Runtime Errors SYSTEM_NO_ROLL
Date and Time 17.04.2011 19:04:31

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.
-

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

- 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
- ztta/roll_extension (10.000.000 - 500.000.000)
  Amount of memory per user in extended memory (EM)
- 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
.

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

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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)..... 440794496
Assigned memory (HEAP)..... 284905296
Short area..... " "
Paging area..... 614400
Maximum address space..... " "

If the error occures 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_OO_SINGLETON" or "Z_ABAP101_BOMBA_OO_SINGLETON"
"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)

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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..... 440794496
Heap.... 284905296
Page.... 614400
MM Used. 705610168
MM Free. 127344

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User and Transaction

```
    Client.............. 000
    User................ "BCUSER"
    Language key........ "E"
    Transaction......... "SEU_INT "
    Transactions ID..... " "

    Program............. "Z_ABAP101_BOMBA_OO_SINGLETON"
    Screen.............. "SAPMSSY0 1000"
    Screen line......... 6
```

Information on where terminated

```
    Termination occurred in the ABAP program "Z_ABAP101_BOMBA_OO_SINGLETON" - in
     "START-OF-SELECTION".
    The main program was "Z_ABAP101_BOMBA_OO_SINGLETON ".

    In the source code you have the termination point in line 38
    of the (Include) program "Z_ABAP101_BOMBA_OO_SINGLETON".
```

Source Code Extract

Line	SourceCde
8	
9	REPORT z_abap101_bomba_oo_singleton.
10	
11	*---*
12	* CLASS lcl_data DEFINITION
13	*---*
14	*
15	*---*
16	CLASS lcl_data DEFINITION.
17	PUBLIC SECTION.
18	DATA: ci_i_data TYPE TABLE OF string.
19	ENDCLASS. "lcl_data DEFINITION
20	
21	*---*
22	* CLASS lcl_data IMPLEMENTATION
23	*---*
24	*
25	*---*
26	CLASS lcl_data IMPLEMENTATION.
27	ENDCLASS. "lcl_data IMPLEMENTATION
28	
29	START-OF-SELECTION.
30	
31	TYPES: ty_o_ref_data TYPE REF TO lcl_data.
32	
33	DATA: o_data_object TYPE ty_o_ref_data.
34	
35	CREATE OBJECT o_data_object.
36	
37	WHILE 1 = 1.
>>>>>	APPEND 'X' TO o_data_object->ci_i_data.
39	ENDWHILE.

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Contents of system fields

Name	Val.
SY-SUBRC	0
SY-INDEX	25165820
SY-TABIX	25165819
SY-DBCNT	0
SY-FDPOS	0
SY-LSIND	0
SY-PAGNO	0
SY-LINNO	1
SY-COLNO	1
SY-PFKEY	
SY-UCOMM	
SY-TITLE	Program Z_ABAP101_BOMBA_PROCEDURAL
SY-MSGTY	
SY-MSGID	
SY-MSGNO	000
SY-MSGV1	
SY-MSGV2	
SY-MSGV3	
SY-MSGV4	
SY-MODNO	0
SY-DATUM	20110417
SY-UZEIT	190219
SY-XPROG	RSDBRUNT
SY-XFORM	%_INIT_PBO_FIRST

Active Calls/Events

No.	Ty. Name	Program	Include	Line
1	EVENT START-OF-SELECTION	Z_ABAP101_BOMBA_OO_SINGLETON	Z_ABAP101_BOMBA_OO_SINGLETON	38

Chosen variables

Name
Val.

