

VELOCITY
SOFTWARE

Monitoring z/VSE with zVPS

VM Workshop
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Richard Smrcina
Velocity Software
rich@velocitysoftware.com

Who is Velocity Software?

Founded 1988, Mission:

- Provide software to assist customers in optimizing the z/VM platform

Continuous fully integrated enhancements for over 30 years

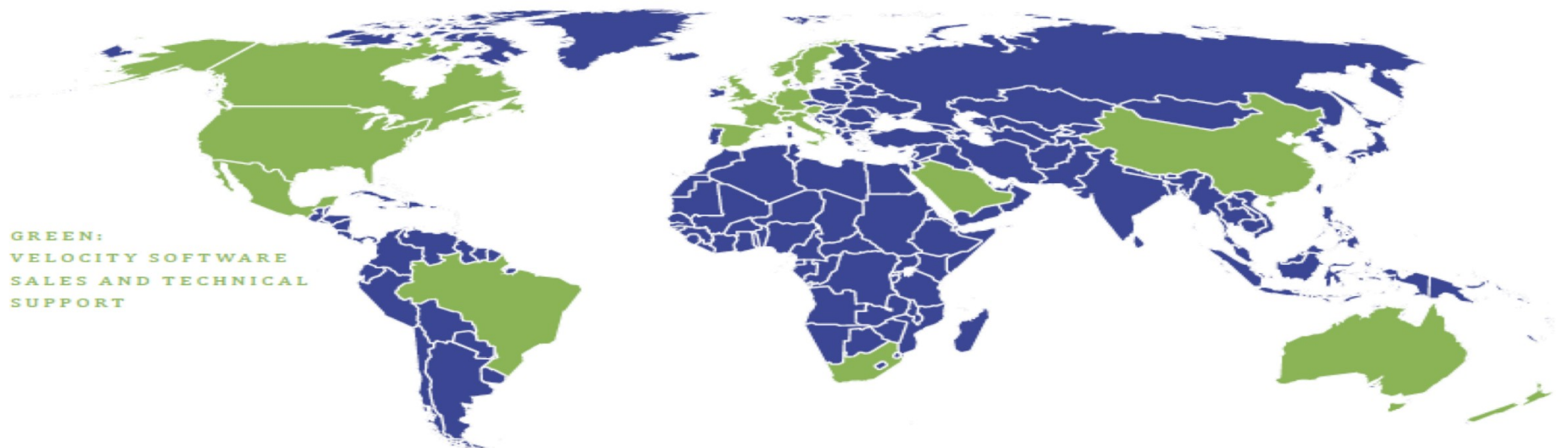
Over 200 installations (zVPS)

- More than half of the IFLs worldwide
- In 22 countries, on 6 continents

Headquartered in Mountain View, California

- Offices in Ohio, Texas, Wisconsin, and Germany

Velocity Software's Sales and Technical Support Map



z/VSE introduced SNMP about 10 years ago

- With z/VSE 4.3
- Since we use SNMP for Linux, it was a natural progression

Velocity Software

- Introduced z/VSE monitoring in 2010
- Based on SNMP 'plugins' provided by IBM
- Added our partition plugin in 2014
 - Displays partition and job information as jobs are running

Fast Forward to 2020.....

- Renewed interest in z/VSE monitoring
- Our recent dive into z/OS monitoring
 - Provides and verifies infrastructure that also benefits z/VSE

Introducing VSEMON

- Updated partition monitoring
- CICS monitoring
- TCP/IP stack monitoring

Updated partition monitoring

- Step/Job ends more closely tracked
- Performance improvements in the VSI plugin
 - One SNMP call per active partition

ESAVSEP - VM4

ESAVSEP - VSE Partition Performance - VM4

Time	Node	Part Id	Job Name	Phase Name	<- CPU% ->	<----- I/O ----->	Rtrn Code	Cncl Code	<----- Start ----->	Stop Time	User Info	Prtly	Share	Job Num
					CPU Ovhd	Disk VDisk Other			Date	Time				
09:59:00	zvse61b		Totals		40.2 4.8	9802 0 20428								
09:59:00	zvse61b	F1	POWSTART	IPWPOWER	1.6 0.4	366.0 0 8.0			05/21/20	07:55:58		1	0	0
09:59:00	zvse61b	FB	SECSERV	BSTPSTS	0.0 0.0	18.0 0 0			05/21/20	07:55:57		2	0	0
09:59:00	zvse61b	F3	VTAMSTRT	ISTINCVT	0.1 0.0	0 0 36.0			05/21/20	07:56:01	SYSA	3	0	49844
09:59:00	zvse61b	T1	BSTTVNET	BSTTVNET	0.1 0.0	2.0 0 19.0			06/04/20	08:02:07		4	0	53418
09:59:00	zvse61b	T2	BSTTFTPD	BSTTFTPS	0 0	0 0 0			06/04/20	08:02:06		4	0	53419
09:59:00	zvse61b	Z1	DMFSTART	DFHDFSIP	0.5 0.1	0 0 4.0			06/04/20	08:02:55		5	0	53422
09:59:00	zvse61b	R1	STARTVCS	IESVCSRV	0.1 0.0	0 0 0			06/04/20	08:01:51		6	0	53420
09:59:00	zvse61b	R2	STARTMAS	IESMASNM	0.2 0.0	0 0 0			06/04/20	08:01:55		6	0	53421
09:59:00	zvse61b	F2	CICSICCF	DFHSIP	0.3 0.0	0 0 0			05/21/20	07:56:35	SYSA	7	0	49850
09:59:00	zvse61b	O1	CICSJA60	DFHSIP	0.4 0.0	2.0 0 10.0			05/26/20	20:14:34		8	0	51255
09:59:00	zvse61b	O2	CICSJB60	DFHSIP	0.2 0.0	0 0 0			05/26/20	20:14:44		8	0	51256
09:59:00	zvse61b	F5	LIBRDIR	LIBR	1.8 0.4	2890 0 20291	0 10		06/04/20	09:57:48	09:57:56 OPERATOR	9	100	53443
09:59:00	zvse61b	F6	SCANVSM2	ARXREXX	23.3 3.5	6517 0 50.0	0 10		06/04/20	09:57:47	09:58:14	9	100	53442
09:59:00	zvse61b	S1	BSTTINET	BSTTINET	0.3 0.0	0 0 2.0			06/04/20	08:01:36		19	0	53417
09:59:00	zvse61b	S2	STGPLAY	STGPLAY	11.3 0.3	7.0 0 8.0			06/04/20	09:58:38		19	0	53439

CICS monitoring

- DMF records generated by CICS (rectype 110)
- Velocity provides an exit that runs in the DMF partition to route CICS data to z/VM
- All other processing is performed on z/VM, preserving precious GP CPU time
- Customers have the option to bypass the writing of the DMF data

ESAVSEP - VSE Partition Performance - VM2

Time	Node	Part Id	Job Name	Phase Name	<- CPU% ->		<----- I/O ----->			Rtrn Code	Cncl Code	<---- Start ---->	Stop Time	User Info	Prty	Share	
					CPU	Ovhd	Disk	VDisk	Other			Date	Time				
07:10:00	zvse61b	Z1	DMFSTART	DFHDFSIP	0.2	0.0	0	0	1.0			01/20/20	07:27:55			6	0
07:10:00	zvse62b	Z1	DMFSTART	DFHDFSIP	0.2	0.0	0	0	1.0			01/29/20	04:21:55			6	0
07:10:00	zvse62c	Z1	DMFSTART	DFHDFSIP	0.2	0.0	50.0	0	1.0			01/23/20	05:17:55			5	0

61b=6.8, 62b=10.7, 62c=8.8
sustained total 650.000=700.000/day

TCP/IP monitoring

- Additional plugin written for each TCP/IP stack vendor
- IPv6/VSE currently available
 - Data maps directly to fields already available in zVPS
- TCP/IP for VSE research ongoing
 - We have issued a statement of direction to provide support

ESATCP4 - TCPIP Hardware Layer / Interfaces - DEMO													
Time	Node/ Group	IFT	<Total Octets>		Avg <-Per second->	<-Subnet packets / Sec->		<-----Packets Discar					
			Input	Output		Q	<-Unicast->	<NonUnicast>	<In Error>	<NonError	Inpt	Outpt	Inpt	Outp
07:32:00	zvse62c	.	.	.	.	.	.	.	.	.	.	.	.
07:32:00	zvse62b	1	13551	59020	0	166	230	0	0	0	0	0	0
07:32:00	zvse61c	.	.	.	.	.	.	.	.	.	.	.	.
07:32:00	zvse61b	2	14972	78191	0	188	279	0	0	0	0	0	0
07:32:00	zvse61b	1	0	0	0	0	0	0	0	0	0	0	0

z/VSE 5.1+ for VSE system and partition data

z/VSE 6.1+ for CICS and TCP/IP data

- z/VSE 6.2 is the only release currently supported by IBM

VSE supplied SNMP agent with our plugins

- Partition plugin
- TCP/IP plugin, based on the stack in use

BSI stack must be 258pre24 or higher

CSI stack (Refer to VSEMON readme for updated requirements)

- z/VSE 6.1: 2.1A with fixes 164, 386, and 391
- z/VSE 6.2: 2.25 with fixes 164, 187, and 188
- See Server must also be configured and running

For CICS, DMF must be running

- Set to one minute interval

CICS Performance and Statistics turned on

- Set to one minute interval

Provided as a ZVPS installation package

- Download from the website

When installed...

