Blacklist Maintenance

This function is used to maintain a blacklist of Natural objects. In a blacklist, you can specify the Natural objects that are not to be loaded into the buffer pool; objects that are already loaded in the buffer pool are then deleted. If the BP cache is enabled, the Natural objects will also be deleted from the BP cache. The blacklist always applies to the buffer pool currently active.

In a blacklist, you can maintain individual Natural objects and/or libraries and object sets which contain multiple Natural objects. In an object set, you specify the objects not to be executed and add a single set (instead of multiple individual objects) to the blacklist. You can also combine both: maintain objects individually or by sets.

The source code of an object set is stored as a Natural source object of the type Text in the current Natural library and system file. The first line of an object set source contains the comment `**BBL**` (buffer pool blacklist).

For further information on the blacklist, see the relevant section in *Natural Buffer Pool* in the *Operations* documentation.

▶ **To invoke Blacklist Maintenance**

- In the SYSBPM **Main Menu**, enter the following function code:

```
B
```

    Or:
    Enter the following SYSBPM direct command:

```
BLACKLIST
```

    The **Blacklist Maintenance** menu appears.

The functions provided in the **Blacklist Maintenance** menu are explained in the following section. This section also provides information on additional blacklist maintenance functions.

- Maintain Blacklist

- List Object Sets

- Edit Object Set

- Add Object Set to Blacklist

- Delete Object Set from Blacklist

- Delete Object Set Source Object

- Additional Object Set Maintenance with Utilities

- Blacklist Maintenance in Batch Mode

Maintain Blacklist

This function invokes the **Maintain Blacklist** screen where you can display and maintain all Natural objects currently available in the blacklist.

▶ **To invoke the Maintain Blacklist screen**

- In the **Blacklist Maintenance** menu, enter the following function code:

```
M
```

Or:
Enter the following SYSBPM direct command:

```
DISPLAY BLACKLIST
```

The **Maintain Blacklist** screen appears with the current blacklist. Press PF7 to scroll one page backward and PF8 to scroll one page forward.

Depending on the mode set when calling the **Maintain Blacklist** function earlier during a SYSBPM session, the **Maintain Blacklist** screen appears in **Display Mode** (default when initializing SYSBPM) or **Add Mode**. Use PF9 to switch from one mode to the other.

This section covers the following topics:

- Adding Objects

- Modifying Objects

- Deleting Objects

Adding Objects

▶ **To add objects to the blacklist**

1. In the **Blacklist Maintenance** menu, enter the following function code:

```
M
```

Or:
Enter the following SYSBPM direct command:

```
DISPLAY BLACKLIST
```

The **Maintain Blacklist** screen appears.

2. If required, press PF9 to switch to **Add Mode**.

A screen with empty input fields appears.

3. In the relevant input fields, enter the name of the library where the objects are stored, the names of
the objects and the corresponding database IDs (DBID) and file numbers (FNR). If DBID and FNR are
left blank, they will be taken from the current system file FUSER or FNAT in libraries whose names start
with SYS (except the library SYSTEM).

If you need to clear the **Add Mode** screen, in the Command line, enter either of the following:

```
CLE
```

or

```
CLEAR
```

4. Press PF5 to confirm the addition.

Or:
In the Command line, enter either of the following:

```
UP
```

or

```
UPDATE
```

An appropriate message appears.

Modifying Objects

▶ **To modify objects on the blacklist**

1. In the **Blacklist Maintenance** menu, enter the following function code:

```
M
```

Or:
Enter the following SYSBPM direct command:

```
DISPLAY BLACKLIST
```

The **Maintain Blacklist** screen appears.

2. If required, press PF9 to switch to **Display Mode** and obtain the list of all objects currently contained in the blacklist.

3. In the relevant input field(s), replace the existing entries with new values.

4. Press PF5 to confirm the modification.

Or:
In the Command line, enter either of the following:

```
UP
```

or

```
UPDATE
```

An appropriate message appears.

Deleting Objects

▶ **To delete individual objects from the blacklist**

1. In the **Blacklist Maintenance** menu, enter the following function code:

```
M
```

Or:
Enter the following SYSBPM direct command:

```
DISPLAY BLACKLIST
```

The **Maintain Blacklist** screen appears.

2. If required, press PF9 to switch to **Display Mode** and obtain a list of all objects currently on the blacklist.

3. In column **C**, next to the object(s) required, enter the following line command:

```
DE
```

4. Press ENTER to confirm the deletion.

   An appropriate message appears.

▶ **To delete all objects from the blacklist**

1. In the **Blacklist Maintenance** menu, enter the following function code:

```
M
```

   Or:
   Enter the following SYSBPM direct command:

```
DISPLAY BLACKLIST
```

   The **Maintain Blacklist** screen appears.

2. Press PF2.

   The **Confirm Delete** window appears.

3. Confirm the deletion, by entering Y (Yes).

   Or:
   Cancel the deletion, by entering N (No; this is the default) or by pressing PF3 without entering anything in the window.

