



VSE Health Checker

Positionierung und Beispiele



GSE z/VM und z/VSE Frühjahrstagung 2005

Hans Joachim Ebert
IBM Technical Sales zSeries
eberthj@de.ibm.com



© 2005 IBM Corporation



Trademarks

The following are trademarks of the International Business Machines Corporation in the United States and / or other countries.

CICS*	IBM*	Virtual Image Facility
DB2*	IBM logo*	VM/ESA*
DB2 Connect	IMS	VSE/ESA*
DB2 Universal Database	Intelligent Miner	VisualAge*
e-business logo*	Multiprise*	VTAM*
Enterprise Storage Server	MQSeries*	WebSphere*
HiperSockets	OS/390*	xSeries
	S/390*	z/Architecture
	SNAP/SHOT*	z/VM
		z/VSE
		zSeries

* Registered trademarks of IBM Corporation

The following are trademarks or registered trademarks of other companies.

EXPLORE is a trademark of Computer Associates International, Inc.
TMON is a trademark of ASG Software Solutions



© 2005 IBM Corporation

Inhalt der Präsentation

- Positionierung des VSE Health Checkers
- Beispiele für die Interpretation

Positionierung des VSE Health Checkers

- Performance-Analyse - Health Check
 - Vorbeugend ist Spitze, reaktiv
- Aktivitäten bei einem Health Check
 - Erfassen der gesamten Hard- und Software-Konfiguration
 - **Erfassen der Systemparameter**
 - **Ist die Domäne des VSE Health Checkers**
 - Interpretation der erfassten Daten
 - Ziehen von Schlussfolgerungen
 - Optimierung des Systems

Positionierung des VSE Health Checkers...

- Der VSE Health Check erstellt eine Momentaufnahme des Systems
- Dauer der Erfassung (fast nur DELAY bei Konsol-Operationen):
ca. 8 Minuten
 - Dauer ohne den Health Checker (meist AR-Commands):
ca. 2 Stunden
- Der Health Checker zeigt
 - Qualität von Systemeinstellungen
 - Wichtige Einstellungen sind farbig unterlegt (grün/gelb/rot)
 - Individuelle veränderbar
- VSE Health Checker ist **kein Ersatz** für
 - Fehlende Fachkenntnis und Erfahrung
 - Monitoring im Sinne von kontinuierlicher Systemüberwachung
 - Ressourcen-Belastung / CICS-Transaktionen
 - Gründliche Analyse einer CICS-Statistik

Beispiele für die Interpretation

- VSE Shared Storage
- Priority Settings
- CICS TS General Information
- CICS TS Partition Layout
- VTAM Buffer Usage
- POWER Information
- LE Information

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

ESA270

VSEPROD

OCS

P2

General

Storage Layout

LE-Options

LSR Pools

TS Queues

P5

General

Storage Layout

LE-Options

LSR Pools

TS Queues

System

General

PL

Turbo Dispatcher

Priority Settings

Storage

Partition Layout

Data Spaces

System Directory List

VTAM

General

POWER

General

Status

TCP

General

ZVSE 3.1

Shared Storage

Area	Size (KB)	Percent
Unused Shared	13	-
V-Pool	0	-
Label Area (SLA)	108	-
Free GETVIS 24	2168	13.0 %
Used GETVIS 24	340	86.0 %
NLA	1568	-
SDL	43	-
Supervisor	760	-