- A top level SFS directory is created (VMSYSVPS:VSEMON.)
- A BJB file is put there
 - Transfer to z/VSE
 - Respond to the SETPARM prompt
- Samples added to VMSYSVPS:VSEMON.
 - STARTMAS JCL, IESMASCF.Z, VSIDMF config

A number of items are cataloged and linked

- Plugin phases (partition and TCP/IP)
- CICS PLTPI phase
 - Reset the monitor
 - Make sure statistics are turned on
- VSIDMF exit phase
 - Sample VSIDMF configuration member
- REXX program
 - Used to delay the DMF startup

Plugin Implementation

```
CATALOG IESMASCF.Z                                REPLACE=YES
* **** *
* CONFIG FILE FOR z/VSE SNMP MONITORING AGENT *
* **** *
* SNMP COMMUNITY NAME:
COMMUNITYNAME = 'velocity'
* PORT (default SNMP Port 161):
PORT          = '161'
* SYSTEM PLUGIN
PLUGIN        = 'IESMPSYS'
* CPU PLUGIN
PLUGIN        = 'IESMPCPU'
* SAMPLE PLUGIN
* THE SAMPLE PLUGIN IS SHIPED AS SOURCE CODE, YOU
* HAVE TO COMPILE IT, IF YOU WANT TO USE IT
* PLUGIN      = 'IESMPSMP'
PLUGIN        = 'VPSSNMPP'
PLUGIN        = 'VPSBSTCP'
PARM          = 'DD:PRD2.CONFIG(IESMPSCF.Z)'
/+
```

Our plugins
configured here

Plugin Startup

```
// EXEC IESMASNM, PARM='DD:PRD2.CONFIG(IESMASCF.Z) '  
1S54I PHASE IESMASNM IS TO BE FETCHED FROM PRD1.BASE  
IESMA101I BEGINNING STARTUP OF MONITORING AGENT  
IESMASNM Loading config member: DD:PRD2.CONFIG(IESMASCF.Z)  
IESMM004I LOADING PLUGIN IESMPSYS...  
IESMM004I LOADING PLUGIN IESMPCPU...  
IESMM004I LOADING PLUGIN VPSSNMPP...  
VPSSNMPP Version 10100  
IESMM004I LOADING PLUGIN VPSBSTCP...  
VPSBNTCP Version 10100  
IESMA102I FINISHED STARTUP OF MONITORING AGENT  
IESMA103I WAITING FOR CONNECTIONS OF CLIENTS...
```

Plugin startup

CICS configuration

- DFHSIT updates

```

DFHSIT TYPE=CSECT, *
...
MN=ON, MONITORING ON *
MNCONV=YES, MONITORING OF CONVERSATIONAL*
MNEXC=ON, MONITORING EXCEPTION CLASS *
MNFREQ=001500, MONITORING FREQUENCY *
MNPER=ON, MONITORING PERFORMANCE CLASS *
MNSYNC=YES, MONITORING SYNCPOINT *
MNTIME=LOCAL, MONITORING TIME GMT *
...
STATRCD=ON, STATISTICS RECORDING *
```

- DFHPLTPI update

```
DFHPLT TYPE=ENTRY, PROGRAM=VPSMONSW
```

CICS configuration

- Make sure statistics is turned on
- Interval set to one minute

```
cent i stat
STATUS:  RESULTS - OVERTYPE TO MODIFY
Sta On           Int( 000100 ) End( 000000 )
```

- Define PLTPI program and associated transaction

```
CEDA View TRANSAction( VSI1 )
TRANSAction : VSI1
Group       : VSI1
Description :
PROGRAM    : VPSMONSW
```

```
CEDA View PROGRAM( VPSMONSW )
PROGRAM    : VPSMONSW
Group      : VSI
Description :
Language   : C
```

DMF Updates

- Update startup LIBDEF

```
// LIBDEF PHASE,SEARCH=(VSILIB.PHASE,SDL)
```

- Add delay to the startup before DMF

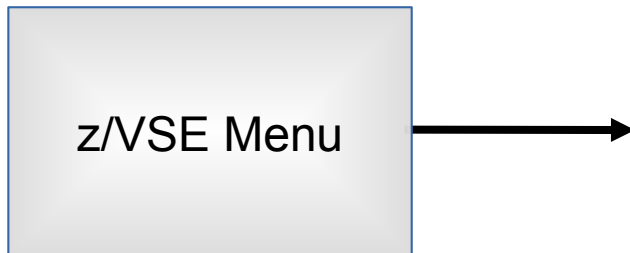
```
// LIBDEF *,SEARCH=VSILIB.REXX  
// EXEC REXX=VSIDELAY
```

DMF Updates

- DMF configuration phase changes

```

DFHDMFM TABLE, *
    CATALOG=VELOCITY.USER.CATALOG, USE VSICAT *
    FILELIST=(VSE.SYSTEM.DFHDMFA,VSE.SYSTEM.DFHDMFB), *
    INTERVAL=0100,      1 MINUTES 0 SECONDS *
    LISTDSN=YES,      SHOW DATASETS WHEN DMF STARTS *
    SID=V62C,          SYSTEM IDENTIFIER *
    SIZE=16,          USE A 16M DATA SPACE *
    STATUS=ACTIVE,    DMF IS ACTIVE AT START *
    SUFFIX=SP,        THIS TABLE IS CALLED DFHDMFSP *
    TRACE=NO,         NO TRACE ACTIVITY *
    TRTABSZ=1024,     TRACE TABLE SIZE IS 1M *
    TYPE=0:255,       RECORD ALL DMF DATA RECORD TYPES *
    USAGE=40          REDUCE SPACE WHEN 40% FULL
  
```

Main menu ✕

Add tab Arrange

Load View Save View

Color config

VSIVM2

zMON **Graphs** **zMAP**

Capacity

System

Service Level Analysis

User

Shared File System

CPU

Main Storage

Paging and Spooling

Input/Output Subsystem

Network

Linux

Linux Application

SSC/Docker

zOS

zVSE

- ESAVSES
- ESAVSEC
- ESAVSEC2
- ESAVSEP
- ESAVSEJ

CICS

Screen Index

Emulation Screens

zALERT Definitions

zOPERATOR

zTUNE

Custom Samples

ESAVSES - VSE System Configuration - DEMO



Time	Node	<---z/VM---> VirtID	<LogicalPart> Lvl Name	Nbr	<-----CPU model-----> <IBM/<model>/CPs/ serial	<--Partitions-->				<----CPU Counts---->				<----- Priority of Partitions ----->
						Max	Cur	Stat	Dyn	Tot	Actv	Quies	Inact	
06:14:00	zvse61b	ZVSE61B	1 VSIVM5	5	IBM 2828-A02 02 (714C702)	80	21	12	9	1	1	0	0	=F9(100)=FA(100),BG,O,F2,R,Z,T,V,F3,FB,F
06:14:00	zvse61c	ZVSE61C	1 VSIVM5	5	IBM 2828-A02 02 (714C702)	80	19	12	7	1	1	0	0	0)=F5(100)=F4(100),BG,R,O,F2,Z,T,FB,F3,F
06:14:00	zvse62b	ZVSE62B	1 VSIVM5	5	IBM 2828-A02 02 (714C702)	80	21	12	9	1	1	0	0	(100)=FA(100),BG,O,F8,F2,R,Z,T,V,F3,FB,F
06:14:00	zvse62c	ZVSE62C	1 VSIVM5	5	IBM 2828-A02 02 (714C702)	80	17	12	5	1	1	0	0	0)=FA(100)=BG(100),F8,O,F2,R,Z,T,F3,FB,F
06:14:00	BSI62	VSE62	1 JCB	1	IBM 1090-306 02 (234502)	120	19	12	7	1	1	0	0	100)=F5(100),F2,F3,R,Z,F4,S,O,F7,FB,BG,F

