

#### Short text

Unable to fulfil request for 469762048 bytes of memory space.

#### What happened?

Each transaction requires some main memory space to process application data. If the operating system cannot provide any more space, the transaction is terminated.

#### What can you do?

Try to find out (e.g. by targetted data selection) whether the transaction will run with less main memory.

If there is a temporary bottleneck, execute the transaction again.

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If the error persists, ask your system administrator to check the following profile parameters:

- o ztta/roll\_area            (1.000.000 - 15.000.000)  
   Classic roll area per user and internal mode  
   usual amount of roll area per user and internal mode
  - o ztta/roll\_extension     (10.000.000 - 500.000.000)  
   Amount of memory per user in extended memory (EM)
  - o abap/heap\_area\_total    (100.000.000 - 1.500.000.000)  
   Amount of memory (malloc) for all users of an application server. If several background processes are running on one server, temporary bottlenecks may occur.  
   Of course, the amount of memory (in bytes) must also be available on the machine (main memory or file system swap).  
   Caution:  
   The operating system must be set up so that there is also enough memory for each process. Usually, the maximum address space is too small.  
   Ask your hardware manufacturer or your competence center about this.  
   In this case, consult your hardware vendor
  - abap/heap\_area\_dia:        (10.000.000 - 1.000.000.000)  
   Restriction of memory allocated to the heap with malloc for each dialog process.
- Parameters for background processes:
- abap/heap\_area\_nondia:    (10.000.000 - 1.000.000.000)  
   Restriction of memory allocated to the heap with malloc for each background process.
- Other memory-relevant parameters are:
- em/initial\_size\_MB:        (35-1200)  
   Extended memory area from which all users of an application server can satisfy their memory requirement.
- Note which actions and input led to the error.

For further help in handling the problem, contact your SAP administrator

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You can use the ABAP dump analysis transaction ST22 to view and manage termination messages, in particular for long term reference.

#### Error analysis

```
More main memory area was requested.
However, all the available space has been used up.
Possible reasons:
- Many (large) internal tables.
- Many (large) programs active.
- Deep nesting of subroutines with a lot of local data.
Last error logged in SAP kernel
```

```
Component..... "EM"
Place..... "SAP-Server eachiano_NSP_00 on host eachiano (wp 0)"
Version..... 37
Error code..... 7
Error text..... "Warning: EM-Memory exhausted: Workprocess gets PRIV "
Description..... " "
System call..... " "
Module..... "emxx.c"
Line..... 1881
```

```
The error reported by the operating system is:
Error number..... " "
Error text..... " "
```

#### How to correct the error

Try to decide by analysis whether this request is reasonable or whether there is a program error. You should pay particular attention to the internal table entries listed below.

The amount of storage space (in bytes) filled at termination time was:

```
Roll area..... 8112
Extended memory (EM)..... 430341536
Assigned memory (HEAP)..... 284905296
Short area..... " "
Paging area..... 131072
Maximum address space..... " "
```

If the error occurs in a non-modified SAP program, you may be able to find an interim solution in an SAP Note.  
If you have access to SAP Notes, carry out a search with the following keywords:

```
"SYSTEM_NO_ROLL" " "
"Z_ABAP101_BOMBA_PROCEDURAL" or "Z_ABAP101_BOMBA_PROCEDURAL"
"START-OF-SELECTION"
```

If you cannot solve the problem yourself and want to send an error notification to SAP, include the following information:

1. The description of the current problem (short dump)

To save the description, choose "System->List->Save->Local File (Unconverted)".

## 2. Corresponding system log

Display the system log by calling transaction SM21.

Restrict the time interval to 10 minutes before and five minutes after the short dump. Then choose "System->List->Save->Local File (Unconverted)".

## 3. If the problem occurs in a problem of your own or a modified SAP program: The source code of the program

In the editor, choose "Utilities->More Utilities->Upload/Download->Download".

## 4. Details about the conditions under which the error occurred or which actions and input led to the error.

### System environment

SAP-Release 700

Application server... "eachiano"  
Network address..... "192.168.1.10"  
Operating system..... "Windows NT"  
Release..... "5.1"  
Hardware type..... "2x Intel 80686"  
Character length.... 8 Bits  
Pointer length..... 32 Bits  
Work process number.. 0  
Shortdump setting.... "full"

Database server... "eachiano"  
Database type..... "ADABAS D"  
Database name..... "NSP"  
Database user ID.. "SAPNSP"

Char.set.... "English\_United State"

SAP kernel..... 700  
created (date)... "Jan 29 2007 00:33:09"  
create on..... "NT 5.0 2195 Service Pack 4 x86 MS VC++ 13.10"  
Database version. "SQLDBC 7.6.3.012 CL 169237 "

