Natural under UTM - Part 1

This part of the Natural UTM Interface documentation covers the following topics:

- Structure of the Natural UTM Interface
- Formatting Messages - FREXIT
- Embedding Natural in a UTM Application
- Common Memory Pools
- Other Storage Areas
- Generating KDCROOT
- Defining the UTM Resources - KDCDEF
- UTM DC-Transaction Exit Routine NUERROR
- UTM Startup Function
- UTM Shutdown Function

Structure of the Natural UTM Interface

The Natural UTM Interface consists of the macros `NATUTM`, `BS2STUB` and `NURENT` and of several utility programs, which enable special requirements to be accommodated.

- Front-End Part - Macro NATUTM
- Reentrant Part - Macro NURENT

Front-End Part - Macro NATUTM

The macro `NATUTM` is used to generate the front-end part of the Natural UTM Interface to suit the particular application based on appropriate operand definitions for the parameters. The default values of the parameters are chosen so that, in general, they can be used without alteration for an initial generation.

The front-end part is present once per UTM task and consists principally of the following components:

- `KDCROOT` of UTM,
- assembled macro `NATUTM`,
- assembled macro `BS2STUB`,
- format exit module `FREXIT`,
- Adabas interface module.

Reentrant Part - Macro NURENT

The reentrant part of the Natural UTM Interface is generated by assembling the macro `NURENT`. This is linked with the reentrant part of the Natural UTM application. If a shared Natural nucleus is to be used, the generated `NURENT` module must be linked to the front-end part.

The reentrant part of the Natural UTM application consists of the following components:

- `NATINV` (address module) (must be included as the first module),
- Natural nucleus,
- Natural buffer pool manager,
- `NURENT` (CSECT name of the assembled macro `NURENT`),
- `NATSWPMG` (Natural swap pool manager),
- Natural parameter module,
- `NATLAST` (end definition) (must be included as the last module).

The reentrant part of the Natural UTM Interface is only present once in a Natural UTM application (reentrant) if it is loaded into class 4 storage or into a *common memory pool* in class 6 storage. The latter is recommended.

A further possibility is to link the reentrant part with the non-reentrant front-end part of the Natural UTM application.

The Natural and UTM macro libraries are required when assembling `NATUTM`, `NURENT` and all utility programs.

Formatting Messages - FREXIT

- Format Exit Module FREXIT
- FREEXIT Macro

Format Exit Module FREXIT

Natural uses its own formatting routines when sending messages to the VDU (UTM format type "minus"). Messages are processed by the format exit module `FREXIT` (transfer from logical to physical I/O domain and vice versa, producing `RESTART` and `LOGOFF` messages, etc.).

The module `FREXIT` must be linked with the front-end part of the Natural UTM application and it must be defined as the format exit module when generating `KDCROOT` or `KDCDEF`.

Example:

```
PROGRAM FREXIT,COMP=ASSEMB
EXIT PROGRAM=FREXIT,USAGE=FORMAT
```

The program FREXIT supports the format name -END for the LOGOFF message. See the description of the parameter LOFFMAP of the macro NATUTM. No more UTM administration commands (KDCINF, KDCSHUT N, etc.) can be entered after the format name -END has been used and the LOGOFF message has been output. The LOGOFF message is output in formatted mode; however, UTM expects administration commands in line mode and therefore any input results in a syntax error. After this error message has been received, all valid administration commands can be input with the administration ID. The messages for asynchronous messages, RESTART and LOGOFF can be changed to suit specific requirements by changing the appropriate text constants in the program FREXIT.

The program FREXIT has a user exit INPTEX that can be satisfied by the utility program INPTEX. See the descriptions of the programs NATDUE and INPTEX in the section *Utility Programs*.

Another user exit in program FREXIT is TRMIOEX, which can be used for input/output message control.