ESAVSEC2

ESAVSEC - VSE System Performance - VM2

Time	Node	Pages/Sec		<Rate/Sec>		<CPU Utilization>			All	Pct	Seconds	Samples
		In	Out	SVC	DSP	Total	Mstr	Spin	Bound	NP		
11:09:00	zvse61b	0	0	1156	1139	5.1	1.7	0	94.1	33.5	59.9	1
11:09:00	zvse61c	0	0	922	891	3.9	1.6	0	95.5	41.6	59.9	1
11:09:00	zvse62b	0	0	299	353	0.6	0.3	0	99.1	47.9	60.0	1
11:09:00	zvse62c	0	0	854	805	1.7	0.8	0	97.7	48.0	60.0	1

ESAVSEC2 - VSE System Performance per CPU - VM2

Time	Node	CPU	Disp /Sec	<CPU Utilization>			All	Pct	Seconds	Samples
				Total	Mstr	Spin	Bound	NP		
11:09:00	zvse61b	0	1143	5.1	1.7	0	94.1	33.5	60	1
11:09:00	zvse61c	0	891	3.9	1.6	0	95.5	41.5	60	1
11:09:00	zvse62b	0	353	0.6	0.3	0	99.1	48.3	60	1
11:09:00	zvse62c	0	805	1.7	0.8	0	97.7	48.0	60	1