4. Press ENTER to confirm the action.

   An appropriate message appears.

List Object Sets

This function invokes the **List Object Sets** screen which displays a list of all existing object sets.

▶ **To invoke the List Object Sets screen**

- In the **Blacklist Maintenance** menu, enter function code L, a library name and an object set name. Asterisk (*) notation is also allowed for an object set name.

  Or:
  Enter the following SYSBPM direct command:

```
LIST SET library-name set-name
```

Asterisk (*) notation is also allowed for *set-name*.

The **List Object Sets** screen appears with the specified set(s).

You can manipulate an object set from the **List Object Sets** screen by using any of the line commands provided to modify a set and add it to or delete it from the blacklist. For a list of possible line commands, enter a question mark (?) in the leftmost screen column (prefix information).

For a list of commands that can be entered in the command line of the **List Object Sets** screen, invoke the **Help** window by entering a question mark (?) in the command line. If required, press PF7 to scroll backward and PF8 to scroll forward in the window.

Edit Object Set

This function invokes the **Edit Object Set** screen where you can create a new object set, add objects to an existing set or modify them, or delete objects from a set.

The editing functions provided on the **Edit Object Set** screen are a subset of the functions provided by the Software AG Editor described in the *Editors* documentation.

For a list of available line commands, enter a question mark (?) in the leftmost screen column (prefix information).

For a list of commands that can be entered in the command line of the **Edit Object Set** screen, invoke the **Help** window by entering a question mark (?) in the command line. If required, press PF7 to scroll backward and PF8 to scroll forward in the window.

This section covers the following topics:

- Creating Object Sets

- Modifying Object Sets

Creating Object Sets

▶ **To create an object set**

1. In the **Blacklist Maintenance** menu, enter function code E and a library name. Do *not* enter the name of an object set but clear the contents (if any) of the corresponding field.

   The **Edit Object Set** screen appears.

2. In the relevant input fields, enter the name of the library where the objects are stored, the names of the objects and the corresponding database IDs (DBID) and file numbers (FNR). If DBID and FNR are left blank, they will be taken from the current system file FUSER or FNAT in libraries whose names start with SYS (except the library SYSTEM).

3. To save the object set as a source object of the type Text, in the command line of the **Edit Object Set** screen, enter the following:

```
SA set-name
```

Modifying Object Sets

This section provides instructions for adding objects to an object set, modifying existing objects and deleting objects from an object set. Note that any of these object set modifications will *not* update the current blacklist.

▶ **To add a new object to an object set**

1. In the **Blacklist Maintenance** menu, enter function code E, a library name and an object set name.

   Or:
   On the **List Object Sets** screen, in the leftmost column, next to the object set required, enter the following line command:

```
E
```

   Or:
   Enter the following SYSBPM direct command:

```
EDIT SET library-name set-name
```

   The **Edit Object Set** screen appears with the specified object set.

2. Complete the input fields by entering the name of the library where the objects are stored, the names of the objects and the corresponding database IDs (DBID) and file numbers (FNR). If DBID and FNR are left blank, they will be taken from the current system file FUSER or FNAT in libraries whose names start with SYS (except the library SYSTEM).

3. To save the modifications, in the command line of the **Edit Object Set** screen, enter the following:

```
SA
```

▶ **To modify an object of an object set**

1. In the **Blacklist Maintenance** menu, enter function code E, a library name and an object set name.

   Or:
   On the **List Object Sets** screen, in the leftmost column, next to the object set(s) required, enter the following line command:

```
E
```

Or:
Enter the following SYSBPM direct command:

```
EDIT SET library-name set-name
```

The **Edit Object Set** screen appears with the specified object set.

2. In the relevant input field(s), replace the existing entries with new values.

3. To save the modifications, in the command line of the **Edit Object Set** screen, enter the following:

```
SA
```

▶ **To delete an object from an object set**

1. In the **Blacklist Maintenance** menu, enter function code E, a library name and an object set name.

    Or:
    On the **List Object Sets** screen, in the leftmost column, next to the object set(s) required, enter the following line command:

```
E
```

    Or:
    Enter the following SYSBPM direct command:

```
EDIT SET library-name set-name
```

    The **Edit Object Set** screen appears with the specified object set.

2. In the leftmost column, next to the object required, enter the following line command:

```
D
```

    The specified object is removed from the object set.

3. To save the modification, in the command line of the **Edit Object Set** screen, enter the following:

```
SA
```

Add Object Set to Blacklist

This function is used to add all objects of an object set to the blacklist.

▶ **To add an object set to the blacklist**

- In the **Blacklist Maintenance** menu, enter function code A, a library name and an object set name.

    Or:
    On the **List Object Sets** screen, in the leftmost column, next to the object set(s) required, enter the following line command:

    ```
    AC
    ```

    Or:
    On the **Edit Object Set** screen, in the command line, enter the following:

    ```
    AC
    ```

    Or:
    Enter the following SYSBPM direct command:

    ```
    ADD SET library-name set-name
    ```

    A message appears confirming that the object set was added to the blacklist.