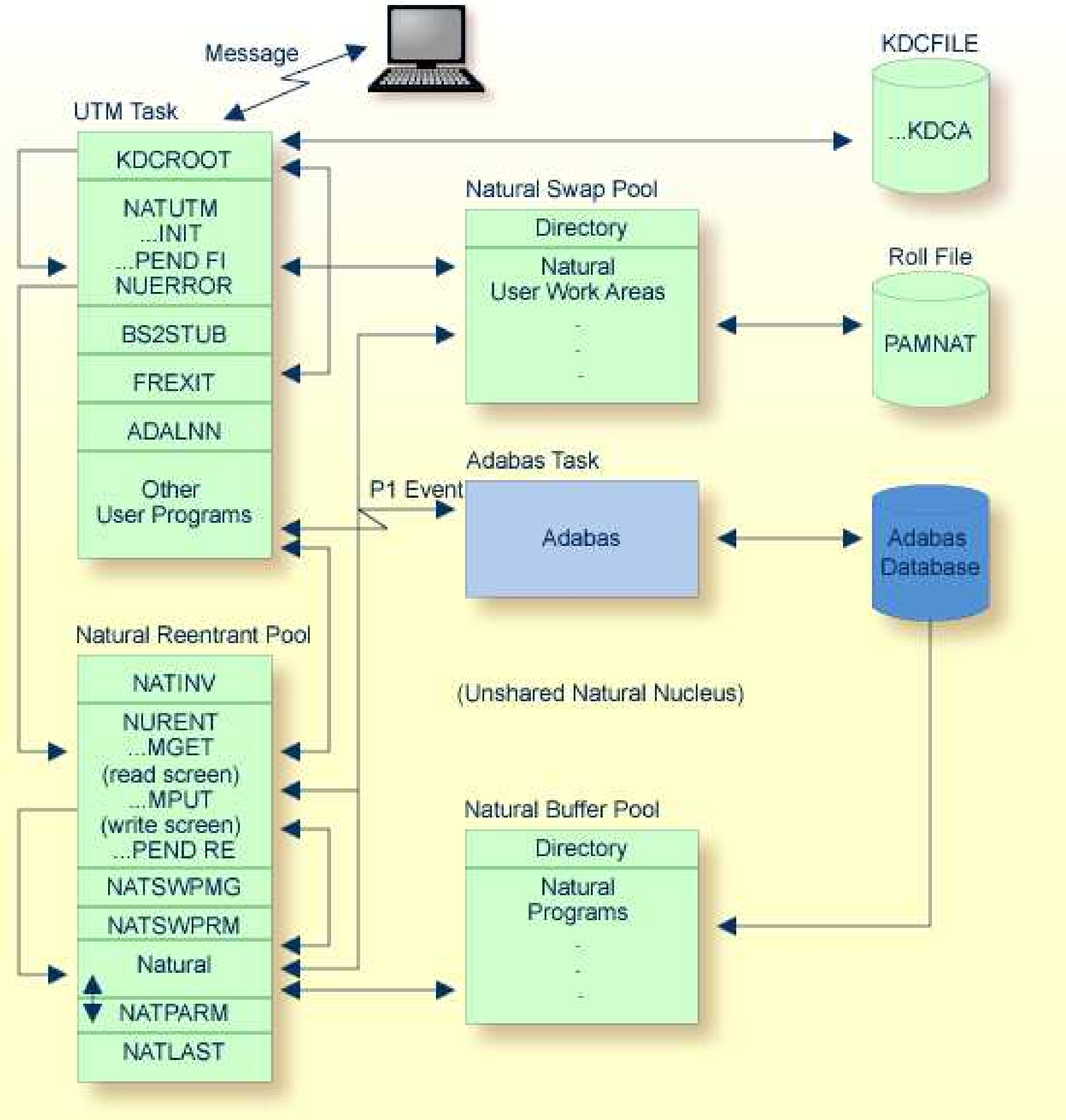
FREEXIT Macro

The macro FREXIT contains the following parameters:

AMSG=ASAP	If there are any "free-running" (asynchronous) messages, a further dialogue with Natural is only possible if these messages have previously been read with the command KDCOUT.
AMSG=WAIT	(Default) A further dialogue with Natural is possible even if any "free-running" messages have not yet been read with the command KDCOUT.
KDCDISP=YES	(Default) KDCDISP is supported by a restart message with an automatic ENTER. The last screen output will be refreshed.
KDCDISP=NO	KDCDISP is supported by a restart message with a following refresh screen.

If you want to change a default operand of macro FREXIT, you must reassemble FREXIT.

Embedding Natural in a UTM Application



Common Memory Pools

The following topics are covered:

- Natural Buffer Pool under UTM
- Natural Swap Pool under UTM
- Loading Natural in a Common Memory Pool - Natural Load Pool
- Natural Monitor Pool

Natural Buffer Pool under UTM

Natural requires a common area into which Natural programs can be read from the Adabas database and where they are also executed. This common memory pool is the Natural *buffer pool*.