Parameters

ESAVSEC Parameters

Start Date

Start Time

End Date

End Time

User Class

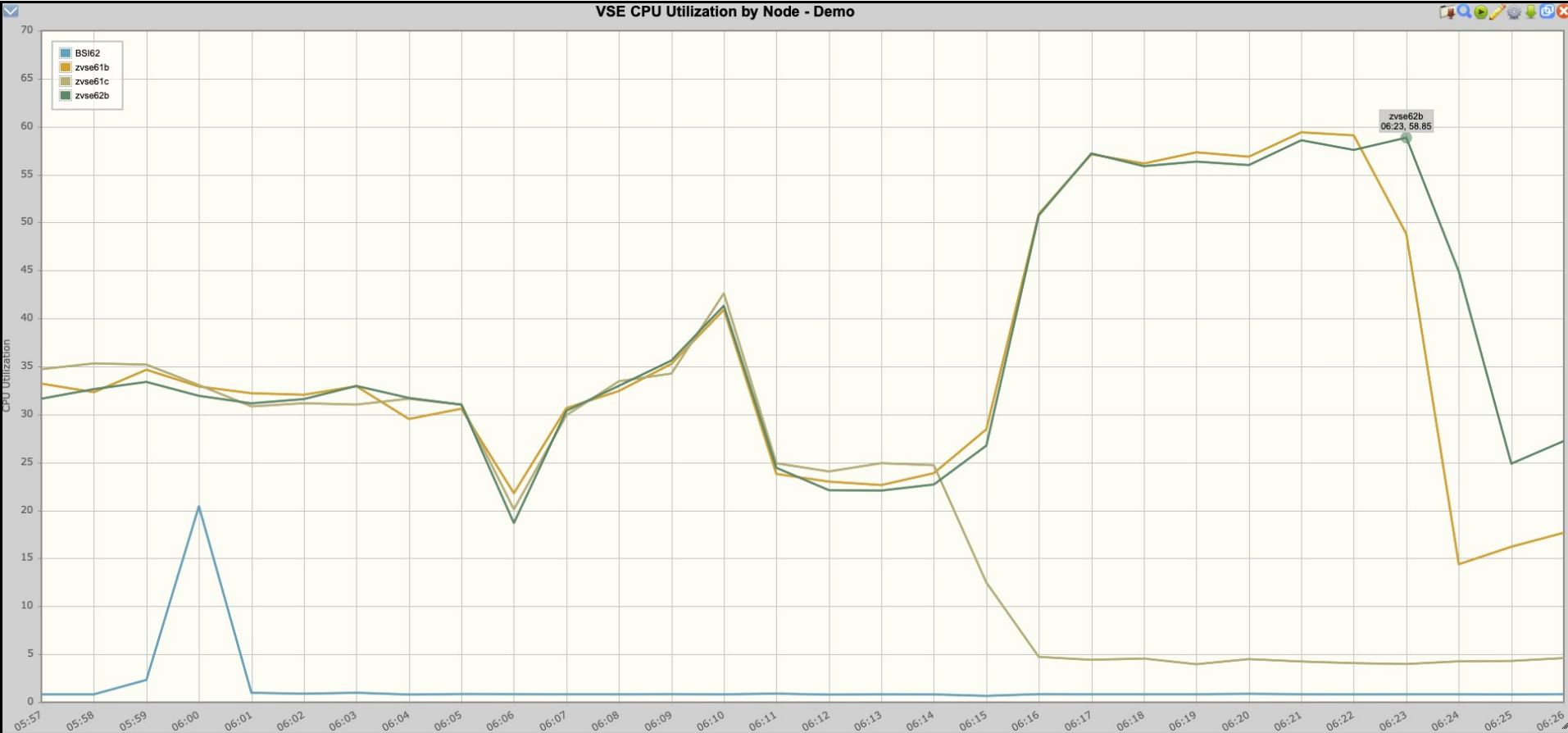
Node name

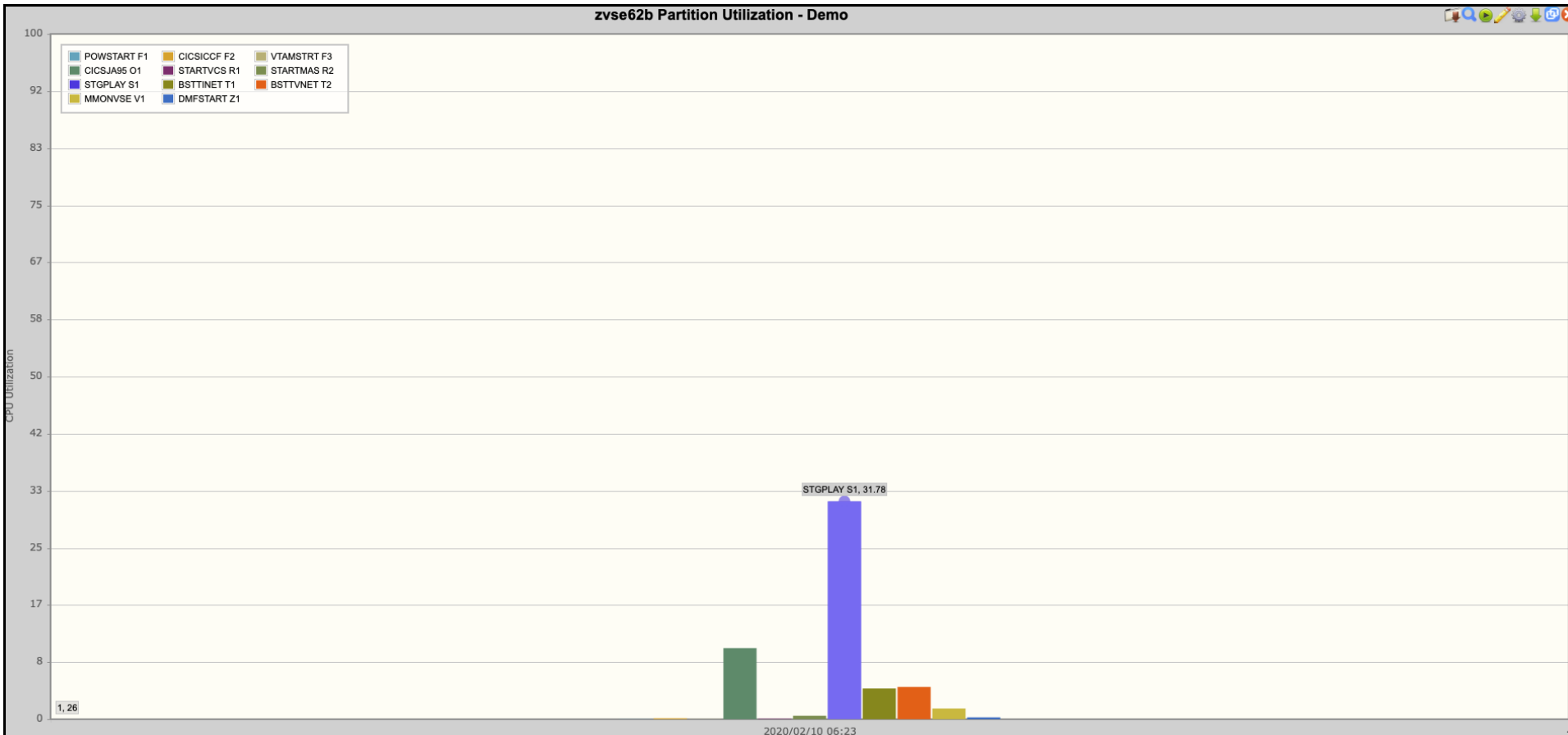
Click to build direct URL

ESAVSEC - VSE System Performance - Demo												
Time	Node	Pages/Sec		<Rate/Sec>		<CPU Utilization>			All	Pct	Seconds	Samples
		In	Out	SVC	DSP	Total	Mstr	Spin	Bound	NP		
04:01:00	zvse62b	0	0.0	4294	3147	33.6	12.3	0	0	36.6	60.7	1
04:00:00	zvse62b	0	0	4014	2969	33.9	10.9	0	0	32.1	60.0	1
03:59:00	zvse62b	0	0	4139	3043	33.0	11.2	0	0	34.0	60.2	1
03:58:00	zvse62b	0	0	4199	3058	32.1	11.3	0	0.0	35.1	60.3	1
03:57:00	zvse62b	0	0	4070	3006	32.5	11.1	0	0	34.2	59.1	1
03:56:00	zvse62b	0	0	4474	3419	31.5	12.7	0	10.0	40.2	60.6	1
03:55:00	zvse62b	0	0	4652	3563	26.1	13.0	0	46.2	49.8	59.6	1
03:54:00	zvse62b	0	0	4587	3527	25.7	12.8	0	47.2	49.8	60.5	1
03:53:00	zvse62b	0	0	4652	3543	25.9	12.9	0	48.3	49.7	59.2	1
03:52:00	zvse62b	0	0	4698	3607	26.2	13.1	0	47.4	49.8	60.6	1
03:51:00	zvse62b	0	0	5388	3765	29.2	14.4	0	42.3	49.5	59.8	1
03:50:00	zvse62b	0	0	11K	5365	54.9	26.3	0	0.7	47.9	60.2	1
03:49:00	zvse62b	0	0	12K	5632	56.2	27.1	0	2.2	48.2	60.0	1
03:48:00	zvse62b	0	0	11K	5638	55.1	26.7	0	2.1	48.6	59.5	1
03:47:00	zvse62b	0	0	12K	5551	57.1	27.3	0	0.9	47.7	60.1	1
03:46:00	zvse62b	0	0	11K	5785	51.7	26.3	0	8.7	50.8	59.7	1
03:45:00	zvse62b	0	0	4785	3658	27.1	13.5	0	43.2	49.8	60.0	1
03:44:00	zvse62b	0	0	4818	3670	27.2	13.5	0	44.0	49.5	60.6	1
03:43:00	zvse62b	0	0	5002	3819	27.8	13.8	0	45.0	49.9	60.0	1
03:42:00	zvse62b	0	0	4728	3627	26.8	13.2	0	45.9	49.4	59.4	1
03:41:00	zvse62b	0	0	6055	4300	33.1	16.8	0	27.4	50.8	60.7	1
03:40:00	zvse62b	0	0	4667	3541	26.4	13.1	0	45.2	49.6	60.0	1
03:39:00	zvse62b	0	0	4898	3743	27.5	13.7	0	43.7	49.7	59.6	1
03:38:00	zvse62b	0	0	4512	3454	25.6	12.8	0	44.7	49.8	60.0	1
03:37:00	zvse62b	0	0	4617	3479	26.7	13.1	0	33.2	49.2	60.1	1
03:36:00	zvse62b	0	0	4688	3549	26.9	13.3	0	34.7	49.7	60.0	1
03:35:00	zvse62b	0	0	4406	3361	26.1	12.8	0	33.9	49.1	60.6	1
03:34:00	zvse62b	0	0	4387	3342	25.8	12.8	0	31.4	49.6	59.8	1
03:33:00	zvse62b	0	0	4386	3316	25.6	12.6	0	27.9	49.1	60.0	1
03:32:00	zvse62b	0	0	4412	3313	25.7	12.6	0	22.1	49.2	59.5	1
03:31:00	zvse62b	0	0	4528	3436	26.5	13.5	0	30.0	50.8	60.5	1
03:30:00	zvse62b	0	0	4638	3543	26.0	13.0	0	47.0	49.9	59.8	1
03:29:00	zvse62b	0	0	4643	3576	26.7	13.2	0	42.1	49.5	59.7	1
03:28:00	zvse62b	0	0	4632	3511	25.7	12.8	0	47.9	49.8	60.2	1
03:27:00	zvse62b	0	0	4812	3661	26.8	13.3	0	45.9	49.8	59.1	1
03:26:00	zvse62b	0	0	4817	3685	26.8	13.3	0	45.6	49.8	61.0	1
03:25:00	zvse62b	0	0	4814	3677	26.9	13.4	0	46.0	49.8	60.0	1
03:24:00	zvse62b	0	0	4968	3721	59.4	14.4	0	4.4	24.2	59.9	1
03:23:00	zvse62b	0	0	4682	3504	60.4	12.8	0	0	21.1	59.5	1
03:22:00	zvse62b	0	0	4679	3607	58.6	14.0	0	0.0	23.9	60.1	1
03:21:00	zvse62b	0	0	10K	5024	57.6	23.1	0	0	40.1	60.7	1
03:20:00	zvse62b	0	0	11K	5715	56.4	26.9	0	0	47.7	59.2	1
03:19:00	zvse62b	0	0	12K	5409	56.3	26.8	0	0	47.6	60.7	1
03:18:00	zvse62b	0	0	11K	5521	55.6	26.3	0	0	47.3	59.4	1
03:17:00	zvse62b	0	0.0	11K	5681	54.1	26.7	0	0	49.3	59.8	1
03:16:00	zvse62b	0	0.0	8134	4716	42.3	20.7	0	0	48.9	60.3	1
03:15:00	zvse62b	0	0	4100	3014	29.6	11.3	0	0	38.0	60.3	1
03:14:00	zvse62b	0	0	3654	2670	22.5	10.0	0	0	44.4	59.6	1
03:13:00	zvse62b	0	0	3580	2614	22.8	9.9	0	0	43.4	60.1	1
03:12:00	zvse62b	0	0	3633	2682	22.5	10.1	0	0	45.1	59.9	1
03:11:00	zvse62b	0	0	3999	2936	27.8	11.0	0	0	39.6	60.5	1
03:10:00	zvse62b	0	0	4216	3143	40.6	11.8	0	0.0	29.1	59.9	1
03:09:00	zvse62b	0	0	4180	3080	33.6	11.6	0	0	34.5	60.4	1
03:08:00	zvse62b	0	0	3962	2938	32.4	11.0	0	0	34.1	59.5	1
03:07:00	zvse62b	0	0	4005	2955	31.6	11.2	0	0	35.5	58.9	1
03:06:00	zvse62b	0	0	3309	2447	19.5	9.4	0	0	48.2	61.5	1
03:05:00	zvse62b	0	0	3915	2922	30.3	11.8	0	0.0	38.8	59.7	1
03:04:00	zvse62b	0	0	4096	2973	28.0	11.4	0	0	40.9	59.6	1
03:03:00	zvse62b	0	0	4220	3112	32.6	11.8	0	0	36.3	60.0	1
03:02:00	zvse62b	0	0	4061	2994	31.1	11.4	0	0.0	36.5	60.8	1
03:01:00	zvse62b	0	0.0	4231	3095	31.9	12.1	0	0	37.8	59.4	1