No. 1 Ty. EVENT
Name START-OF-SELECTION

```
O_DATA_OBJECT
    {O:3*\PROGRAM=Z_ABAP101_BOMBA_OO_SINGLETON\CLASS=LCL_DATA}
    F0000000
    C0003000
%_DUMMY$$

    2222
    0000
SY-REPID
    Z_ABAP101_BOMBA_OO_SINGLETON
    554445333544444544554444454422222222222222
```

```
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    AF1210101F2FD21FFFF39E7C54FE000000000000
SYST-REPID
    Z_ABAP101_BOMBA_OO_SINGLETON
    554445333544444544554444454422222222222222
    AF1210101F2FD21FFFF39E7C54FE000000000000
%_SPACE

    2
    0
O_DATA_OBJECT->CI_I_DATA
    Table IT_11[25165820x8]
    \PROGRAM=Z_ABAP101_BOMBA_OO_SINGLETON\DATA=O_DATA_OBJECT->CI_I_DATA
    Table reference: 7
    TABH+  0(20) = 28F6D13B00000000000000000070000000B000000
    TABH+ 20(20) = FCFF7F0108000000FFFFFFFF04000000B8040000
    TABH+ 40( 8) = 10000000C1288001
    store        = 0x28F6D13B
    ext1         = 0x00000000
    shmId        = 0     (0x00000000)
    id           = 7     (0x07000000)
    label        = 11    (0x0B000000)
    fill         = 25165820 (0xFCFF7F01)
    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         = 0x98F5D13B
    pgHook       = 0x10CBBB1F
    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
```

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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 20110417190219.