You use the parameters of macro `ADDON` (which assembles module `BS2STUB`) either to define a local Natural buffer pool, or to define the connection to a global Natural buffer pool. For more information, see *ADDON Macro* in the Natural *Operations* documentation.

You use the parameters of module `CMPSTART` to define a global Natural buffer pool. For more information on this module, see *CMPSTART Program* in the Natural *Operations* documentation.

To display statistical information about the buffer pool, use the Natural utility *SYSBPM*; see the Natural *Utilities* documentation.

Natural Swap Pool under UTM

A Natural user work area is required for each online Natural user. This user work area must be in the computer's main store whenever the user initiates any form of dialogue transaction. To reduce the frequency with which the user work area is rolled out to the swap file and rolled in again, it is possible to set up a Natural Swap Pool. For details on the swap pool, please refer to *Natural Swap Pool* in the Natural *Operations* documentation.

You use the parameters of macro `ADDON` (which assembles the module `BS2STUB`) either to define a local Natural swap pool, or to define the connection to a global Natural swap pool. For more information, see *ADDON Macro* in the Natural *Operations* documentation.

You use the parameters of module `CMPSTART` to define a global Natural swap pool. For more information, see *CMPSTART Program* in the Natural *Operations* documentation.

Loading Natural in a Common Memory Pool - Natural Load Pool

The reentrant part of the Natural UTM application can be loaded in class 4 storage or linked with the front-end part of the Natural UTM application. Alternatively, it can be loaded in a common memory pool in class 6 storage. This last method is recommended. The amount of storage required in the common memory pool depends upon the size of the linked reentrant part of the Natural UTM application; this can be read from the linker listing. The parameter `NUCNAME` of macro `NATUTM` is used if Natural is to be loaded into a common memory pool in class 6 storage. This parameter specifies the name of the linked, reentrant Natural nucleus. This is also the name of the Natural load pool. See also *Parameters of Macro NATUTM*.

You use the parameters of macro `ADDON` (which assembles module `BS2STUB`) either to define a local Natural load pool, or to define the connection to a global Natural load pool (shared Natural nucleus). For more information, see *ADDON Macro* in the Natural *Operations* documentation.

You use the parameters of module `CMPSTART` to define a global Natural load pool (shared Natural nucleus). For more information, see *CMPSTART Program* in the Natural *Operations* documentation.

Natural Monitor Pool

The Natural Monitor utility requires a common memory pool for data storage. This common memory pool is allocated when the Monitor utility is activated, and released when the Monitor utility is deactivated.

You use the parameters of macro `ADDON` (which assembles module `BS2STUB`) either to define a local Natural monitor pool, or to define the connection to a global Natural monitor pool. For more information, see *ADDON Macro* in the Natural *Operations* documentation.

You use the parameters of module `CMPSTART` to define a global Natural monitor pool. For more information, see *CMPSTART Program* in the Natural *Operations* documentation.

For details on the Monitor utility, see *SYSTP Utility* in the Natural *Utilities* documentation.

Other Storage Areas

- Natural User Thread
- Natural User Work Area Asynchronous Write Buffer
- Natural User Area for Asynchronous Transactions
- Natural Roll File - LINK=PAMNAT

Natural User Thread

For each UTM task a storage area with a size of `MAXSIZE` is generated. This area contains the Natural user area in decompressed form.

Natural User Work Area Asynchronous Write Buffer

The Natural user work area can be written out either asynchronously ("write without wait") or synchronously ("write with wait").

If the asynchronous option is used (this is the default option), a write buffer having the size of defined operand for parameter `ROLLTSZ` is generated for each UTM task. Using this technique, the compressed user work area is copied from the swap pool into the write buffer, the asynchronous write is started and processing can continue immediately. This option gives better performance, but at the cost of increased storage.

If roll-outs are to be performed synchronously, the parameter `ROLLACC` must have the value `UPAM-SY`. In this case, it is not necessary to allocate a write buffer. Processing is suspended until the user work area has successfully been written to the swap file.