PFIX Below Actual 716 KB PFIX Above Actual 4364 KB

PFIX Below Limit 6088 KB PFIX Above Limit 1015648 KB

SVA24 VSize 1612 KB

SVA24 VAddr BE000

7

ON DEMAND BUSINESS

© 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

ESA270

VSEPROD

OCS

P2

General

Storage Layout

LE-Options

LSR Pools

TS Queues

P5

General

Storage Layout

LE-Options

LSR Pools

TS Queues

System

General

PL

Turbo Dispatcher

Priority Settings

Storage

Partition Layout

Data Spaces

System Directory List

VTAM

General

POWER

General

Status

TCP

General

ZVSE 3.1

Priority	Share	Partition	Application
9	0	F1	POWER
9	0	F3	PROD-VTAM
7	0	FB	SECSERV
6	0	FA	FAIGSPCS
5	0	I	
5	0	II	PRODTCP
4	0	E	
4	0	E1	FAIGSASO
4	0	E2	FAIGSMAN
4	0	E3	EXPLORE
4	0	E4	EXPDOC
3	0	R	
3	0	R1	PRODVCS
2	50	L	
2	100	M	
2	100	M1	SQMSRVY
2	4000	N	
2	4000	M1	MONITOR
2	4000	G	
2	4000	G1	ARCHEB2
2	100	B5	
2	2000	F2	PRODOC
2	4000	F4	PRODOB2
2	2000	F5	PABRICKS
2	100	F6	JABETS
2	100	F7	
2	100	F8	
2	100	F9	
1	0	V	

Tip: Click on a column header to sort by this column.
Higher priority number means higher priority.

8

ON DEMAND BUSINESS

© 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

ES4270

VSEPROD

CICS

F2

General

Storage Layout

LE-Options

LSR Pools

TS Queues

FS

General

Storage Layout

LE-Options

LSR Pools

TS Queues

System

General

PL

Turbo Dispatcher

Priority Settings

Storage

Partition Layout

Data Spaces

System Directory List

VTAM

General

POWER

Status

TCP/IP

ES

II

General

ZVSE 3.1

General

Temporary Storage

General

CICS TS Level: 010101

Default User: CICS2

Release: 0411

Storage Protection: ACTIVE

OCS Startup:

Cold

Warm

Emergency

DSAs (KB)

Peak DSA Size: 4608

Peak DSA Used: 3672

Peak EDGA Size: 26624

Peak EDGA Used: 20664

ICV Time

ICV Time: 250

ICVR Time: 20000

ICVSD Time: 0

PRTY Aging: 0000

OCS Recording

OCS Monitoring Rec: OFF

OCS Statistics Rec: ON

Statistics Interval: 23:59:00

End of Day: 00:00:00

Transactions

Total Transactions: 2903

Max. Tasks: 35

Times at MXT: 0

Peak Active User transactions: 28

Max:

Average Library Load time: 00:00:00.00832

Note: this plugin works only with CICS TS and requires the STAT transaction.

9

ON DEMAND BUSINESS

© 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

ES4270

VSEPROD

CICS

F2

General

Storage Layout

LE-Options

LSR Pools

TS Queues

FS

General

Storage Layout

LE-Options

LSR Pools

TS Queues

System

General

PL

Turbo Dispatcher

Priority Settings

Storage

Partition Layout

Data Spaces

System Directory List

VTAM

General

POWER

Status

TCP/IP

ES

II

General

ZVSE 3.1

General

Storage Below

Storage Above

Area	Size (KB)	Size (MB)
Free GETVIS-24	1412	1.42
Used GETVIS-24	1612	1.57
Free DSA	3584	3.50
User DSA (UDSA)	1260	1.25
Ready DSA (...)	512	0.50
Shared DSA (...)	1792	1.75
OCS DSA (OSDA)	1024	1.00
Partition Program...	4	0.00

Free DSA

User DSA

Ready DSA

Shared DSA

OCS DSA

Job Name: PR00CICS

Phase Name: DF00SP

Part. Begin Addr: 300000

Storage Prot.: Active

Peak DSA Size: 4938 KB

Peak DSA Used: 3672 KB

DSA Limit: 8192 KB

Max. Ever Used GETVIS-24: 11260 KB

Public Key (B0)

Partition Key (B0)

Ready Key (B0)

Note: Issue a GETVIS n, /RESET after CICS startup to get a correct max_ever_used_24 value.

