

Fujitsu Siemens Computers

R E L E A S E N O T I C E

C O P E (BS2000) *

Computer Performance Evaluator

3* Version 5.4C
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1 General

- 2* This release notice summarizes the major points of information on COPE Version 5.4C.
To print this file use the following command:

```
/PRINT-FILE SYSFGM.COPE.054.E,CONTROL-CHARACTER=EBCDIC
```

- 4* The release level is that of September 2004.
- 3* Changes in this revision (SOLIS revision status
5* COPE V5.4C20) are marked by '5*' in the left-hand margin.

If one or more previous versions are skipped when this product is used, the information from the Release Notices of the previous versions must be noted.

1.1 Ordering

- 2* COPE V5.4C can be ordered from your local distributors. The executive of COPE V5.4C is available in both English and German.

1.2 Delivery

- 2* The COPE V5.4C files are supplied via SOLIS.

Delivery components:

SYSFGM.COPE.054.D	Release Notice (German)
SYSFGM.COPE.054.E	Release Notice (English)
SINLIB.COPE.054	LMS library for installation

1.3 Documentation

- 2* Delivery of COPE V5.4C includes the following documentation:

Title	Version
COPE Beschreibung	5.4 (only in German !)
COPE Benutzerhandbuch	5.4 (only in German !)
COPE Produktblatt	5.4 (only in German !)

These manuals (in German) are contained in the supplied LMS library named SINLIB.COPE.054

as WinZip files from element LMS-Typ X:

Beschr54.ZIP
Benutz54.ZIP

Transfer the files Beschr54.ZIP and Benutz54.ZIP in binary mode to the desired PC, e.g. by ftp or rapid filer.

The WinZip files contain WORD-for-Windows files. Where each chapter is a separate file named <chapter-number>.DOC. With WORD the document may be printed as usual.

- 2* Currently there are no COPE V5.4C manuals available in English.
The following additional documentation is also recommended:

BS2000 Performance Handbook
SM2 User Guide (for COSMOS as of OSD V2.0)
COSMOS Descriptions

2 Technical information

New and extended software functions are described in chapter 3.

2.1 Resource requirements

Approximately 12000 PAM pages are required for installation. The file SINLIB.COPE.054 (approximately 6000 PAM pages) can be deleted after installation. During evaluation of COSMOS measurement files, work files are created which can be 500 to 5000 PAM pages in size depending on the number of events and tasks to be evaluated. COSMOS evaluations require a high level of calculation time, depending on the measurements to be evaluated.

Hardware

Siemens System 7.500
9750,9755 terminals and others

User address space: approximately 24 MB

2.2 Software configuration

The following software is required for running the product:

BS2000-GA (basic configuration) as of OSD V1.0
FHS as of V8.0
TOM.DOC text module

2.3 Product installation

- 2* All files required for running COPE V5.4C and the procedures required for installation are supplied in a single LMS library named:
SINLIB.COPE.054.

The installation procedure provided in this library is "COP54.INST" and can be called as follows:

```
/DO SINLIB.COPE.054(COP54.INST)
```

If an older COPE version already exists under this ID, it can generally be overwritten as COPE V5.4C includes all functions of older COPE versions. Once the installation procedure has executed, all COPE files should be available under the selected ID.

The "COPEV54" runtime procedure must then still be adapted to the respective user ID or BS2000 system. This applies to the IDs for COPE, MFHSROUT and the TOM.DOC text module. Further information is provided in Appendix 2 (page A2-1ff) of the COPE Benutzerhandbuch.

2.4 Product use

COPE is a tool for performance prognosis. It calculates models of real or planned BS2000 applications and determines:

- utilization
- throughputs
- response times

COPE models the performance behavior of the DP system and is suitable for performance analysis and capacity planning in the areas of:

- development and planning of new DP methods and concepts
- DP production planning (load distribution)
- DP investment planning (configuration comparisons, load increase)

COPE is an interactive program system. The inputs can be acquired quickly and specifically and modified as required. This applies to:

- the central hardware configuration
- the first level of the data communication network
- the complete software configuration

The effects on performance for both software and hardware modifications can be seen immediately on the screen.