Natural User Area for Asynchronous Transactions

A storage area of `MAXSIZE` is allocated for each asynchronous transaction in a Natural UTM application (Natural user work area for this transaction). It is released at the end of the transaction. The Natural swap pool is not used to store the user work area associated with asynchronous transactions. Every Natural program that runs asynchronously must end with a `TERMINATE` statement; that is, the UTM DC transaction is ended with `PEND 'FI(NISH)'`. This applies to asynchronous transactions both within an application and between two Natural UTM applications; see also *Asynchronous Transaction Processing*.

Natural Roll File - LINK=PAMNAT

A PAM file is required for swapping the Natural user work areas. Writing to and reading from this file is done by physical chained PAM-I/O. However, this is only possible as long as the swap file does not cross an extent boundary. This can be checked using SPCCNTRL.

The LINK name of the Natural swap file is PAMNAT. The size of the roll file can be computed as follows:

```
NP=([(MS+4+31)/32]*32*NT+4)/2
```

where:

NP	Size of dataset in PAM pages
MS	Parameter ROLLTSZ in Kbytes, rounded up to next even number
NT	Number of terminals online

Example:

ROLLTSZ = 80 KBytes (per user), number of terminals online = 40

```
Size of dataset = ( [ ( 80 + 4 + 31 ) / 32 ] * 32 * 40 + 4 ) / 2
                = ( [ 115 / 32 ] * 32 * 40 + 4 ) / 2
                = ( [ 3.59375 ] * 32 * 40 + 4 ) / 2
                = ( 3 * 32 * 40 + 4 ) / 2
                = 3844 / 2
                = 1922 PAM pages
```

```
FILE statement:
```

```
/FILE NATUTM.SWAPFILE,LINK=PAMNAT,SPACE=(1922,96)
```

When a local swap pool is used, each Natural UTM application requires its own Natural swap file. When a user logs on to the application, the Natural UTM Interface checks whether there is sufficient space available for the new user in the Natural roll file. If there is not enough space, error message NUS0033 is output.

When a global swap pool is used, all Natural UTM applications which are connected to the same global swap pool must use the same Natural roll file.

Generating KDCROOT

The following Natural-specific definitions must be entered when generating KDCROOT for a Natural UTM application:

```
MAX KB=400,SPAB=8192,NB=5120,TRMSGLTH=5120 (see Note 1)
PROGRAM NUSTART,COMP=ASSEMB                (see Note 2)
PROGRAM NUERROR,COMP=ASSEMB                (see Note 2)
TAC NAT,PROGRAM=NUSTART,EXIT=NUERROR       (see Note 2)
EXIT PROGRAM=FREXIT,USAGE=FORMAT           (see Note 3)
PROGRAM FREXIT,COMP=ASSEMB                 (see Note 3)
```

Note	
1	The area needed for the UTM KB has a minimum length of 400 bytes. The necessary KB length for operand `KB=`*`nnn`* in the `MAX` parameter of `KDCDEF` must be calculated as follows: Fixed KB length is 400 bytes + length of KB user extension (parameter `KBUSEXT`) + length of dynamic parameter save area (parameter `SVDYPRM`) + (only if MULTI-PASS is used) length of session key areas, which has to be calculated as follows: *n* *72, where *n* is the number of parallel session minus 1 The UTM I/O areas `NB` and `TRMSLGTH` need a length of 5120 bytes.
2	In a Natural UTM application there is as a rule only one user-specific UTM partial program. This program is the front-end part of the Natural UTM Interface, which must be defined in the adequate parameters of `KDCDEF` under the name specified in the operand of the parameter `CSECT` of macro `NATUTM` (default = `NUSTART`). Any number of UTM transaction codes can be assigned, providing the naming rule is observed. The name of the DC transaction exit routine `NUERROR` must be defined for the front-end part of the Natural UTM Interface and for each other UTM partial program.
3	The format exit module `FREXIT` must be defined with the parameters `EXIT` and `PROGRAM`.

All other definitions relating to the generation of `KDCROOT` are either specific to UTM or else they are dependent upon the values defined in the operands of the appropriate parameters of macro `NATUTM`.

Defining the UTM Resources - KDCDEF

The following Natural-specific points must be observed when defining the UTM resources:

- Special Definition for Type 9755/9756 Terminals
- Treatment of K Keys and F Keys
- Support of IBM Type 3270 Terminals
- Support of TTY Terminals

Special Definition for Type 9755/9756 Terminals

The `TERMN` operand of the `PTERM` command must be set to the value `X1` or `FG` for 9755-type terminals and to the value `X2` for 9756-type terminals. These are special values and not described in the appropriate table in the Siemens UTM documentation.