10

ON DEMAND BUSINESS

© 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

- ES/270
 - VSEPROD
 - OCS
 - General
 - Storage Layout
 - IE-Options
 - LSR Pools
 - TS Queues
 - IFS
 - General
 - Storage Layout
 - IE-Options
 - LSR Pools
 - TS Queues
 - System
 - General
 - PL
 - Turbo Dispatcher
 - Priority Settings
 - Storage
 - Partition Layout
 - Data Spaces
 - System Directory List
 - VTAM
 - General
 - POWER
 - Status
 - TCPP
 - General
 - ZVSE 3.1
 - General

General | Major Nodes

SGA 24

Limit	No Limit	Limit	No Limit
Current	1429 KB	Current	271 KB
Max.	1542 KB	Max.	278 KB
Max. Used	1542 KB	Max. Used	278 KB

-VTAM Private

Current: 4415 KB
Max: 4497 KB

VTAM Buffers

Buffer	Size	Times Exp.	Cur. Total	Max. Total	Max. Used
IO	112	1	54	54	41
SP	144	0	10	10	1
LP	2032	0	15	15	12
LF	120	0	30	30	3
BS	216	15	901	1054	1034
XD	881	0	10	10	0
CR	164	0	120	120	53

11 ON DEMAND BUSINESS © 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

- ES/270
 - VSEPROD
 - OCS
 - General
 - Storage Layout
 - IE-Options
 - LSR Pools
 - TS Queues
 - IFS
 - General
 - Storage Layout
 - IE-Options
 - LSR Pools
 - TS Queues
 - System
 - General
 - PL
 - Turbo Dispatcher
 - Priority Settings
 - Storage
 - Partition Layout
 - Data Spaces
 - System Directory List
 - VTAM
 - General
 - POWER
 - Status
 - TCPP
 - General
 - ZVSE 3.1
 - General

Status | Internal

General

Service Level: DV46264
Present Session Start: NP

Account File

Account File Name: UAFLE
Total Tracks: 80
Percent Full: 0 %

Data File

Data File Name: UDFLE
Total Tracks: 42000
Data Block Size: 7548 Bytes
Spool Limit Percentage: 90 %

Queue File

Queue File Name: UQFLE
Total Tracks: 60
Total Queue Rec: 7646
Used Records: 501
Free Records: 7145
Lost Records: 0

Data Block Groups

Total	30750
Used	29565
Free	15785
Size	8 DELK6
Lost	0
Used since last colistat	21095

Fixed Storage

Total	Allocated	256 KB
Max. Fixed	132 KB	
Current Fixed	116 KB	

Partition Storage

Total	13312 KB
Above	3048 KB

12 ON DEMAND BUSINESS © 2005 IBM Corporation

IBM Technical Sales zSeries

VSE Health Checker - Data loaded from: VSEPROD_2005_03_22_07.29.33.xml - Timestamp: 22.03.2005 07:29:24

File Selected Configuration Help

VSE Health Checker

- CSA270
- VSEPROD
 - CICS
 - General
 - Storage Layout
 - LSR Options
 - LSR Pools
 - TS Queues
 - F2
 - General
 - Storage Layout
 - LSR Options
 - LSR Pools
 - TS Queues
 - System
 - General
 - PL
 - Turbo Dispatcher
 - Priority Settings
 - Storage
 - Partition Layout
 - Data Spaces
 - System Directory List
 - VTAM
 - POWER
 - General
 - Status
 - TOPP
 - IT
 - General
 - ZVSE 3.1
 - General

Runtime Options for CICS | Runtime Options for Batch

General

Enclave: EDCYCRDP

Environment: VSEESA V1.RM.3

Options:

AbTermErr	ASBND	Installation default
ABT1	ON	Installation default
Debug	NO	Installation default
Heap	1534 1535 ANYWHERE KEEP 4096 4096	Installation default
Stack	3122 3123 ANYWHERE KEEP 4224	Installation default
Storage	00 00 00 00 00	Installation default
NO	ALL 00 00 00 00 00	Installation default
Trace	OFF 4096 DUMP L=0	Installation default
TransThdAct	TRACE MSGFLD	Installation default
Trap	ON MAX	Installation default

13

ON DEMAND BUSINESS

© 2005 IBM Corporation

IBM Technical Sales zSeries

IBM

**Danke
für
Ihre Aufmerksamkeit !**

14

ON DEMAND BUSINESS

© 2005 IBM Corporation