# BitKeeper Reference Card

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**http://www.bitkeeper.com**

## BitKeeper Command Syntax

bk [*global_options*] *command* [*command_options*] [*args*]

## Global Options:

**–R** Perform operation at root of repository
**–r** Perform recursive operations

### Options common to most commands:

**–v** Run verbosely
**–q** Run quietly

## Repository-Level Commands

### bk abort

Abort a failed pull or push

### bk changes

Main command for browsing the repository history. See **bk help changes** for other useful options. See also **bk revtool**.

**–L** List changes in local that are not in remote
**–R** List changes in remote that are not in local
**–/***pat***/** List changesets whose comments include *pat*.
**–u***user* List changesets created by *user*.

### bk repocheck

Run a consistency check (like fsck).

### bk clone [*options*] *source destination*

Make a copy of a repository
**–r***rev*|*tag* clone backwards to the changeset specified by *rev* or *tag*.
**–l** Make a hard linked clone (UNIX only).

### bk commit [*options*]

Group checked in changes into a changeset
**–yC** Set check-in comment to *C*
**–YC** Get check-in comment from file *C*
See also **bk help citool**.

### bk export [*options*] [*source*] *dest*

Extract a particular version as a tree or a patch
**–k** Do not expand keywords.
**–r***rev* Export the tree as of revision *rev*.
**–t***patch* Export the specified revision[s] as a traditional patch.

## Repository-Level Commands...

### bk import [*options*] *source dest*

Import external changes into a BK repository.
**–t***patch* Import a patch (can be done repeatedly).
**–t***CVS* Import a CVS (one time only).

### bk parent [*repo*]

Show or set the repository from which we pull or to which we push (Note: repos may have multiple parents; see **bk help parent**)

### bk pull [*options*] [*source*]

Pull changes from the parent or source to this repository
**–i** Turn off automerge
**–r***rev* Pull up to, but not past, *rev*.

### bk push [*options*] [*destination*]

Push changes from this repository to the parent or dest
**–a** Automatically do a pull if the push has conflicts

### bk conflicts [*options*]

Show files that are in conflict in an unresolved pull.
**–v** Be more verbose about who/what. **–vv** is yet more verbose.

### bk resolve [*options*] [*file* **...**]

Merge conflicts created by a pull
**–a** Automerge if possible
**–t** Text-only mode, use no GUI tools.
**–y[***msg***]** Use *msg* as the check-in message

### bk setup [*options*] *directory*

Create a new BitKeeper package in *directory*.
**–c***file* Use *file* as the configuration file
Use **bk clone** to create copies, **bk setup** is for the creation of a new package.
See also **bk setuptool**.

### bk status [*options*] [*repo*]

Show repository information such as number of files, uncommitted files, BitKeeper version, etc.

### bk tag [*options*] *symbol*

Tag the most recent changeset with a symbolic name
**–r***rev* Tag *rev* instead of most recent changeset.
See also **bk clone –r**.

### bk unpull

Remove changesets added by the most recent **bk pull**. Also **removes the merge**, if any.

### bk version

Show BitKeeper software version.

## File-Level Commands

### Specifying file argument lists

**bk** *cmd* – invoke *cmd* on all files in this directory only
**bk** *cmd *.c* – invoke *cmd* on **.c*
**bk –r** *cmd* – invoke *cmd* on all revision controlled files
**bk –r***dir cmd* – start at *dir* instead of repository root
**bk –c –r** *cmd* – invoke *cmd* on all modified files
**bk –x –r** *cmd* – invoke *cmd* on all files **not** under revision control
See also **bk sfiles**.

### bk ci [*options*] [*files*]

Check in locked and modified files
**–y***str* Set the revision comment to *str*
**–p** Print differences before prompting for comments

### bk clean [*options*] [*files*]

Unlock and remove unmodified working files

### bk co [*options*] [*files*]

Check out files

### bk diffs [*options*] [*files*]

Show differences in revision controlled files
**–r***rev* Diff working file against revision *rev*
**–r***r1..r2* Diff revision *r1* against revision *r2*
**–r@***cset* Diff working file against version in changeset *cset*
**–u** Do unified diffs

### bk edit [*options*] [*files*]

Check out and lock files for editing.