Patch level. 95  
Patch text.. " "

Database..... "MaxDB 7.6, MaxDB 7.7"  
SAP database version. 700  
Operating system..... "Windows NT 5.0, Windows NT 5.1, Windows NT 5.2"

### Memory consumption

Roll.... 8112  
EM..... 430341536  
Heap.... 284905296  
Page.... 131072  
MM Used. 705586216  
MM Free. 151296

User and Transaction

Client..... 000  
User..... "BCUSER"  
Language key..... "E"  
Transaction..... "SEU\_INT "  
Transactions ID..... " "  
  
Program..... "Z\_ABAP101\_BOMBA\_PROCEDURAL"  
Screen..... "SAPMSSY0 1000"  
Screen line..... 6

Information on where terminated

Termination occurred in the ABAP program "Z\_ABAP101\_BOMBA\_PROCEDURAL" - in  
"START-OF-SELECTION".  
The main program was "Z\_ABAP101\_BOMBA\_PROCEDURAL".  
  
In the source code you have the termination point in line 15  
of the (Include) program "Z\_ABAP101\_BOMBA\_PROCEDURAL".

Source Code Extract

Line	SourceCde
1	*&-----*
2	*& Report    Z_ABAP101_BOMBA_PROCEDURAL
3	*&
4	*&-----*
5	*& Esse report tem por finalidade esgotar a memória da sessão usando um
6	*& código procedural
7	*&-----*
8	
9	REPORT    Z_ABAP101_BOMBA_PROCEDURAL.
10	
11	DATA: i_data TYPE STANDARD TABLE OF string.
12	
13	WHILE 1 = 1.
14	
>>>>	APPEND `X` TO i_data.
16	
17	ENDWHILE.

Contents of system fields

Name	Val.
SY-SUBRC	0
SY-INDEX	25165810
SY-TABIX	25165809
SY-DBCNT	0
SY-FDPOS	0
SY-LSIND	0
SY-PAGNO	0
SY-LINNO	1
SY-COLNO	1



```

TABH+ 40( 8) = 10000000C1288001
store       = 0xA8E8D13B
ext1        = 0x00000000
shmId       = 0      (0x00000000)
id          = 7      (0x07000000)
label       = 11     (0x0B000000)
fill        = 25165810 (0xF2FF7F01)
leng        = 8      (0x08000000)
loop        = -1     (0xFFFFFFFF)
xtyp        = TYPE#000011
occu        = 16     (0x10000000)
access      = 1      (ItAccessStandard)
idxKind     = 0      (ItIndexNone)
uniKind     = 2      (ItUniqueNon)
keyKind     = 1      (default)
cmpMode     = 4      (cmpSingleEq)
occu0       = 1
groupCntl   = 0
rfc         = 0
unShareable = 0
mightBeShared = 0
sharedWithShmTab = 0
isShmLockId = 0
gcKind      = 0
isUsed      = 1
isCtfyAble  = 1
>>>> Shareable Table Header Data <<<<<
tabi        = 0x40F5D13B
pgHook      = 0x00A2580E
idxPtr      = 0x00000000
shmTabhSet  = 0x00000000
id          = 6      (0x06000000)
refCount    = 0      (0x00000000)
tstRefCount  = 0      (0x00000000)
lineAdmin   = 25181232 (0x303C8001)
lineAlloc   = 25165872 (0x30008001)
shmVersId   = 0      (0x00000000)
shmRefCount  = 1      (0x01000000)
>>>> 1st level extension part <<<<<
regHook     = Not allocated
collHook    = Not allocated
ext2        = Not allocated
>>>> 2nd level extension part <<<<<
tabhBack    = Not allocated
delta_head  = Not allocated
pb_func     = Not allocated
pb_handle   = Not allocated

```

#### Internal notes

The termination was triggered in function "ab\_InitStrhTab" of the SAP kernel, in line 319 of the module "`///bas/700_REL/src/krn/runt/abstring.c#4`". The internal operation just processed is "TAPP". Internal mode was started at 20110307151329.

