

Natural Global Buffer Pool under BS2000/OSD

This document describes purpose and usage of a Natural Global Buffer Pool (GBP) under the operating system BS2000/OSD.

In the examples below, the notation *vrs* or *vr* stands for the relevant **version, release, system maintenance level numbers**. For further information on product versions, see *Version* in the *Glossary*.

The following topics are covered:

- Using a Natural Global Buffer Pool under BS2000/OSD
 - Establishing the Global Buffer Pool under BS2000/OSD
 - Administering the Global Buffer Pool under BS2000/OSD
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Using a Natural Global Buffer Pool under BS2000/OSD

The Natural global buffer pool is a common memory pool that can be used with BS2000 Version 10.0 and above.

On XS31 computers, it can be located either below 16 MB or in the extended address space above 16 MB. On non-XS31 computers, it can be located in the user address space below Class 4 storage (whose size depends on how the operating system was generated).

The global buffer pool can be used by several Natural under TIAM, Natural under UTM and batch applications simultaneously. It is possible to have more than one global buffer pool per operating system.

The global buffer pool has to be activated before the first Natural application is started. It can remain active as long as the operating system is active, even after the last Natural session has been terminated. This means that the global buffer pool's contents are still available when a new session is started and need not be loaded into the buffer pool again.

Establishing the Global Buffer Pool under BS2000/OSD

The global buffer pool is established by executing a batch job which starts the program CMPSTART. The global buffer pool's name, size, virtual address, etc. are determined by parameters specified in this job.

Example of CMPSTART Job:

```
/SYSFILE SYSOUT.LST.BPvrsGA
/SYSFILE SYSDTA=(SYSCMD)
/EXEC (CMPSTART,$NATvrs.NATvrs.BS2.MOD)
NAME=BPvrsGA,TYPE=NAT,POSI=ABOVE,SIZE=2MB,ADDR=260,PFIX=NO,SCOP=GLOBAL
/SYSFILE SYSDTA=(PRIMARY)
```

If the parameter values are invalid or do not match the BS2000/OSD environment, the buffer pool task is terminated with an error message. The error message contains the reason for the termination and (if applicable) the SVC return code. All error messages are output on SYSOUT. In the case of grave errors, they are also displayed on the operator console.

Administering the Global Buffer Pool under BS2000/OSD

Once global buffer pool is active, it is administered via the operator console.

The following BS2000/OSD console commands are available (where *tsn* is the TSN of the buffer pool task):

Command	Function
/INTR <i>tsn</i> ,DPRM	Displays the current parameters settings and the start time of the global buffer pool.
/INTR <i>tsn</i> ,SHUT /INTR <i>tsn</i> ,STOP	Terminates the buffer pool task normally.
/INTR <i>tsn</i> ,DUMP	Terminates the buffer pool task abnormally and produces a dump.

The termination of the buffer pool task does not necessarily mean the termination of the global buffer pool, as the common memory pool remains active until the end of the last Natural application.

So that you can terminate global buffer pools via a program, too, the program CMPEND is provided:

Example:

```
/PROC C
/SYSFILE SYSDTA=(SYSCMD)
/EXEC (CMPEND,NATvrs.MOD)
name /* name of the global buffer pool
/SYSFILE SYSDTA=(PRIMARY)
/ENDP
```