For all other types of terminals, the `TERMN` operand must be set to the value shown in the tables.

Example:

```
PTERM ss19,lterm=ltdf1900,pronam=vr,ptype=t9755,TERMN=X1
```

Treatment of K Keys and F Keys

The Natural UTM Interface supports the function keys K1, K2, K3, K4, F1, F2, F3, F4 and F5 (for P keys). The function key which has been pressed can be identified by means of the UTM return code, which must be defined using the `SFUNC` statement of `KDCDEF`:

```
SFUNC K1,RET=26Z
SFUNC K2,RET=27Z
SFUNC K3,RET=28Z
SFUNC K4,RET=29Z
SFUNC F1,RET=21Z
SFUNC F2,RET=22Z
SFUNC F3,RET=23Z
SFUNC F4,RET=24Z
SFUNC F5,RET=25Z
SFUNC nn,RET=nnZ
```

(for the PRKEY, see the parameter `PRKEY`)

Using other function keys or using valid function keys that have not been defined in `KDCDEF` results in an error message.

Support of IBM Type 3270 Terminals

In an appropriate system configuration of IBM SNA (VTAM) and Siemens TRANSDATA DC, 3270-type terminals are supported by the Natural UTM Interface.

This means that Siemens terminals as well as 3270 terminals can be connected to a Natural UTM application. Natural adjusts screen output to the specific terminal type used. 3270-type terminals have to be defined as such to `KDCDEF` in the `PTERM` command (see Siemens UTM documentation).

For the support of Siemens and IBM function keys, the `SFUNC` statements of `KDCDEF` have to be defined as follows:

Siemens Key	IBM Key	UTM Return Code
F1	PF1	21Z
F2	PF2	22Z
F3	PF3	23Z
F4	PF4	24Z
F5	PF5	25Z
K1	PA1	26Z
K2	PA2	27Z
K3	PF6 + PF13	28Z
K4	PF7 + PF14	29Z
K5	PF8 + PF15	30Z
K6	PF9 + PF16	31Z
K7	PF10 + PF17	32Z
K8	PF11 + PF18	33Z
K9	PF12 + PF19	34Z
K10	PF20	35Z
K11	PF21	36Z
K12	PF22	37Z
K13	PF23	38Z
K14	PF24	39Z

Support of TTY Terminals

For terminals which are to be used in TTY mode, the `TERMN` operand of the `PTERM` command must be set to `TERMN=X9`.

The following restrictions apply to TTY mode:

- Asynchronous transaction processing is not supported.
- MULTI-PASS is not supported.

UTM DC-Transaction Exit Routine NUERROR

A UTM DC-transaction exit routine is defined in the front-end part of the Natural UTM Interface. This routine is called at the beginning of a DC transaction, when a DC transaction is restarted, at normal termination and at abnormal termination (`PEND ER`). The user exit `UVGEXIT` can be used in any of these circumstances.

In the case of abnormal termination, the affected user is deleted from the internal terminal control table, the Natural recovery procedures are executed and the user’s user area is released from the swap pool directory if necessary.

The DC-transaction exit routine NUERROR must be defined in the adequate parameters of KDCDEF for the front-end part of the Natural UTM Interface (generation of KDCROOT); see also *Generating KDCROOT*.

UTM Startup Function

If the user exit STARTEX (default value of parameter STRTALL) is to be used, EXIT PROGRAM=NUSTART,USAGE=START must be defined in the KDCDEF parameter for the front-end part of the Natural UTM Interface.

One of the effects of this is that the task initialization routines (allocation of common memory pools, loading Natural, etc.) are activated immediately following the start of each UTM task. Errors that occur are output on the console and all users are sent an appropriate message; if SYSLST=YES, errors are also output to SYSLST.

If the UTM startup function is not used, the UTM task(s) are not initialized until they are activated when a user logs on. If an error occurs under these circumstances, the error message is sent to the terminal that caused the error. All other users are given an appropriate message when they try to log-on to the application.

UTM Shutdown Function

If the user exits SHUTEX1 and/or SHUTEX2 (default values of parameters SHUTALL and SHUTLST) are to be used, the following must be defined in the KDCDEF parameters (KDCROOT) for the front-end part of the Natural UTM Interface:

```
EXIT PROGRAM=NUSTART,USAGE=SHUT
```

The statistics of the Natural UTM Interface are output when the last UTM task terminates.

