SYSBPM Direct Commands

The SYSBPM direct commands described in this section can be used to directly execute SYSBPM utility functions or navigate in SYSBPM screens in online or batch mode. For additional SYSBPM direct commands that only apply to particular screens, refer to the sections where the individual SYSBPM functions are documented.

SYSBPM direct commands that refer to the BP cache or buffer pool hash table only apply to buffer pools of the type Natural.

The following table lists all SYSBPM direct commands (including subcommands) provided, the parameters that can be used with the commands, and the equivalent SYSBPM menu functions.

The SYSBPM direct commands listed below can be entered in the Command line of any SYSBPM screen. To execute a SYSBPM direct command from any other command prompt or in batch mode, the direct command must be preceded by the keyword SYSBPM, for example:

```
SYSBPM ADD BLACKLIST
```

An underlined portion of a SYSBPM command represents its minimum abbreviation. Parameter values that are required by a command are represented by letters in italics.

Command	Parameters	Function
+	none	Scrolls one page down in a list.
–	none	Scrolls one page up in a list.
ADD BLACKLIST	none	Invokes the **Maintain Blacklist** screen described in *Blacklist Maintenance*.
ADD SET	*library-name set-name*	Adds all objects of a specified object set to the blacklist as described in *Add Object Set to Blacklist*.
BLACKLIST	none	Invokes the **Blacklist Maintenance** menu.
BOTTOM	none	Scrolls to the end of a list.
CANCEL	none	Same as EXIT.
CHECK HASH or CHECK HT	none	Checks the BP hash table for consistency and returns the number of inconsistencies found. See also REBUILD HASH.
CLOSE BPC	none	BP cache required. Closes the BP cache. The buffer pool runs without BP cache afterwards. You can restart the BP cache by using the INITIALIZE BPC command.

Command	Parameters	Function
DELETE	none	Deletes all objects from the buffer pool and the BP cache. If entered on the **Directory Information** screen: see DELETE in *PF Keys and Direct Commands*.
DELETE	*library-name object-name dbid fnr*	Deletes the specified object(s) from the buffer pool and the BP cache as described in *Delete Objects*.
DELETE ALL	none	Deletes all objects from the blacklist as described in *Delete Object Set from Blacklist*.
DELETE BUFFERPOOL or DELETE BP	none	Deletes all objects from the buffer pool only.
	library-name object-name dbid fnr	Deletes the specified object(s) from the buffer pool only.
DELETE BPC	none	BP cache required. Deletes all objects from the BP cache only.
	library-name object-name dbid fnr	BP cache required. Deletes the specified object(s) from the BP cache only.
DELETE BLACKLIST	none	Invokes the **Maintain Blacklist** screen where you can delete blacklist entries as described in *Blacklist Maintenance*.
DELETE SET	*library-name set-name*	Deletes all objects of the specified object set from the blacklist as described in *Delete Object Set from Blacklist*.
DISPLAY ALL	none	Same as DISPLAY LIST.
DISPLAY BUFFERPOOL or DISPLAY BP	none	See *Display Buffer Pools* in *Select Buffer Pool*.
DISPLAY BLACKLIST	none	Invokes the **Maintain Blacklist** screen described in *Blacklist Maintenance*.
DISPLAY CDIRECTORY	none	BP cache required. Invokes the **Directory Information** screen.

Command	Parameters	Function
DISPLAY CGENERAL	none	BP cache required. Invokes the **General BP Cache Statistics** screen described in *General BP Cache Statistics*.
DISPLAY CHASH	none	Invokes the function **BP Cache Hash Table Statistics** described in *BP Cache Hash Table Statistics* and displays the **Cache Hash Table Collisions** screen.
DISPLAY CLIST	*library-name object-name dbid fnr*	BP cache required. Invokes the **List Objects** screen. In contrast to the command DISPLAY LIST, this command generates a statistics report that displays data about BP cache objects at the beginning of the list.
DISPLAY CLOAD	none	BP cache required. Invokes the **BP Cache Call Statistics** screen described in *BP Cache Statistics*.
DISPLAY CSTATISTICS	none	BP cache required. Invokes the **BP Cache Statistics** menu described in *BP Cache Statistics*.
DISPLAY DIRECTORY	*library-name object-name dbid fnr*	Invokes the **Directory Information** screen.
DISPLAY FRAGMENTATION	none	Invokes the **Buffer Pool Fragmentation** screen described in *Buffer Pool Statistics*.
DISPLAY FUNCTION	none	Invokes the **Internal Function Usage** screen described in *Buffer Pool Statistics*.
DISPLAY GENERAL	none	Invokes the **General Buffer Pool Statistics** screen described in *Buffer Pool Statistics*.
DISPLAY HASH or DISPLAY HT	none	Invokes the function **Buffer Pool Hash Table Statistics** and displays the **Hash Table Collisions** screen.
DISPLAY HDIRECTORY	*library-name object-name dbid fnr*	Invokes the **Directory Information Hex** screen that displays in hexadecimal format the directory information of an object.
DISPLAY HEX	*library-name object-name dbid fnr*	Invokes the **Hexadecimal Display** screen that displays in hexadecimal format the source of an object.