ESAVSEP - VSE Partition Performance - VM4																			
Time	Node	Part Id	Job Name	Phase Name	CPU%		I/O			Rtrn Code	Cncl Code	Start		Stop Time	User Info	Prtly	Share	Job Num	
					CPU	Ovhd	Disk	VDisk	Other			Date	Time						
10:01:00	zvse61b		Totals		3.9	0.6	230.0	0	16.0										
10:01:00	zvse61b	F1	POWSTART	IPWPOWER	0.0	0.0	19.0	0	15.0			05/21/20	07:55:58			1	0	0	
10:01:00	zvse61b	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	07:55:57			2	0	0	
10:01:00	zvse61b	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	07:56:01		SYSA	3	0	49844	
10:01:00	zvse61b	S1	BSTTINET	BSTTINET	0.6	0.1	0	0	0			06/04/20	08:01:36			4	0	53417	
10:01:00	zvse61b	T1	BSTTVNET	BSTTVNET	0.3	0.1	0	0	0			06/04/20	08:02:07			5	0	53418	
10:01:00	zvse61b	T2	BSTTFPD	BSTTFPS	0	0	0	0	0			06/04/20	08:02:06			5	0	53419	
10:01:00	zvse61b	Z1	DMFSTART	DFHDFSIP	0.1	0.0	0	0	1.0			06/04/20	08:02:55			6	0	53422	
10:01:00	zvse61b	R1	STARTVCS	IESVCSRV	0.0	0.0	0	0	0			06/04/20	08:01:51			7	0	53420	
10:01:00	zvse61b	R2	STARTMAS	IESMASNM	0.2	0.0	0	0	0			06/04/20	08:01:55			7	0	53421	
10:01:00	zvse61b	F2	CICSICCF	DFHSIP	0.1	0.0	9.0	0	0			05/21/20	07:56:35		SYSA	8	0	49850	
10:01:00	zvse61b	O1	CICSJA60	DFHSIP	1.7	0.3	183.0	0	0			05/26/20	20:14:34			9	0	51255	
10:01:00	zvse61b	O2	CICSJB60	DFHSIP	0.8	0.1	19.0	0	0			05/26/20	20:14:44			9	0	51256	
10:01:00	zvse61c		Totals		57.4	7.8	18740	0	442.0										
10:01:00	zvse61c	F1	POWSTART	IPWPOWER	0.1	0.0	34.0	0	3.0			05/21/20	08:07:43			1	0	0	
10:01:00	zvse61c	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	08:07:43			2	0	0	
10:01:00	zvse61c	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	08:07:50		SYSA	3	0	50933	
10:01:00	zvse61c	T1	TCPIPO0	IPNET	1.1	0.1	0	0	0			05/22/20	10:30:32			4	0	51227	
10:01:00	zvse61c	T2	SVSESRVR	SVSESRVR	0.0	0.0	0	0	0			05/23/20	16:40:03			4	0	51554	
10:01:00	zvse61c	Z1	DMFSTART	DFHDFSIP	0.2	0.0	16.0	0	1.0			05/22/20	10:31:55			5	0	51231	
10:01:00	zvse61c	R1	STARTVCS	IESVCSRV	0.0	0.0	0	0	0			05/22/20	10:31:09			6	0	51229	
10:01:00	zvse61c	R2	STARTMAS	IESMASNM	0.2	0.0	0	0	0			05/23/20	16:45:30			6	0	51559	
10:01:00	zvse61c	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0			05/21/20	08:08:13		SYSA	7	0	50937	
10:01:00	zvse61c	O1	CICSJA68	DFHSIP	1.8	0.2	206.0	0	0			05/21/20	08:08:28			8	0	50938	
10:01:00	zvse61c	Y1	2 Job	steps V	2.5	0.3	2226	0	204.0							20	0		
10:01:00	zvse61c	Y2	3 Job	steps V	24.9	3.4	12558	0	151.0							20	0		
10:01:00	zvse61c	Y3	3 Job	steps V	26.7	3.6	3700	0	83.0							20	0		
10:01:00	zvse62b		Totals		1.0	0.4	511.0	0	1326										
10:01:00	zvse62b	F1	POWSTART	IPWPOWER	0.1	0.0	48.0	0	6.0			05/21/20	08:09:14			1	0	0	
10:01:00	zvse62b	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	08:09:14			2	0	0	
10:01:00	zvse62b	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	08:09:28		SYSA	3	0	36114	
10:01:00	zvse62b	T1	BSTTINET	BSTTINET	0.3	0.1	0	0	0			05/21/20	08:09:31			4	0	36116	
10:01:00	zvse62b	T2	BSTTVNET	BSTTVNET	0.1	0.0	0	0	0			05/21/20	08:10:01			4	0	36117	
10:01:00	zvse62b	T3	BSTTFPD	BSTTFPS	0	0	0	0	0			05/21/20	08:10:01			4	0	36118	
10:01:00	zvse62b	Z1	DMFSTART	DFHDFSIP	0.1	0.0	0	0	1.0			06/05/20	07:44:50			5	0	44145	
10:01:00	zvse62b	R1	STARTVCS	IESVCSRV	0.0	0.0	0	0	0			05/21/20	08:10:07			6	0	36122	
10:01:00	zvse62b	R2	STARTMAS	IESMASNM	0.1	0.0	0	0	0			05/21/20	08:10:06			6	0	36123	
10:01:00	zvse62b	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0			05/21/20	08:09:51		SYSA	7	0	36120	
10:01:00	zvse62b	O1	CICSJA95	DFHSIP	0.2	0.1	0	0	0			05/21/20	08:10:07			8	0	36121	
10:01:00	zvse62b	F4	2 Job	steps V	0.1	0.0	308.0	0	878.0							9	100		
10:01:00	zvse62b	F5	LIBRDIR3	LIBR	0.0	0.0	155.0	0	441.0	0	10	06/05/20	10:00:00	10:00:00		9	100	44201	

