

# Directory Information

This function is used to display the full directory of a Natural object currently loaded in the buffer pool or BP cache.

## ▶ To invoke Directory Information

- In the SYSBPM **Main Menu**, specify the following:

Enter function code **I**.

In the fields **Object**, **Library**, **DBID** and **FNR**, specify the object for which to display the directory: the valid input values are described in *Invoking and Operating SYSBPM*.

In the **Object Pool** field, enter the code that corresponds to the object pool from which to read the object directory information:

B or * (asterisk)	Buffer pool
C	BP cache

Or:

Use either of the following SYSBPM direct commands:

○

```
DISPLAY DIRECTORY library-name object-name dbid fnr
```

(For the directory of the specified object loaded in the buffer pool.)

○

```
DISPLAY CDIRECTORY library-name object-name dbid fnr
```

(For the directory of the specified object loaded in the BP cache.)

The **Directory Information** screen appears. Depending on the object pool (buffer pool or BP cache) selected, the screen provides different fields as described in the following section.

- Fields for Buffer Pool Objects
- Fields for BP Cache Objects
- PF Keys and Direct Commands

## Fields for Buffer Pool Objects

For directories of objects loaded in the buffer pool, the **Directory Information** screen provides the following fields and information on a specified object:

Field	Explanation	
<b>Directory of</b>	The type (for example, map) and name of the object.	
<b>Loaded</b>	<b>from Library</b>	The name of the library from which the object was loaded into the buffer pool.
	<b>on DBID/FNR</b>	The database ID (DBID) and file number (FNR) of the system file FNAT or FUSER from which the object was loaded into the buffer pool.
	<b>on</b>	The date and time when the object was loaded into the buffer pool.
	<b>by User</b>	The ID of the user who executed the object.
<b>Last Action on</b>	The date and time when the object was last used by an application.	
<b>BP Directory at Address</b>	The address of the directory of the object in the buffer pool.	
<b>Object at Address</b>	The address of the object in the buffer pool.	
<b>Allocated Size (KB)</b>	The size that has been allocated in the buffer pool for the object.	
<b>Object Size</b>	The size of the object.	
<b>Status (RLD)</b>	<p>The status of the object:</p> <p>R    The object is resident in the buffer pool. Resident means that the object is not deleted from the buffer pool, not even if its <b>Current Use Count</b> (see below) changes to 0 (zero).</p> <p>L    The object is currently locked.</p> <p>D    A Delete call for the object is pending. The object will be deleted from the buffer pool as soon as its <b>Current Use Count</b> (see below) changes to 0 (zero).</p>	
<b>Current Use Count</b>	<p>The number of applications currently executing the object.</p> <p>A value of 0 (zero) denotes that the object is no longer used.</p>	
<b>Maximum Use Count</b>	The maximum number of applications that have executed the object since it was loaded into the buffer pool.	

Field	Explanation
<b>BP Total Use</b>	<p>The total number of times an object has been executed since it was loaded from the system file into the buffer pool.</p> <p>If a BP cache is used, this value is not lost if the object is removed from the buffer pool and saved to the BP cache. Therefore, this value indicates the number of times the object has been used since it was loaded from the system file.</p>
<b>Cataloged</b>	<p>The information displayed in the <b>Cataloged</b> section of the <b>Directory Information</b> screen is identical to the information provided with the Natural system command LIST DIRECTORY described in the <i>System Commands</i> documentation.</p>

## Fields for BP Cache Objects

For directories of objects loaded in the BP cache, the **Directory Information** screen provides the following fields and information on a specified object:

Field	Explanation
<i>object-type</i>	The type (for example, map) and name of the object.
<b>Library</b>	The name of the library from which the object was loaded into the buffer pool.
<b>DBID</b>	The database ID of the system file FNAT or FUSER from which the object was initially loaded into the buffer pool.
<b>FNR</b>	The file number of the system file FNAT or FUSER from which the object was initially loaded into the buffer pool.
<b>Last Put</b>	The date and time when the object was last loaded from the BP cache into the buffer pool.
<b>BP Load Time</b>	The date and time when the object was first loaded into the buffer pool.
<b>Cache Load Time</b>	The date and time when the object was first loaded into the BP cache.
<b>Last Get</b>	The date and time when the object was last swapped from the buffer pool into the BP cache.
<b>Position Index</b>	Serially numbered internal Natural position index of the objects in the BP cache.
<b>First Data Block Offset</b>	The address of the directory of the object in the BP cache.
<b>Allocated Size (KB)</b>	The size that has been allocated in the BP cache for the object.
<b>Object Size</b>	The size of the object.
<b>Status</b>	<p>The status of the object:</p> <p>L    Locked while load function is ongoing.</p> <p>D    Locked for delete.</p>
<b>Reuse</b>	Indicates how many times the object has been returned from the BP cache to the buffer pool.
<b>BP Total Use</b>	The total number of times an object has been executed since it was initially loaded from the system file into the buffer pool and then into the BP cache.
<b>Cataloged</b>	The information displayed in the <b>Cataloged</b> section of the <b>Directory Information</b> screen is identical to the information provided with the Natural system command <code>LIST DIRECTORY</code> described in the <i>System Commands</i> documentation.

## PF Keys and Direct Commands

On the **Directory Information** screen, you can use the PF keys or SYSBPM direct commands listed in the table below. An underlined portion of a command represents its minimum abbreviation. For further commands, see *SYSBPM Direct Commands*.

PF Key	Command	Function
PF1		Provides help information on SYSBPM direct commands.
PF2	NEXT	Only applies if a range of objects was selected. Displays one object after the other and then redisplay the screen on which NEXT was entered.
PF3	<u>EXIT</u>	Leaves the current function/screen and displays the previous screen.
PF4	LAST	Displays the SYSBPM direct command entered most recently.
PF6	FLIP	Switches the PF-key line: toggles between the display of PF1 to PF12 and PF13 to PF24.
PF12	<u>CANCEL</u>	Same as EXIT.
PF15	MENU	Invokes the SYSBPM <b>Main Menu</b> .
	<u>FDELETE</u>	Buffer pool only. Deletes an object immediately from the buffer pool, regardless of its <b>Use</b> count.
	<u>RESIDENT</u>	Buffer pool only. Marks an object as resident. Resident means that the object is not deleted from the buffer pool, not even if its <b>Use</b> count is 0 (object no longer used).
	<u>CLEAR</u>	Buffer pool only. Releases an object marked as resident.
	<u>DELETE</u>	Marks an object for deletion. See Status D of the buffer pool or BP cache mentioned in a previous section.