SYSTP in Batch Mode

SYSTP can also be used to obtain statistical data on Natural/CICS sessions in batch mode.

The Natural log file to which the statistical data are written must be assigned to the Natural batch job as work file 1 (that is, via CMWKF01). It must also be defined to the online system, which means in the CICS DCT (destination control table); see the LOGDEST parameter in macro NCIPARM of the Natural/CICS parameter module in section Natural under CICS in the Natural TP Monitor Interfaces documentation.

Invoking SYSTP in Batch Mode

To invoke the SYSTP utility in batch mode, you specify either of the following commands in the batch job:

- SYSTP *xxx*
- LOGON SYSTP
  SYSBATCH *xxx*

where ***xxx*** indicates what kind of data are to be processed; ***xxx*=nci**, for example, would indicate that the data were collected by a Natural/CICS online system.

Evaluating the Log File

Data are written to the Natural log file whenever Natural is started, a Natural session is terminated, or the Natural swap pool is reorganized.

The SCP system writes the following records to the Natural log file:

- a start log record whenever the SCP system is initialized,
- a session log record whenever a Natural session is terminated,
- a reorganization log record whenever the swap pool has been reorganized.

When an SCP environment is initialized, a System ID is written into the system control block. This system ID also belongs to all log records. Therefore, a Natural log file can be shared by several SCP online environments.

The information logged serves to keep track of the usage of the SCP online environment. Therefore, most of the information refers to facilities of the SCP environment. The log file is not intended to be an accounting or monitoring tool that refers to facilities of CICS.

Based on the system ID, several reports are created with data related to a Natural session:

- log file data listed in chronological order, which means that session log records are sorted by session end date and time;
- statistical information on how the SCP environment was set up and used;
- statistics on thread groups (if used);
- statistics on program storage threads (if used);
- statistics on roll facilities (if used);
- reorganization statistics (in the case of swap pool reorganizations)

This set of reports is created for all SCP systems with records on the Natural/CICS log file.

Note:
The session termination log records, of course, reflect only resources which have been used by the corresponding sessions. Therefore, these records may not reflect the full SCP environment. Reports of a full SCP environment can be obtained by making a snapshot of the whole SCP environment using the System Administration Facilities.

Sample Batch Job - OS/390:

```
//NATLOG   JOB (user,,,999),CLASS=K,MSGCLASS=Z
//NATBATCH EXEC PGM=natbatch,REGION=2000K,
//   PARM=('DBID=nn,FNR=nn,IM=D,MT=0,MADIO=0,AUTO=OFF,MENU=OFF')
//STEPLIB  DD DISP=SHR,DSN=natural.loadlib
//DDCARD   DD *
ADARUN DA=nn,SVC=nnn,DE=3380
//CMPRINT  DD SYSOUT=A
//CMWKF01  DD DISP=SHR,DSN=nat.log.file
//SYSOUT   DD SYSOUT=X
//SYSUDUMP DD SYSOUT=X
//CMSYNIN  DD *
SYSTP NCI
/*
```

Sample Batch Job - VSE/ESA:

```
* $$ JOB JNM=NATLOG,CLASS=0,DISP=D,PRI=3
* $$ LST CLASS=A,DISP=D,COPY=1,RBS=100,DEST=*
// JOB NATLOG
// DLBL CMWKF01, 'nat.log.file'
// EXTENT SYS001,xxxxxx
// ASSGN SYS001,DISK,VOL=xxxxxx,SHR
// ASSGN SYSLST,cuu
// LIBDEF PHASE,SEARCH=...
// EXEC natbatch,SIZE=natbatch,PARM='SYSRDR'
DBID=nn,FNR=nn,IM=D,MT=0,OBJIN=R,MADIO=0
AUTO=OFF,MENU=OFF,BWORKD=(1,1,4628,VB)
/*
ADARUN DA=nn,SVC=nnn,DEVICE=3380,TNAE=999999,TT=999999,MODE=MULTI
/*
SYSTP NCI
/*
// EXEC LISTLOG
/&
* $$ EOJ
```

