **gfix -icu** is the remedy.

-k

-kill_shadow

Kill unavailable database shadow files.

-l

-list

List limbo transactions.

-pr

-prompt

Prompt for commit/rollback for each transaction in limbo.

-me

-mend

Prepare corrupt database for backup.

-mo *access*

-mode *access*

Set database access mode. Possibla values are *read_only* and *read_write*.

-nol

-nolinger

Temporary remove linger setting of the database.

Similar to the following SQL statement:

```
alter database drop linger;
```

but the next attachment to the database will restore the linger setting.

See *sql.extensions/README.linger*.

-o [*mode*]

-online [*mode*]

Brings the database online. The reverse of **-shut**.

mode can be:

normal

This is the default. Brings the database fully online, all normal connections are permitted.

multi

Permits multiple connections from SYSDBA and the database owner.

single

Permits only one connection from SYSDBA or the database owner.

-v

-validate

Perform database validation.

Validation options:

-fu

-full

Full validation. Record fragments are verified.

-i

-ignore

Ignore record checksum errors.

-n

-no_update

Perform read-only validation.

-r *number*|all

-rollback *number*|all

Rollback given limbo transaction or all limbo transactions.

-sq *number*

-sql_dialect *number*

Change the SQL dialect of the database.

-sw

-sweep

Perform immediate garbage collection on the database.

-sh [*mode*] *option timeout*

-shutdown [*mode*] *option timeout*

Shuts the database down. *mode* is either of

multi

Multiple connections from SYSDBA and the database owner are allowed. Ordinary users are denied any requests to the database. This is the default *mode*.

single

Only a single connection from SYSDBA or the database owner is allowed.

full No connections to the database are allowed.

-ca**-cache**Ignored. Equivalent to **-multi**.*option* is either of**-at****-attach**

Prevents new attachments (connections). Active connections continue to work.

-tra**-transaction**

Prevents new transactions. Open transactions continue to work.

-fo**-force_shutdown**

Force immediate database shutdown. All running statements, transactions and connections are aborted.

-tw**-two_phase**

Perform two-phase recovery of limbo transactions.

-u mode**-use mode**Set the page allocation preference. When *mode* is `reserve` a certain amount of the page is kept aside for record versions. When *mode* is `full` database pages are used fully without such reservations.Corresponds to the **-use_all** option of **gbak** (1).**-w mode****-write mode**Sets the synchronous writes flag. `sync` sets the synchronous mode flag (also known as forced writes). `async` clears the flag.

When the flag is on, all writes to the database are synchronised via a call to the operating system to ensure that the data has reached stable storage.

OPTIONS

-fe file**-fetch_password file**Read password from *file*.**-pas string****-password string**

Password for the connection.

-ro string**-role string**

Use supplied SQL role for the connection.

-user string

Use supplied user name for the connection.

-z Prints the **gfix** version number before anything else.

ENVIRONMENT

ISC_USERDefault value for the **-user** option.**ISC_ROLE**Default value for the **-role** option.

ISC_PASSWORD

Default value for the `-password` option.

SEE ALSO

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.