ESAVSEP - VM4																				
ESAVSEP - VSE Partition Performance - VM4																				
Time	Node	Part	Job	Phase	-< CPU% ->		-<----- I/O ----->			Rtrn	Cncl	-<----- Start ----->		Stop	User	Info	Prty	Share	Job	
					CPU	Ovhd	Disk	VDisk	Other	Code	Code	Date	Time	Time					Num	
10:01:00	zvse61b		Totals		3.9	0.6	230.0	0	16.0											
10:01:00	zvse61b	F1	POWSTART	IPWPOWER	0.0	0.0	19.0	0	15.0			05/21/20	07:55:58				1	0	0	
10:01:00	zvse61b	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	07:55:57				2	0	0	
10:01:00	zvse61b	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	07:56:01		SYSA		3	0	49844	
10:01:00	zvse61b	S1	BSTTINET	BSTTINET	0.6	0.1	0	0	0			06/04/20	08:01:36				4	0	53417	
10:01:00	zvse61b	T1	BSTTVNET	BSTTVNET	0.3	0.1	0	0	0			06/04/20	08:02:07				5	0	53418	
10:01:00	zvse61b	T2	BSTTFPTD	BSTTFTPS	0	0	0	0	0			06/04/20	08:02:06				5	0	53419	
10:01:00	zvse61b	Z1	DMFSTART	DFHDFSIP	0.1	0.0	0	0	1.0			06/04/20	08:02:55				6	0	53422	
10:01:00	zvse61b	R1	STARTVCS	IESVCSR	0.0	0.0	0	0	0			06/04/20	08:01:51				7	0	53420	
10:01:00	zvse61b	R2	STARTMAS	IESMASNM	0.2	0.0	0	0	0			06/04/20	08:01:55				7	0	53421	
10:01:00	zvse61b	F2	CICSICCF	DFHSIP	0.1	0.0	9.0	0	0			05/21/20	07:56:35		SYSA		8	0	49850	
10:01:00	zvse61b	O1	CICSJA60	DFHSIP	1.7	0.3	183.0	0	0			05/26/20	20:14:34				9	0	51255	
10:01:00	zvse61b	O2	CICSJB60	DFHSIP	0.8	0.1	19.0	0	0			05/26/20	20:14:44				9	0	51256	
10:01:00	zvse61c		Totals		57.4	7.8	18740	0	442.0											
10:01:00	zvse61c	F1	POWSTART	IPWPOWER	0.1	0.0	34.0	0	3.0			05/21/20	08:07:43				1	0	0	
10:01:00	zvse61c	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	08:07:43				2	0	0	
10:01:00	zvse61c	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	08:07:50		SYSA		3	0	50933	
10:01:00	zvse61c	T1	TCPIP00	IPNET	1.1	0.1	0	0	0			05/22/20	10:30:32				4	0	51227	
10:01:00	zvse61c	T2	SVSESRV	SVSESRV	0.0	0.0	0	0	0			05/23/20	16:40:03				4	0	51554	
10:01:00	zvse61c	Z1	DMFSTART	DFHDFSIP	0.2	0.0	16.0	0	1.0			05/22/20	10:31:55				5	0	51231	
10:01:00	zvse61c	R1	STARTVCS	IESVCSR	0.0	0.0	0	0	0			05/22/20	10:31:09				6	0	51229	
10:01:00	zvse61c	R2	STARTMAS	IESMASNM	0.2	0.0	0	0	0			05/23/20	16:45:30				6	0	51559	
10:01:00	zvse61c	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0			05/21/20	08:08:13		SYSA		7	0	50937	
10:01:00	zvse61c	O1	CICSJA68	DFHSIP	1.8	0.2	206.0	0	0			05/21/20	08:08:28				8	0	50938	
10:01:00	zvse61c	Y1	2 Job	steps V	2.5	0.3	2226	0	204.0								20	0		
10:01:00	zvse61c	Y2	3 Job	steps V	24.9	3.4	12558	0	151.0								20	0		
10:01:00	zvse61c	Y2	SCANVSM2	ARKREXX	2.4	0.4	2253	0	14.0			06/05/20	10:00:48		VSM2		20	0	54781	
10:01:00	zvse61c	Y2	SCANVSM2	ARKREXX	11.2	1.6	5138	0	48.0	0	10	06/05/20	10:00:26	10:00:48	VSM2		20	0	54781	
10:01:00	zvse61c	Y2	SCANVSM2	ARKREXX	11.2	1.5	5167	0	89.0	0	10	06/05/20	10:00:01	10:00:26	VSM2		20	0	54781	
10:01:00	zvse61c	Y3	3 Job	steps V	26.7	3.6	3700	0	83.0								20	0		
10:01:00	zvse62b		Totals		1.0	0.4	511.0	0	1326											
10:01:00	zvse62b	F1	POWSTART	IPWPOWER	0.1	0.0	48.0	0	6.0			05/21/20	08:09:14				1	0	0	
10:01:00	zvse62b	FB	SECSERV	BSTPSTS	0	0	0	0	0			05/21/20	08:09:14				2	0	0	
10:01:00	zvse62b	F3	VTAMSTR	ISTINCVT	0.0	0.0	0	0	0			05/21/20	08:09:28		SYSA		3	0	36114	
10:01:00	zvse62b	T1	BSTTINET	BSTTINET	0.3	0.1	0	0	0			05/21/20	08:09:31				4	0	36116	
10:01:00	zvse62b	T2	BSTTVNET	BSTTVNET	0.1	0.0	0	0	0			05/21/20	08:10:01				4	0	36117	
10:01:00	zvse62b	T3	BSTTFPTD	BSTTFTPS	0	0	0	0	0			05/21/20	08:10:01				4	0	36118	
10:01:00	zvse62b	Z1	DMFSTART	DFHDFSIP	0.1	0.0	0	0	1.0			06/05/20	07:44:50				5	0	44145	
10:01:00	zvse62b	R1	STARTVCS	IESVCSR	0.0	0.0	0	0	0			05/21/20	08:10:07				6	0	36122	
10:01:00	zvse62b	R2	STARTMAS	IESMASNM	0.1	0.0	0	0	0			05/21/20	08:10:06				6	0	36123	
10:01:00	zvse62b	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0			05/21/20	08:09:51		SYSA		7	0	36120	
10:01:00	zvse62b	O1	CICSJA95	DFHSIP	0.2	0.1	0	0	0			05/21/20	08:10:07				8	0	36121	
10:01:00	zvse62b	F4	2 Job	steps V	0.1	0.0	308.0	0	878.0								9	100		
10:01:00	zvse62b	F5	LIBRDIR3	LIBR	0.0	0.0	155.0	0	441.0	0	10	06/05/20	10:00:00	10:00:00			9	100	44201	





Adjust Paramet... ✕

Current interval

Start date

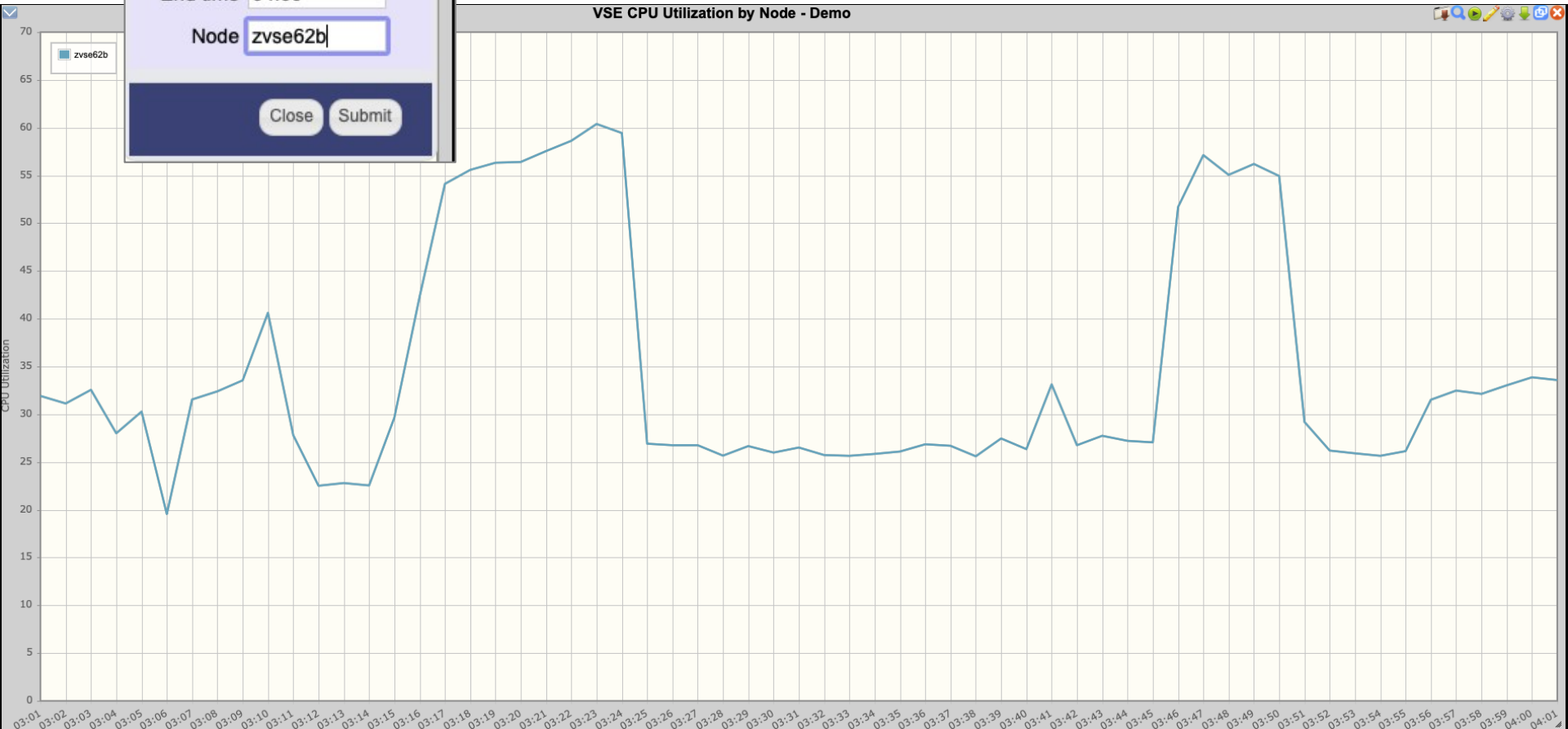
Start time

End date

End time

Node


Close Submit



Our Enterprise View shows activity from multiple z/VM LPARs on a single screen

It can be used as a launch point into those LPARs

Today is Saturday 13 Jun 2020



Enterprise Performance Summary

VM2 Expand			
VM2	14:59	IFL Total (1)	1.09%
VSE Systems			
zvse61c	28.15%		
zvse62b	28.14%		
zvse62c	27.17%		
win	27.12%		
zvse61b	26.97%		
8 Linux Nodes(z/VM-Guests)			
DOCKER (1)	2.25%		
redhat6x (1)	0.49%		
s11s2ora (2)	0.40%		
redhat6 (1)	0.12%		
redhat6S (1)	0.12%		
redhat62 (1)	0.12%		
redhat6M (1)	0.08%		
sles12 (1)	0.03%		
2 Linux Nodes(Distributed Servers)			
linux9 (5)	102.94%		
mongo02 (2)	0.24%		

Click on a VSE system name to bring up MyVSE for that system

ESAVSEC2 - VSE System Performance per CPU - VM2

Time	Node	CPU	Disp /Sec	<CPU Utilization>			All	Pct		
			Total	Mstr	Spin	Bound	NP	Seconds	Samples	
15:07:00	zvse61c	0	423	1.2	0.8	0	98.7	67.4	60	1