If the UTM shutdown function is not used, the user exits defined with SHUTALL and SHUTLST cannot be used and the statistics are not available.

The statistics that are collected and output by the Natural UTM Interface are:

```
MAIN DIRECTORY IS RESIDENT, N O T  P A G E A B L E
--------------------------------------------------
INITIALIZED WITH CONTROL DATA FROM NAT SYSTEM FILE
TOTAL SIZE OF SWAP POOL IN KB :   32760
SIZE OF MAIN DIRECTORY IN KB :        2
TOTAL NO. OF SWAP POOL THREADS:     209
TOTAL NO. OF LOGICAL SWP(S) :        10

LAST STATUS OF THE SWAP POOL STATISTICS
+-----------------------------------------------+
I       Natural USER THREADS WITH LENGTH        I
I       GREATER                    LOWER        I
I                    152 KB                     I
+-----------------------+-----------------------+
I  + 2 KB:           0 I - 2 KB:              0 I
I  + 4 KB:           0 I - 4 KB:             17 I
I  + 6 KB:           0 I - 6 KB:              0 I
I  + 8 KB:           0 I - 8 KB:              1 I
I  + 10 KB:          0 I - 10 KB:             0 I
I  + 12 KB:          0 I - 12 KB:             0 I
I  + 14 KB:          0 I - 14 KB:             0 I
I + 16 KB:           0 I - 16 KB:             0 I
I + 18 KB:           0 I - 18 KB:             0 I
I + NN KB:           0 I - NN KB:             0 I
I AVER.LNG.NN:       0 KB I AVER.LNG.NN:   0 KB I
+-----------------------------------------------+
LOGICAL SWP NO. 01             LOGICAL SWP NO. 02
------------------             ------------------
LOGICAL SWP SIZE IN KB: 2402   LOGICAL SWP SIZE IN KB: 2690
DIRECTORY SIZE IN KB :     2   DIRECTORY SIZE IN KB :     2
SWP THREAD SIZE IN KB :  120   SWP THREAD SIZE IN KB :  128
NO. OF SWP ENTRIES :      20   NO. OF SWP ENTRIES :      21
MAX. USED ENTRIES :        0   MAX. USED ENTRIES :        0
NO. OF SWP GUESTS :        0   NO. OF SWP GUESTS :        0
NO. SUCCESSFUL LOCATES:    0   NO. SUCCESSFUL LOCATES:    0
NO. FAILED LOCATES :       0   NO. FAILED LOCATES :       0

LOGICAL SWP NO. 03             LOGICAL SWP NO. 04
------------------             ------------------
LOGICAL SWP SIZE IN KB: 2858   LOGICAL SWP SIZE IN KB: 3026
DIRECTORY SIZE IN KB :     2   DIRECTORY SIZE IN KB :     2
SWP THREAD SIZE IN KB :  136   SWP THREAD SIZE IN KB :  144
NO. OF SWP ENTRIES :      21   NO. OF SWP ENTRIES :      21
MAX. USED ENTRIES :        0   MAX. USED ENTRIES :        1
NO. OF SWP GUESTS :        0   NO. OF SWP GUESTS :        0
NO. SUCCESSFUL LOCATES:    0   NO. SUCCESSFUL LOCATES:    1
NO. FAILED LOCATES :       0   NO. FAILED LOCATES :       0

LOGICAL SWP NO. 05             LOGICAL SWP NO. 06
------------------             ------------------
LOGICAL SWP SIZE IN KB: 3194   LOGICAL SWP SIZE IN KB: 3362
DIRECTORY SIZE IN KB :     2   DIRECTORY SIZE IN KB :     2
SWP THREAD SIZE IN KB :  152   SWP THREAD SIZE IN KB :  160
NO. OF SWP ENTRIES :      21   NO. OF SWP ENTRIES :      21
MAX. USED ENTRIES :        1   MAX. USED ENTRIES :        0
NO. OF SWP GUESTS :        0   NO. OF SWP GUESTS :        0
NO. SUCCESSFUL LOCATES:   17   NO. SUCCESSFUL LOCATES:    0
NO. FAILED LOCATES :       0   NO. FAILED LOCATES :       0

LOGICAL SWP NO. 07             LOGICAL SWP NO. 08
------------------             ------------------