If a real BS2000 application can be measured with COSMOS as a reference, COPE then has an interface for evaluating and modeling on the basis of the measurement data.

A list documenting all inputs and results can be printed out.

All generated models can be archived in a library for later use.

2.5 Obsolete functions

The following CPU types are no longer supported

7.521, 7.531, 7.536, 7.541, 7.551, 7.552, 7.561, 7.571
7.722, 7.730, 7.738, 7.740, 7.748, 7.750, 7.755, 7.760, 7.762
and C30-x.

2* H121-x, 7.580-x1

2.6 Incompatibilities

not applicable

2.7 Restrictions

2* The COSMOS evaluator can only process COSMOS measurement value files as of BS2000/OSD-BC V1.0 (COSMOS V11.0)

2.8 Procedure in the event of errors

If errors occur, the following information must be recorded for diagnostic purposes:

- description of the function that caused the error
- name of the module in which the error occurred
- number of the statement in which the error was reported
- type of error
- name of the model in which the error occurred

Please send the following with your error report:

- User library
- If an error has occurred in list generation, the file:
"POLL.OUTPUT.ddhmm"
- If an error occurred during COSMOS evaluation, the following additional files:

COSMOS measurement value file
<identity>.COPE.LST.<name>
<identity>.COPE.COS.<name>
<identity>.COPE.LOG.<name>

3. Software extensions

The following extensions and enhancements are implemented over the previous version COPE 5.3A:

- Hardware master data updating (new CPUs, disks)

The following new hardware can be modeled:

	CPU	: S110-x, S115-x, S135-xxx
		S150-xxx, S160-xxx
1*		S140-xxx, S170-xxx
		SR2000-Bx
2*		SR2000-Cx, SX130-xxx, S120-xxx
3*		SX100-Ax/Bx, SX140-xxx, S145-xxx, S180-xxx
4*		S190-xxx, S155-xxx
5*		SX150-xxx (all 9 Typs)
	Disk	: D34251-21/41, MP47, MP97
2*		FP38
5*		DMX1000, DMX2000, DMX3000

net controller: HNC 91850 and 91851

- Modelling the SR2000 Systems

The release V5.4 supports the following specific functions of the SR2000-Ax/-Bx systems:

- . Utilization and number of needed SINIX-Prozessors for the Input/Output workload of BUS peripheral devices
- . Utilization and number of needed Controller (DCS2/HIOS) and multibusbridges (MBP) for the Input/output workload of BUS peripheral devices

- Improved modeling of I/O subsystems with cache

From a COSMOS measurement the cache hit ratio is build for the model. Different actions are created for read and write access. On this base it's very simple to change the hit ratio for the model.

COPE calculate the access time for the I/O with included the data format (K2,NK4), channel type and the raid level.

- | | |
|----|---|
| 1* | - Modeling Transaktion in seperate TYPE of a Group |
| 1* | |
| 1* | .From a COSMOS measurement the resource requirements is build |
| 1* | for each Transaktion of a UTM-TAC. The output of the COPE |
| 1* | cosmos monitor can be used for evaluation purposes. The list |
| 1* | contines the monitoring values gathered for each TAC. |
| 1* | |
| 2* | .The utility COPV54.CSMODTA is now obsolete. Create model |
| 2* | with TACs to a TYPE is now integreated as function in |
| 2* | COPE. |

2* - Modeling with PAV (Parallel Access Volume)

2* From COSMOS measurements PAV DEVICES are recognized
2* and considered with the structure of model.
2* The computation of the I/O waiting time is realized
2* dependent on the number of existing alias DEVICES.
2* In the model an even distribution of the accesses
2* to the PAV DEVICES takes place. Thus the extent
2* of utilization of individual volumes in the
2* model can deviate from extent of utilization
2* with the measurement.

4. Hardware support

COPE V5.4B can run on all CPUs supported by BS2000
1* as of OSD V1.0 with 24 MB of user address space.