ESAVSES - VSE System Configuration - VM2

Time	Node	<---z/VM---	<LogicalPart>	<-----CPU model----->	<--Partitions-->	<-----CPU Counts----->					
		VirtID	Lvl Name	Nbr	<IBM/<model>/CPs/ serial	Max Cur Stat Dyn Tot	Actv	Quies	Inact	<-----	Priority of Part
15:07:00	zvse61c	ZVSE61C	1	VSIVM5	5	IBM 8562-A02 02 (40F782)	80 18 12 6 1	1	0	0	0)=F5(100)=F4(100),BG,O,

ESAVSEC - VSE System Performance - VM2

Time	Node	Pages/Sec		<Rate/Sec>	<CPU Utilization>			All	Pct		
		In	Out	SVC DSP	Total	Mstr	Spin	Bound	NP	Seconds	Samples
15:07:00	zvse61c	0	0	397 423	1.2	0.8	0	98.7	67.4	60.1	1

VSE CPU Utilization by Node

ESAVSEP - VSE Partition Performance - VM2

Time	Node	Part Id	Job Name	Phase Name	<- CPU% ->	<----- I/O ----->	Rtrn	Cncl	<----- Start ----->	Stop
					CPU Ovhd	Disk VDisk Other	Code	Code	Date	Time
15:07:00	zvse61c	Totals			1.0 0.2	13.0 0	1.0			
15:07:00	zvse61c	F1	POWSTART	IPWPOWER	0.0 0.0	0 0	0		05/21/20	08:07:43
15:07:00	zvse61c	FB	SECSERV	BSTPSTS	0 0	0 0	0		05/21/20	08:07:43
15:07:00	zvse61c	F3	VTAMSTRT	ISTINCVT	0.0 0.0	0 0	0		05/21/20	08:07:50
15:07:00	zvse61c	T1	TCPIP00	IPNET	0.5 0.1	0 0	0		05/22/20	10:30:32
15:07:00	zvse61c	T2	SVSESRVR	SVSESRVR	0.0 0.0	0 0	0		05/23/20	16:40:03
15:07:00	zvse61c	Z1	DMFSTART	DFHDFSIP	0.2 0.1	13.0 0	1.0		05/22/20	10:31:55
15:07:00	zvse61c	R1	STARTVCS	IESVCSRV	0.0 0.0	0 0	0		05/22/20	10:31:09
15:07:00	zvse61c	R2	STARTMAS	IESMASNM	0.2 0.0	0 0	0		05/23/20	16:45:30
15:07:00	zvse61c	F2	CICSICCF	DFHSIP	0.0 0.0	0 0	0		05/21/20	08:08:13
15:07:00	zvse61c	O1	CICSJA68	DFHSIP	0.0 0.0	0 0	0		05/21/20	08:08:28

Load the MyVSE view to see all VSE systems

ESAVSEC2 - VSE System Performance per CPU - VM2

Time	Node	CPU	Disp /sec	<CPU Utilization> Total	<Mstr Spin>	All Bound	Pct NP	Seconds	Samples
10:10:00	zvse61b	0	1103	5.4	1.7	0	94.1	31.4	60
10:10:00	zvse61c	0	941	3.7	1.7	0	96.0	46.8	60
10:10:00	zvse62b	0	577	1.0	0.5	0	98.7	47.9	61
10:10:00	zvse62c	0	758	1.7	0.8	0	98.0	49.7	60

ESAVSES - VSE System Configuration - VM2

Time	Node	<---z/VM--> VirtID	<LogicalPart> Lvl	<Name>	<-----CPU model-----> Nbr	<---Partitions--> IBM/<model>/<CPs>/serial	Max	Cur	Stat	Dyn	Tot	Actv	Quies	Inact	<----CPU Counts-->	Priority of Partitions
10:10:00	zvse61b	ZVSR61B	1	VSIVMS	5	IBM 8562-A02 02 (40F782)	80	20	12	8	1	1	0	0	00)=FA(100)=BG(100),O,F2,R,Z,T,S,F3,FB,F	
10:10:00	zvse61c	ZVSR61C	1	VSIVMS	5	IBM 8562-A02 02 (40F782)	80	18	12	6	1	1	0	0	0)=F5(100)=F4(100),BG,O,F2,R,Z,T,F3,FB,F	
10:10:00	zvse62b	ZVSR62B	1	VSIVMS	5	IBM 8562-A02 02 (40F782)	80	19	12	7	1	1	0	0	0(100)=FA(100)=BG(100),O,F2,R,Z,T,F3,FB,F	
10:10:00	zvse62c	ZVSR62C	1	VSIVMS	5	IBM 8562-A02 02 (40F782)	80	18	12	6	1	1	0	0	0(100)=FA(100)=BG(100),O,F2,R,Z,T,F3,FB,F	

ESAVSEC - VSE System Performance - VM2

Time	Node	Pages/Sec In	Pages/Sec Out	<Rate/Sec> SVC	<CPU Utilization> DSP	Total	Mstr	Spin	All Bound	Pct NP	Seconds	Samples
10:10:00	zvse61b	0	0	1152	1104	5.4	1.7	0	94.1	31.4	60.0	1
10:10:00	zvse61c	0	0	974	941	3.6	1.7	0	96.0	46.8	60.5	1
10:10:00	zvse62b	0	0	547	577	1.0	0.5	0	98.7	47.9	60.9	1
10:10:00	zvse62c	0	0	801	758	1.7	0.8	0	98.0	49.6	60.0	1

VSE CPU Utilization by Node

ESAVSEP - VSE Partition Performance - VM2

Time	Node	Part Id	Job Name	Phase	<- CPU%>	<--- I/O ---> Disk	VDisk	Other	Code	Code	Rtrn	Cncl	<--- Start ---> Date	Time	Stop Time	User Info	Prtly	Share	Job Num			
10:10:00	zvse61b	Totals			4.8	0.6	212.0	0	1.0													
10:10:00	zvse61b	F1	POWSTART	IPNPOWER	0.0	0.0	0	0	0				05/21/20	07:55:58					1	0	0	
10:10:00	zvse61b	FB	SECSERV	BSTPSTS	0	0	0	0	0				05/21/20	07:55:57		SYSA			2	0	0	
10:10:00	zvse61b	F3	VFMSTR	ISTINCT	0.0	0.0	0	0	0				05/21/20	07:56:01					3	0	49844	
10:10:00	zvse61b	S1	BSTTNET	BSTTNET	0.6	0.1	0	0	0				06/04/20	08:01:36					4	0	53417	
10:10:00	zvse61b	T1	BSTTVNET	BSTTVNET	0.4	0.1	0	0	0				06/04/20	08:02:07					5	0	53418	
10:10:00	zvse61b	T2	BSTTFPD	BSTTFPS	0	0	0	0	0				06/04/20	08:02:06					5	0	53419	
10:10:00	zvse61b	Z1	DMFSTART	DFHDFSIP	0.1	0.0	0	0	1.0				06/04/20	08:02:55					6	0	53422	
10:10:00	zvse61c	R1	STARVCS	IESVCSRV	0.0	0.0	0	0	0				06/04/20	08:01:51					7	0	53420	
10:10:00	zvse61b	R2	STARVCS	IESMASNM	0.1	0.0	0	0	0				06/04/20	08:01:55					7	0	53421	
10:10:00	zvse61b	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0				05/21/20	07:56:35		SYSA			8	0	49850	
10:10:00	zvse61b	O1	CICSJA60	DFHSIP	2.4	0.3	195.0	0	0				05/26/20	20:14:34					9	0	51255	
10:10:00	zvse61b	O2	CICSJB60	DFHSIP	1.1	0.2	17.0	0	0				05/26/20	20:14:44					9	0	51256	
10:10:00	zvse61c	Totals			3.2	0.5	249.0	0	1.0													
10:10:00	zvse61c	F1	POWSTART	IPNPOWER	0.0	0.0	0	0	0				05/21/20	08:07:43					1	0	0	
10:10:00	zvse61c	FB	SECSERV	BSTPSTS	0	0	0	0	0				05/21/20	08:07:43		SYSA			2	0	0	
10:10:00	zvse61c	F3	VFMSTR	ISTINCT	0.0	0.0	0	0	0				05/21/20	08:07:50					3	0	50933	
10:10:00	zvse61c	T1	TCPIP00	IPNET	1.1	0.2	0	0	0				05/22/20	10:30:32					4	0	51227	
10:10:00	zvse61c	T2	SVSESRV	SVSESRV	0.0	0.0	0	0	0				05/23/20	16:40:03					4	0	51554	
10:10:00	zvse61c	Z1	DMFSTART	DFHDFSIP	0.2	0.0	16.0	0	1.0				05/22/20	10:31:55					5	0	51231	
10:10:00	zvse61c	R1	STARVCS	IESVCSRV	0.0	0.0	0	0	0				05/22/20	10:31:09					6	0	51229	
10:10:00	zvse61c	R2	STARVCS	IESMASNM	0.2	0.0	0	0	0				05/23/20	16:45:30					6	0	51559	
10:10:00	zvse61c	F2	CICSICCF	DFHSIP	0.0	0.0	0	0	0				05/21/20	08:08:13		SYSA			7	0	50937	
10:10:00	zvse61c	O1	CICSJA68	DFHSIP	1.7	0.3	233.0	0	0				05/21/20	08:08:28					8	0	50938	
10:10:00	zvse62b	Totals			0.8	0.3	0	0	1.0													
10:10:00	zvse62b	F1	POWSTART	IPNPOWER	0.0	0.0	0	0	0				05/21/20	08:09:14					1	0	0	
10:10:00	zvse62b	FB	SECSERV	BSTPSTS	0.0	0.0	0	0	0				05/21/20	08:09:14					2	0	0	