LOGICAL SWP SIZE IN KB: 3530   LOGICAL SWP SIZE IN KB: 3698
DIRECTORY SIZE IN KB :     2   DIRECTORY SIZE IN KB :     2
SWP THREAD SIZE IN KB :  168   SWP THREAD SIZE IN KB :  176
NO. OF SWP ENTRIES :      21   NO. OF SWP ENTRIES :      21
MAX. USED ENTRIES :        0   MAX. USED ENTRIES :        0
NO. OF SWP GUESTS :        0   NO. OF SWP GUESTS :        0
NO. SUCCESSFUL LOCATES:    0   NO. SUCCESSFUL LOCATES:    0
NO. FAILED LOCATES :       0   NO. FAILED LOCATES :       0
LOGICAL SWP NO. 09             LOGICAL SWP NO. 10
------------------             ------------------
LOGICAL SWP SIZE IN KB: 3866   LOGICAL SWP SIZE IN KB: 4118
DIRECTORY SIZE IN KB :     2   DIRECTORY SIZE IN KB :     2
SWP THREAD SIZE IN KB :  184   SWP THREAD SIZE IN KB :  196
NO. OF SWP ENTRIES :      21   NO. OF SWP ENTRIES :      21
MAX. USED ENTRIES :        0   MAX. USED ENTRIES :        0
NO. OF SWP GUESTS :        0   NO. OF SWP GUESTS :        0
NO. SUCCESSFUL LOCATES:    0   NO. SUCCESSFUL LOCATES:    0
NO. FAILED LOCATES :       0   NO. FAILED LOCATES :       0
```

```
  ------------------------------------------------------------
  USAGE STATISTICS OF SWAP POOL AND NATURAL USER THREADS

  SWP  SLOT NO.  NAT.       %     DIAGRAM
  NO.  LNG KB   THREADS
  ---  ------   -------   -----  -----------------------------------
  01     120          0     0,0
  02     128          0     0,0
  03     136          0     0,0
  04     144          1     5,5  ***
  05     152         17    94,4  ***********************************
  06     160          0     0,0
  07     168          0     0,0
  08     176          0     0,0
  09     184          0     0,0
  10     196          0     0,0
  DESERTERS:          0     0,0

  M A I N   D I R E C T O R Y   S T A T I S T I C S   A R E A
  NATSHARE: SWP POOL START DATE                      02-07-17
  NATSHARE: SWP POOL START TIME                      11:52:14
  NATSHARE: TOTAL NUMBER OF SWP SYNC. WAITS:                0
  NATSHARE: TOTAL NUMBER OF ASYN. WRITE WAITS:              0
  NATSHARE: TOTAL NUMBER OF DIALOGUE STEPS:                19
  NATSHARE: TOTAL NUMBER OF SWAPS:                          0
  NATSHARE: TOTAL NUMBER OF WRITES TO ROLL FILE:            0
  NATSHARE: TOTAL NUMBER OF SYNCHRONOUS WRITES:             0
  NATSHARE: MAX NUMBER OF USER:                             1
  NATSHARE: MAX NUMBER OF DIALOGUES WITHOUT SWAPS:         19
  NATSHARE: NUMBER OF SWAP POOL REORGANIZATION:             0
  NATSHARE: NUMBER OF SWAP POOL REPAIR:                     0
  NATSHARE: NUMBER OF ABNORMAL ENDED SESSIONS:              0
  NATSHARE: MAX. COMPR. L’ OF NAT USER THREAD IN KB:      148
  NATSHARE: REAL MAXSIZE NEEDED FROM Natural IN KB:       386


When Swap Pool Data Space is generated:



  NATSHARE: D A T A  S P A C E  ( D S F ) S T A T I S T I C S
  NATSHARE: NO. OF ESA DATA SPACE SLOTS:                   30
  NATSHARE: NO. OF WRITES INTO DATA SPACE:                  0
  NATSHARE: NO. OF FAILED WRITES (DATA SPACE FULL):         0
  NATSHARE: NO. OF SUCCESSFUL DSP THREAD LOCATES:           0
  NATSHARE: NO. OF FAILED DSP THREAD LOCATES:               0

  NATSHARE: SWP STATISTICS PRINT DATE:               02-07-17
  NATSHARE: SWP STATISTICS PRINT TIME:               11:52:14
```