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=3404)
When      : 4/17/2011 19:4:27.984
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 d80
eax=043cd8d8 ebx=000004b8 ecx=00800000 edx=fffff000 esi=000004b8 edi=00000000
eip=7c90e514 esp=043cdd08 ebp=043cdd6c 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 8da42400000000  lea     esp,[esp]              ss:043cdd08=7c90df5a
        7c90e51c 8d642400        lea     esp,[esp]              ss:13f4cd17=00000000
FramePtr ReturnAd Param#1  Param#2  Param#3  Param#4  Function Name
043cdd6c 7c802542 000004b8 0001d4c0 00000000 043cdda4 ntdll!KiFastSystemCallRet
043cdd80 00fec10a 000004b8 0001d4c0 00000001 7c38b5c8 kernel32!WaitForSingleObject
043cdda4 0056a476 0056a4af 7c38b5c8 7c38b5c8 7c38b5c8 disp+work!strncpy_sRFB
043cddec 00856ffb 02297ff8 00000000 00800000 043cdfb4 disp+work!PrBinAll
043ce270 0064de21 011cec78 011cec68 0000013f 01bc7b54 disp+work!ab_rabax
043ce2a4 00650303 103700ec 1fbae3c0 00000001 000000ef disp+work!ab_cStringFirstInitFromTabh
043ce2cc 00650111 1fbae3c0 000000ec 00000003 1fbae3c0 disp+work!ab_StrRefMoveStrhId
043ce2f4 006e42b2 3bcb9ce0 6c83c5f0 00000001 6c83c5f0 disp+work!ab_NullTerminateString
043ce354 006c9b24 000001ca 6c83bf28 1fbae3c0 6c83cf9c disp+work!ab_popstate_to
043ce37c 0071baf0 000001ca 3bd1e813 000d0602 000004b8 disp+work!ab_popstate_to
043ce40c 00692657 00000008 6c83da18 00000000 043ce474 disp+work!ab_popstate_to
043ce474 007c5fe3 3bd20dd4 00000000 043ce4a0 00000000 disp+work!ab_popExtriState
0130f230 00000000 49444553 00000000 4f525f25 0000544f disp+work!zdate_stamp
State Dump for Thread Id b48
eax=0664feb8 ebx=00000103 ecx=0000f95d edx=0664fec7 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 8da42400000000  lea     esp,[esp]              ss:0664febc=7c90d3aa
        7c90e51c 8d642400        lea     esp,[esp]              ss:161ceecb=0000104b
FramePtr ReturnAd Param#1  Param#2  Param#3  Param#4  Function Name
0664ff00 010e70d5 000006f4 00000000 04e40000 048b3560 ntdll!KiFastSystemCallRet
0664ff80 7c349565 00000000 04e40000 048acd70 048b35f8 disp+work!haSHA1Input
0664ffb4 7c80b729 048b35f8 04e40000 048acd70 048b35f8 MSVCR71!endthreadex
0664ffec 00000000 7c3494f6 048b35f8 00000000 00000000 kernel32!GetModuleFileNameA
```

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List of ABAP programs affected

Index	Typ	Program	Group	Date	Time	Size	Lang.
0	Prg	Z_ABAP101_BOMBA_OO_SINGLETON	0	17.04.2011	19:02:01	17408	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	Prg	SAPLSABE	11	07.03.2005	18:01:13	10240	E
12	Prg	SAPLSECU	12	28.11.2006	10:23:40	73728	E
13	Typ	RSSUBINFO	0	22.11.1999	21:15:17	3072	
14	Prg	%_CRSDS	0	07.03.2005	18:01:13	8192	E
15	Typ	RSDSEXPR	0	16.12.1996	19:31:30	2048	
16	Prg	SAPFSPOR	1	07.03.2005	18:01:13	12288	E
17	Prg	SAPLSCNT	17	07.03.2005	18:01:13	24576	E
18	Typ	DYCBOX	0	23.11.1999	09:23:17	2048	
19	Prg	SAPLSVSM	19	25.10.2005	09:23:59	24576	E
20	Prg	SAPLSGUI	20	31.05.2007	11:24:42	66560	E
21	Prg	SAPLSTTM	21	14.09.2005	08:06:40	62464	E
22	Prg	SAPLSBDC	22	14.09.2005	08:06:40	37888	E
23	Prg	CL_DATAPROVIDER==========CP	23	07.03.2005	18:01:13	40960	E
24	Prg	%_CCNTL	23	07.03.2005	18:01:13	12288	E
25	Typ	OBJ_RECORD	0	07.10.1997	12:13:38	2048	
26	Prg	SAPLSTUP	26	25.10.2005	09:19:16	64512	E
27	Prg	SAPLCNDP	27	12.06.2006	14:53:38	177152	E
28	Prg	SAPSHDTV	17	07.03.2005	18:01:13	28672	E
29	Prg	SAPFGUICNTL	1	07.03.2005	18:01:13	20480	E
30	Prg	SAPLOLEA	30	08.03.2007	12:57:10	84992	E
31	Prg	SAPLSFES	31	31.05.2007	11:26:53	229376	E
32	Prg	SAPLSPLUGIN	32	07.03.2005	18:01:13	7168	E
33	Typ	ARFCRDATA	0	19.01.2005	15:59:43	6144	
34	Prg	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	

Directory of Application Tables

Name	Date	Time	Lngth
Val.			
Program Z_ABAP101_BOMBA_OO_SINGLETON			
SYST	15.09.2004	17:25:35	00002408
üÿ\x7F\x01\0\0\0\0ûÿ\x7F\x01\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0			

ABAP Control Blocks (CONT)

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Index	Name	Fl	PAR0	PAR1	PAR2	PAR3	PAR4	PAR5	PAR6	Source Code	Line
45	ENDM	00	0000							<SYSINI>	56
46	----	00	0000							<SYSINI>	56
47	xper	06	B1A5	001F	001D					Z_ABAP101_BOMBA_OO_SINGLETON	9
49	PERP	80	0001							Z_ABAP101_BOMBA_OO_SINGLETON	9
50	PERP	80	001E							Z_ABAP101_BOMBA_OO_SINGLETON	9
51	----	00	0000							Z_ABAP101_BOMBA_OO_SINGLETON	9
52	ABOO	00	0000	0020	0001					Z_ABAP101_BOMBA_OO_SINGLETON	35
54	WHIL	00	0002	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_OO_SINGLETON	37
58	WHIL	00	0003	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_OO_SINGLETON	37
62	BRAN	05	0007							Z_ABAP101_BOMBA_OO_SINGLETON	37
63	cmpl	00	00CA	0001	0006					Z_ABAP101_BOMBA_OO_SINGLETON	37
65	BRAF	02	0004							Z_ABAP101_BOMBA_OO_SINGLETON	37
>>>>>	TAPP	00	01CA	0021	0007					Z_ABAP101_BOMBA_OO_SINGLETON	38
68	BRAX	00	FFF6							Z_ABAP101_BOMBA_OO_SINGLETON	39
69	WHIL	00	0004	0000	0000	0000	0000	0000	0000	Z_ABAP101_BOMBA_OO_SINGLETON	39
73	----	00	0000							Z_ABAP101_BOMBA_OO_SINGLETON	39
74	xper	06	93E3	0022	0023					Z_ABAP101_BOMBA_OO_SINGLETON	40
76	PERP	80	0001							Z_ABAP101_BOMBA_OO_SINGLETON	40
77	PERP	80	0024							Z_ABAP101_BOMBA_OO_SINGLETON	40
78	----	00	0000							Z_ABAP101_BOMBA_OO_SINGLETON	40