Active Calls in SAP Kernel

Lines of C Stack in Kernel (Structure Differs on Each Platform)

```

SAP (R) - R/3(TM) Callstack, Version 1.0
Copyright (C) SAP AG. All rights reserved.
Callstack without Exception:
App       : disp+work.EXE (pid=952)
When      : 3/7/2011 15:14:37.296
Threads   : 2
Computer Name   : EACHIANO
User Name      : SYSTEM
Number of Processors: 2
Processor Type: x86 Family 6 Model 15 Stepping 13
Windows Version   : 5.1 Current Build: 2600
State Dump for Thread Id 4e0
eax=00000000 ebx=000004dc ecx=00400000 edx=00000000 esi=000004dc edi=00000000
eip=7c90e514 esp=043cdd38 ebp=043cdd9c iopl=0         nv up ei ng nz ac po cy
cs=001b  ss=0023  ds=0023  es=0023  fs=003b  gs=0000             efl=00000297
function : KiFastSystemCallRet
       7c90e514 c3                ret
       7c90e515 8da4240000000000 lea     esp,[esp]          ss:043cdd38=7c90df5a
       7c90e51c 8d642400          lea     esp,[esp]          ss:139acd47=00000000
FramePtr ReturnAd Param#1  Param#2  Param#3  Param#4  Function Name
043cdd9c 7c802542 000004dc 0001d4c0 00000000 043cddd4 ntdll!KiFastSystemCallRet
043cddb0 00fec10a 000004dc 0001d4c0 00000001 7c38b5c8 kernel32!WaitForSingleObject
043cddd4 0056a476 0056a4af 7c38b5c8 7c38b5c8 7c38b5c8 disp+work!strncpy_sRFB
043cde1c 00856ffb 02297ff8 00000000 00800000 043cdfef4 disp+work!PrBinAll
043ce2a0 0064de21 011cec78 011cec68 0000013f 01bc7b54 disp+work!ab_rabax
043ce2d4 00650303 0e575e10 3bd1d4e8 000000ef 000000ef disp+work!ab_cStringFirstInitFromTabh
043ce2fc 006e4c88 0e575e10 000000ed 00000002 3bd1e868 disp+work!ab_StrRefMoveStrId
043ce354 006c9b24 000001dd 6f84d634 0e575e10 6f84e724 disp+work!ab_popstate_to
043ce37c 0071baf0 000001dd 3bd1e813 0005d102 000004b8 disp+work!ab_popstate_to
043ce40c 00692657 00000003 6f84ef40 00000000 043ce474 disp+work!ab_popstate_to
043ce474 007c5fe3 3bd20dfc 00000000 043ce4a0 00000000 disp+work!ab_popExtriState
0130f230 00000000 49444553 00000000 4f525f25 0000544f disp+work!zdate_stamp
State Dump for Thread Id d50
eax=0664feb8 ebx=00000103 ecx=00001e30 edx=0664fec6 esi=00000000 edi=00000000
eip=7c90e514 esp=0664febc ebp=0664ff00 iopl=0         nv up ei pl zr na po nc
cs=001b  ss=0023  ds=0023  es=0023  fs=003b  gs=0000             efl=00000246
function : KiFastSystemCallRet
       7c90e514 c3                ret
       7c90e515 8da4240000000000 lea     esp,[esp]          ss:0664febc=7c90d3aa
       7c90e51c 8d642400          lea     esp,[esp]          ss:15c2eeeb=00000100
FramePtr ReturnAd Param#1  Param#2  Param#3  Param#4  Function Name
0664ff00 010e70d5 000006f4 00000000 04e40000 048b3560 ntdll!KiFastSystemCallRet
0664ffb0 7c349565 00000000 04e40000 048acd70 048b35f8 disp+work!haSHA1Input
0664ffb4 7c80b729 048b35f8 04e40000 048acd70 048b35f8 MSVCR71!endthreadex
0664ffec 00000000 7c3494f6 048b35f8 00000000 00000000 kernel32!GetModuleFileNameA

```

List of ABAP programs affected

Index	Typ	Program	Group	Date	Time	Size	Lang.
0	Prg	Z_ABAP101_BOMBA_PROCEDURAL	0	07.03.2011	15:11:03	13312	E
1	Prg	SAPMSSY0	1	31.05.2007	11:27:31	72704	E
2	Prg	SAPMSSYD	1	23.11.2006	14:47:21	17408	E
3	Prg	SAPFSYSCALLS	1	07.03.2005	18:01:13	6144	E
4	Prg	RSDBRUNT	0	23.11.2006	14:47:09	223232	E
5	Typ	RSSCR	0	23.11.1999	09:24:41	5120	
6	Prg	RSDBSPBL	0	07.03.2005	18:01:13	59392	E
7	Prg	SAPDB__S	0	07.03.2005	18:01:13	15360	E
8	Prg	RSDBSPMC	0	23.11.2006	14:39:51	67584	E

