BitKeeper Reference Card

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.
- **−uuser** List changesets created by user.

bk repocheck
Run a consistency check (like fsck).

bk clone [options] source destination
Make a copy of a repository
- **−rrev** 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.
- **−rrev** Export the tree as of revision rev.
- **−tpatch** Export the specified revision[s] as a traditional patch.

Repository-Level Commands...

bk import [options] source dest
Import external changes into a BK repository.
- **−tpatch** Import a patch (can be done repeatedly).
- **−tCVS** 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
- **−rrev** 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.
- **−cfile** 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
- **−rrev** 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 −rdir 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
- **−ystr** 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
- **−rrev** Diff working file against revision rev
- **−rr1..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
- **−cdate** Cut-off dates.
- **−dspec** Specify output data specification
- **−h**   Suppress headers
- **−rrev** 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
  −arev Remove all changesets that occurred after rev
  −f   Do not prompt for confirmation
  −rrevs 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 −vvrrev
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 [−rrevs]
  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 −llocal −rremote −omerge 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.