Note:
The command AC denotes ACTIVATE which is the equivalent of **Add Object Set to Blacklist**.

Delete Object Set from Blacklist

This function is used to delete all objects of an object set from the blacklist. Note that the **Delete Object Set** function will *not* delete the object set as a source object. The objects of the object set can be added to the blacklist again at any time, as described above. See also *Delete Object Set Source Object*.

▶ **To delete an object set from the blacklist**

- In the **Blacklist Maintenance** menu, enter function code D, a library name and an object set name.

    Or:
    On the **List Object Sets** screen, in the leftmost column, next to the object set(s) required, enter the following line command:

    ```
    DA
    ```

Or:
On the **Edit Object Set** screen, in the command line, enter the following:

```
DA
```

Or:
Enter the following SYSBPM direct command:

```
DELETE SET library-name set-name
```

A message appears confirming that the object set was deleted from the blacklist.

Note:
The command DA denotes DEACTIVATE which is the equivalent of **Delete Object Set from Blacklist**.

Delete Object Set Source Object

▶ **To delete the source object of an object set**

1. In the **Blacklist Maintenance** menu, enter function code L, a library name and an object set name.

   Or:
   Enter the following SYSBPM direct command:

```
LIST SET library-name list-name
```

   The **List Object Sets** screen appears.

2. In the leftmost column, next to the object set required, enter the following line command:

```
D
```

   The **DELETE** window appears.

3. Confirm the deletion by entering the name of the object set.

   A confirmation message appears.

Note:
Deleting the source object of an object set will *not* update the current blacklist.

Additional Object Set Maintenance with Utilities

The Natural utilities SYSMAIN and Object Handler provide additional functions for maintaining object sets. Functions include transferring object sets between different Natural libraries and system files and/or different mainframe platforms and deleting or finding object sets in a different environment.

When using a Natural utility, an object set is treated like any other source object of the type Text.

For details, refer to the relevant sections in the *Utilities* documentation.

Blacklist Maintenance in Batch Mode

SYSBPM blacklist maintenance functions can also be executed in batch mode as described in *Batch Processing*.

In addition, the Natural system library SYSBPM provides the command BPMBLBAT that further facilitates batch processing of the blacklist maintenance functions add and delete all objects.

Log on to the library SYSBPM and execute the BPMBLBAT command using the syntax indicated in the diagram below. The symbols used in the diagram are explained in the section *System Command Syntax* in the *System Commands* documentation.

```
BPMBLBAT  ⎧ FUNC=LOCK, BPNAME=bp-name, (object-specification) ⎫
          ⎨                                                    ⎬
          ⎩ FUNC=RLS,  BPNAME=bp-name                          ⎭
```

This section covers the following topics:

- Explanation of Syntax

- Examples of Input

Explanation of Syntax

The keywords and the *object-specification* clause indicated in the BPMBLBAT syntax diagram above are described in the following section. *Examples of Input* demonstrate the use of the keywords.

Syntax Item	Explanation
FUNC=LOCK	Adds object names to a blacklist as described in *Adding Objects* in the section *Maintain Blacklist*.
FUNC=RLS	Deletes a complete blacklist with all object names contained in the list. This functions corresponds to delete function described under *To delete all objects from the blacklist* in the section *Maintain Blacklist*. (In batch mode, you cannot delete single object names from a blacklist.)
BPNAME	The name of the buffer pool where the blacklist is loaded.
object-specification	The keywords that apply to the *object-specification* clause (see the respective syntax below) are:
	LIB The name of the library where the objects are stored.
	DBID The database ID (DBID) and the file number (FNR) where the FNR objects are stored. If DBID and FNR are left blank, they will be taken from the current system file FUSER or FNAT in libraries whose names start with SYS (except the library SYSTEM).
	object-name The name(s) of the object(s) to be added to the blacklist: Enter each name in a separate line in the positions 1 to 8. To indicate the end of the input, in a separate line, enter a period (.)

Syntax of *object-specification*

Shown and explained below is the syntax that applies to *object-specification*:

> **LIB=***lib-name*, **DBID** *dbid*, **FNR** *fnr* [*object-name*]...

Examples of Input

Example 1 - Adding Objects to a Blacklist

The example input below demonstrates how to add to a blacklist the objects A, B and C in the buffer pool NATGBP:

```
/*Job
.
.
.
*/Job

LOGON SYSBPM
BPMBLBAT
```

```
FUNC=LOCK,BPNAME=NATGBP,LIB=SAGTEST,DBID=10,FNR=32
A
B
C
.
FIN
```

Example 2 - Deleting a Blacklist:

The example input below demonstrates how to delete a blacklist in the buffer pool NATGBP:

```
/*Job
.
.
.
*/Job
LOGON SYSBPM
BPMBLBAT
FUNC=RLS,BPNAME=NATGBP
.
FIN
```