9	Typ	DDSHDESCR	0	28.11.1997	16:26:30	3072	
10	Typ	SPPARAMS	0	07.03.1997	14:48:48	2048	
11	Prgr	SAPLSABE	11	07.03.2005	18:01:13	10240	E
12	Prgr	SAPLSECU	12	28.11.2006	10:23:40	73728	E
13	Typ	RSSUBINFO	0	22.11.1999	21:15:17	3072	
14	Prgr	%_CRSDS	0	07.03.2005	18:01:13	8192	E
15	Typ	RSDSEXPR	0	16.12.1996	19:31:30	2048	
16	Prgr	SAPFSPOR	1	07.03.2005	18:01:13	12288	E
17	Prgr	SAPLSCNT	17	07.03.2005	18:01:13	24576	E
18	Typ	DYCBOX	0	23.11.1999	09:23:17	2048	
19	Prgr	SAPLSVSM	19	25.10.2005	09:23:59	24576	E
20	Prgr	SAPLSGUI	20	31.05.2007	11:24:42	66560	E
21	Prgr	SAPLSTTM	21	14.09.2005	08:06:40	62464	E
22	Prgr	SAPLSBDC	22	14.09.2005	08:06:40	37888	E
23	Prgr	CL_DATAPROVIDER=====CP	23	07.03.2005	18:01:13	40960	E
24	Prgr	%_CCNTL	23	07.03.2005	18:01:13	12288	E
25	Typ	OBJ_RECORD	0	07.10.1997	12:13:38	2048	
26	Prgr	SAPLSTUP	26	25.10.2005	09:19:16	64512	E
27	Prgr	SAPLCNDP	27	12.06.2006	14:53:38	177152	E
28	Prgr	SAPSHDTV	17	07.03.2005	18:01:13	28672	E
29	Prgr	SAPFGUICNTL	1	07.03.2005	18:01:13	20480	E
30	Prgr	SAPLOLEA	30	08.03.2007	12:57:10	84992	E
31	Prgr	SAPLSFES	31	31.05.2007	11:26:53	229376	E
32	Prgr	SAPLSPLUGIN	32	07.03.2005	18:01:13	7168	E
33	Typ	ARFCRDATA	0	19.01.2005	15:59:43	6144	
34	Prgr	SAPLGRFC	34	07.03.2005	18:01:13	13312	E
35	Typ	SWCBCONT	0	07.10.1997	12:13:50	3072	
36	Typ	OLE_VERBS	0	09.02.1995	13:23:37	2048	
37	Typ	OLE_PA	0	13.01.1995	11:06:59	2048	
38	Typ	SYST	0	15.09.2004	17:25:35	27648	

Directory of Application Tables			
Name	Date	Time	Length
Val.			
Program Z_ABAP101_BOMBA_PROCEDURAL			
SYST	15.09.2004	17:25:35	00002408
øÿ\x7F\x01\0\0\0\0\0\0\x7F\x01\0\0\0\0\0\0\0\0\0\0\0\0			

ABAP Control Blocks (CONT)											
Index	Name	F1	PAR0	PAR1	PAR2	PAR3	PAR4	PAR5	PAR6	Source Code	Line
43	PERP	80	0001							<SYSINI>	55
44	PERP	80	0002							<SYSINI>	55
45	ENDM	00	0000							<SYSINI>	56
46	----	00	0000							<SYSINI>	56
47	xper	06	B1A5	001F	001D					Z_ABAP101_BOMBA_PROCEDURAL	9
49	PERP	80	0001							Z_ABAP101_BOMBA_PROCEDURAL	9
50	PERP	80	001E							Z_ABAP101_BOMBA_PROCEDURAL	9
51	WHIL	00	0002	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_PROCEDURAL	13
55	WHIL	00	0003	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_PROCEDURAL	13
59	BRAN	05	0007							Z_ABAP101_BOMBA_PROCEDURAL	13
60	cmp1	00	00CA	0001	0006					Z_ABAP101_BOMBA_PROCEDURAL	13
62	BRAF	02	0004							Z_ABAP101_BOMBA_PROCEDURAL	13
>>>>	TAPP	00	01DD	0020	0021					Z_ABAP101_BOMBA_PROCEDURAL	15



Runtime Errors  
Date and Time

SYSTEM\_NO\_ROLL  
07.03.2011 15:14:37

65	BRAX	00	FFF6							Z_ABAP101_BOMBA_PROCEDURAL	17
66	WHIL	00	0004	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_PROCEDURAL	17
70	----	00	0000							Z_ABAP101_BOMBA_PROCEDURAL	17
71	xper	06	93E3	0022	0023					Z_ABAP101_BOMBA_PROCEDURAL	18
73	PERP	80	0001							Z_ABAP101_BOMBA_PROCEDURAL	18
74	PERP	80	0024							Z_ABAP101_BOMBA_PROCEDURAL	18
75	----	00	0000							Z_ABAP101_BOMBA_PROCEDURAL	18