### bk mv *source destination*

move file or directory, recording the move for all files

### bk new [*options*] [*files*]

Add a new file to the repository

### bk log [*options*] [*files*]

View revision history of a file
**–c***date* Cut-off dates.
**–d***spec* Specify output data specification
**–h** Suppress headers
**–r***rev* Specify a revision, or part of a range

### bk rm *files*

Remove a file in a recoverable way

### bk sfiles [*options*] [*directory*]

Generate a list of files.
**–c** List locked and modified files
**–n** List files not in the correct location (names)
**–p** List files with pending deltas
**–x** List files not under revision control
**–E** List "everything" in an ls –l style format

## File-Level Commands...

**bk undo [***options***] [***files***]**

Remove one or more changesets

**–a***rev* Remove all changesets that occurred after *rev*

**–f** Do not prompt for confirmation

**–r***revs* Remove the list of changesets specified by *revs*

**bk what** *files*

Show SCCS keywords embedded within a file

## BitKeeper File Types

| | |
|---|---|
| **foo.c** | gfile, this is your source file |
| **SCCS/s.foo.c** | sfile – file with all revision history |
| **SCCS/p.foo.c** | pfile – lock file created when file is edited |
| **SCCS/z.foo.c** | zfile – lock file created when checking in a new version |
| **SCCS/x.foo.c** | xfile – temporary file containing s.file underway |

## Common operations

**Get a working copy of a tree**

**bk clone bk://mysql.bkbits.net/mysql-3.23**

**Edit some files**

**cd mysql-3.23 && bk vi README**

**Create new files**

**bk new *.[ch]**

**Create a patch of all changed or new files**

**bk –xcr diffs –Nu > /tmp/patch**

**Check in the files, creating a changeset**

**bk citool**

**Push the changes back up**

**bk push**

**Pull updates**

**bk pull**

**View a changeset as diffs plus comments**

**bk changes –vvr***rev*

**Search for a string in the most recent version**

**bk –r grep –r+** *string*

**Search for a string in all versions**

**bk –r grep –R** *string*

**Graphically browse a file's history**

**bk revtool** *file*

**Graphically browse a project's history**

**bk revtool**

## Graphical Tools

**bk citool [***dir or file list***]**

Graphical checkin tool – shows all modified files and all files not under revision control. Click on a modified file to view the differences and enter checkin comments for that file in the comment window.

**bk csettool [–r***revs***]**

View all changes contained in a changeset or set of changesets. Lists the changesets, the deltas in each file in each changeset, and shows the differences for each file.

**bk difftool** *left right*

Side-by-side file difference viewer. If *right* is a directory the implied name is *right/left*, like diff(1).

**bk fm3tool –l***local* **–r***remote* **–o***merge file*

3-way side-by-side merge tool for resolving differences. Walks through each change, allows you to select either, places the selection in a merge window, which can then be edited directly. Typically called from resolve.

**bk fmtool** *local remote merge*

2-way side-by-side merge tool for resolving differences.

**bk helptool [***topic***]**

Online help system with search facility.

**bk revtool [***filename***]**

Graphically browse file or project history. Click left on a node and then click right on a later node to view differences. Double click on a node to get an annotated listing of that version of the file. Press "c" to get an annotated listing of **all** versions of a file (**try this!**). Click on any line in an annotated listing to jump to that node of the revision history. Click "View Changeset" to see all other files changed at the same time as the selected line.

**bk setuptool [***package***]**

Graphical tool to setup a new package.

**bk sendbug [–t]**

Graphical tool (or text-based with **–t**) to report a bug.

## Range and Date Syntax

**Commands that take a revision option, –r, can usually take either a range of deltas or a range of dates as the argument.**

**Date format is YYMMDDhhmmss.**

```
–r1.1..1.5      # specify both endpoints
–c06..06        # all changes in 2006
–c–1M           # all changes in the last month
```

## Merging

**bk help resolving**

Get help on the merge process

**bk help merge-binaries**

Get help on merging binaries

## Searching

**bk grep [***options***] pattern [***files***]**

Search some/all revisions of one or more files for a string. See **bk help grep**; this command is now much closer to GNU grep.

**bk annotate [***options***] [***files***]**

Show an annotated listing

**bk annotate –R [***options***] [***files***]**

Show a listing of **all** versions of a file

## Getting more help

**Other commands**

This reference card is not a complete listing of the commands and their options; it lists the most commonly used combinations. See the help facilities described below for a complete listing.

**bk helptool [***cmd***]**

Graphical, hyperlinked, searchable help tool – shows all man pages, with word search and a page-views stack like web browsers.

**bk help** *cmd*

Shows man-page-like help for *cmd*.

**http://www.bitkeeper.com/UG**

Online user guide.

**bk sendbug**

To report a bug or request a feature

**http://db.bitkeeper.com/**

To search existing bug reports

**mail support@bitkeeper.com**

For BitKeeper support.

**+1-408-370-9911 (international & California)**
**1-888-401-8808 (toll free in US & Canada)**

For **right now** support.