Command	Parameters	Function
DISPLAY LIST	*library-name object-name dbid fnr*	Invokes the **List Objects** screen. In contrast to the command DISPLAY CLIST, this command generates a statistics report that displays data about buffer pool objects at the beginning of the list.
DISPLAY LOAD	none	Invokes the **Buffer Pool Load/Locate Statistics** screen described in *Buffer Pool Statistics*.
DISPLAY PERFORMANCE	none	Invokes the **Performance Hints** screen with performance-related statistics of a Natural buffer pool and BP cache as described in *Buffer Pool Statistics* and *BP Cache Statistics*.
DISPLAY STATISTICS	none	Invokes the **Buffer Pool Statistics** menu described in *Buffer Pool Statistics*.
EDIT PRELOADLIST	*list-name*	Invokes the **Edit Preload List** screen described in *Preload List Maintenance*.
EDIT SET	*library-name set-name*	Invokes the **Edit Object Set** screen described in *Blacklist Maintenance*.
EXIT	none	Leaves the current function/screen and displays the previous screen.
FLIP	none	Switches the PF-key line: toggles between the display of PF1 to PF12 and PF13 to PF24.
GENERATE PRELOADLIST	*list-name gen-library*	Invokes the function **Generate Preload List from Buffer Pool**.

Command	Parameters	Function
INITIALIZE	none or: 1, 2, 4, 8, 12, 16	Reinitializes the buffer pool and the BP cache. If no text record size is specified, the current text record size will be taken. Only use this function if the **Current Use Count** (see *Directory Information*) is equal to 0 (see the warning below) or if the buffer pool has been destroyed. ⚠ **Warning:** **If you try to reinitialize the buffer pool while objects are being executed by active sessions in this buffer pool, the Confirm Initialization window appears with the Current Use Count for this buffer pool (not counting the SYSBPM user himself). If Current Use Count is *not* equal to 0 (zero) and you enter a Y to confirm the reinitialization of the buffer, the results of the active sessions are unpredictable and Natural can even abend.**
INITIALIZE BP	none or: 1, 2, 4, 8, 12, 16	Reinitializes the buffer pool only. If no text record size is specified, the current text record size will be used. See also the *Warning* above.
INITIALIZE BPC	none	BP cache required. Reinitializes the BP cache only. The text record size of the BP cache is fixed (4 KB).
LAST	none	Displays the SYSBPM direct command entered most recently.
LIST PRELOADLIST	*list-name*	Invokes the **List Preload Lists** screen for the specified object as described in *Preload List Maintenance*.

Command	Parameters	Function
LIST SET	*library-name set-name*	Invokes the **List Object Sets** screen for the specified library or object as described in *Blacklist Maintenance*. Asterisk (*) is also allowed for *set-name*.
MENU	none	Invokes the SYSBPM **Main Menu** as described in *Invoking and Operating SYSBPM*.
PRELOADLIST	none	Invokes the **Preload List Maintenance** menu described in *Preload List Maintenance*.
QUIT	none	Same as EXIT.
REBUILD HASH or REBUILD HT	none	Rebuilds hash tables if inconsistencies are found with CHECK HASH. REBUILD HASH deletes the current hash table and rebuilds a new hash table from the current buffer pool contents.
RESET BUFFERPOOL or RESET BP	none	Resets the buffer pool as described in *Reset Buffer Pool*.
SELECT BUFFERPOOL or SELECT BP	none	Only applies to buffer pools of the type Natural, DL/I or Sort. Invokes a selection list of buffer pools as described in *Select Buffer Pool*.
SORT BPC	(syntax below)	Sorts the BP cache as described in *Display Sorted Extract*.
SORT BUFFERPOOL	(syntax below)	Sorts the buffer pool as described in *Display Sorted Extract*.
STOP	none	Leaves the SYSBPM utility.
TOP	none	Scrolls to the beginning of a list.
WRITE BP or WRITE BPC or WRITE ALL		Writes object directory data to a local file or a PC text file. See also *Write to Work File*.

This section covers the following topics:

- SORT

- SORT BPC

SORT

```
SORT [ { BUFFERPOOL } ] { OBJECT } [ { D } ]
     [ { BP        } ] { TOTAL  }   { A }
                       { LAST   }
```

SORT BPC

```
SORT BPC { OBJECT } [ { D } ]
         { TOTAL  }   { A }
         { LAST   }
```