MYVSE

ESAVSEC2 - VSE System P...

Time	Node	CPU	Dis...	<CPU Utilizati...
		/Sec	Total	Matr S
07:39:00	zvse61b	0	1478	17.7 5.7
07:39:00	zvse61c	0	711	5.1 3.1
07:39:00	zvse62b	0	3727	27.4 13.6
07:39:00	zvse62c	0		
07:39:00	BSI62	0	194	0.8 0.5

ESAVSEC

Time	Node	Pages/Sec	<Rate/Sec>	<CPU
		In Out SVC DSP		Tota
07:39:00	zvse61b	0	0 1699 1472	17.7
07:39:00	zvse61c	0	0 682 711	5.1
07:39:00	zvse62b	0	0 4840 3715	27.4
07:39:00	BSI62	0	0 231 201	0.8

ESAVSEP

Time	Node	Part	Job	Phase
		Id	Name	Name
07:39:00	BSI62		Totals	
07:39:00	BSI62	FB	SECSERV	BSTPSTS
07:39:00	BSI62	F1	POWSTART	IPWPOWER
07:39:00	BSI62	F2	CICSICCP	DFHSIP
07:39:00	BSI62	F3	VTAMSTR	ISTINCVT
07:39:00	BSI62	F7	OPTITAPE	BSOTMAIN
07:39:00	BSI62	P1		
07:39:00	BSI62	R1	OPTIAUDT	BSAUMAIN
07:39:00	BSI62	R2	INETOSA	BSTINET
07:39:00	BSI62	R3	INETOSA6	BST6NET
07:39:00	BSI62	R4	VNET66	BSTVNET
07:39:00	BSI62	S1	FPSOOP	BSTTFPS
07:39:00	BSI62	S2	FTPS66	BSTTFPS
07:39:00	BSI62	Z1	STARTMAS	IESMASNM
07:39:00	BSI62	Z2	FTPC62HR	BSTTFTPC
07:39:00	zvse62c		Totals	
07:39:00	zvse62c	BG	LLSF	DTRIATTN
07:39:00	zvse62c	FB	SECSERV	BSTPSTS
07:39:00	zvse62c	F1	POWSTART	IPWPOWER
07:39:00	zvse62c	F2	CICSICCP	DFHSIP
07:39:00	zvse62c	F3	VTAMSTR	ISTINCVT
07:39:00	zvse62c	F4	SCANVSM3	ARKREXX
07:39:00	zvse62c	F5	LIBRIR	LIBR
07:39:00	zvse62c	F8	VBSNMP	LISTLOG
07:39:00	zvse62c	O1	CICSJA69	DFHSIP
07:39:00	zvse62c	R1	STARTVCS	IESVCSRV
07:39:00	zvse62c	R2	STRTMAS	IESMASNM
07:39:00	zvse62c	R3	STRTMAS	IESMASNM
07:39:00	zvse62c	S1	STOPLAY	STOPLAY

Tab Parameters

Current interval

Start date: 2020/02/10

Start time: 07:41

End date: 2020/02/10

End time: 07:41

Relative: [Dropdown]

Class: [Text]

Node: [Text]

User: [Text]

LPAR: [Text]

zOS SYSID: [Text]

Job name: [Text]

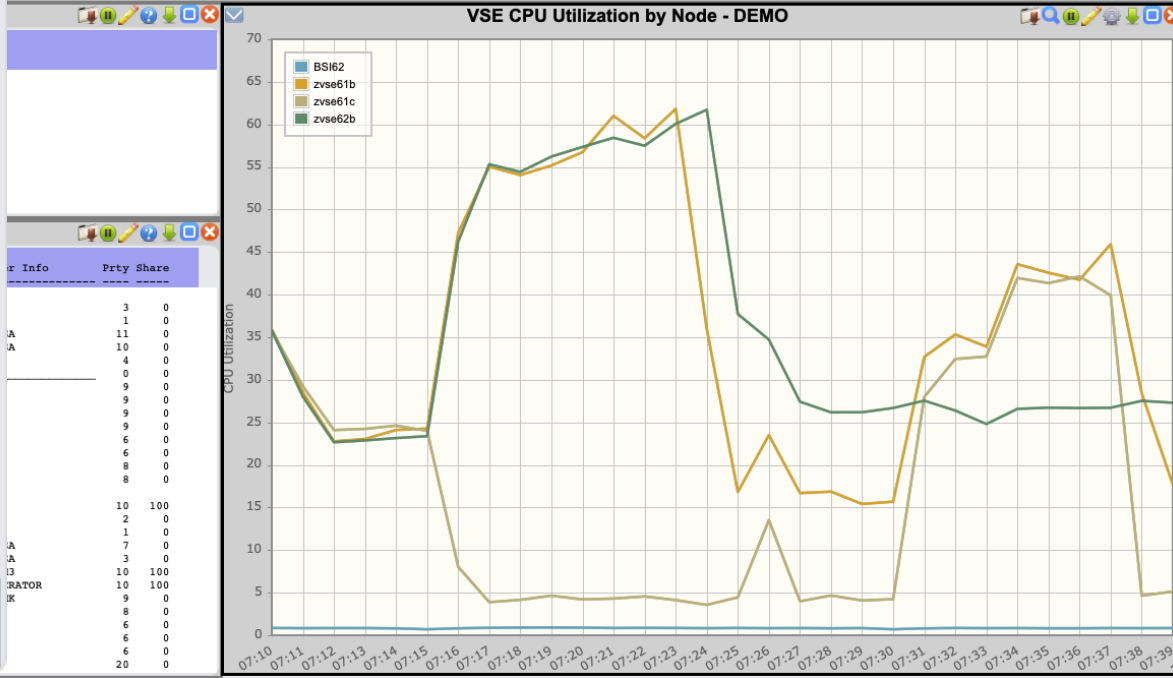
Service class: [Text]

Device: [Text]

Submit Close

ESAVSES - VSE System Configuration - DEMO

Time	Node	<VM>	<LogicalPart>	<CPU model>	<Partitions>	<CPU Counts>	Priority of Partitions
		VirtID	Lvl	Name	Nbr	<IBM/<model>/Cps/ serial	Max Cur Stat Dyn Tot Actv Quies Inact
07:39:00	zvse61b	ZVSE61B	1	VSIVM5	5	IBM 2828-A02 02 (714C702)	80 20 12 8 1 1 0 0
07:39:00	zvse61c	ZVSE61C	1	VSIVM5	5	IBM 2828-A02 02 (714C702)	80 18 12 6 1 1 0 0
07:39:00	zvse62b	ZVSE62B	1	VSIVM5	5	IBM 2828-A02 02 (714C702)	80 20 12 8 1 1 0 0
07:39:00	zvse62c	ZVSE62C	1	VSIVM5	5	IBM 2828-A02 02 (714C702)	80 17 12 5 1 1 0 0
07:39:00	BSI62	VSE62	1	JCB	1	IBM 1090-306 02 (234502)	120 19 12 7 1 1 0 0



ESATCP1 - TCPIP Transport Layer Data - DEMO

Time	Node/Group	<----- TCP Connections ----->						<TCP Communications/second >					<--UDP Datagrams per second-->			
		Curr Conn	<Opens/Sec> Activ	<Closes/Sec> Pass	<Segments Transmitted--> Fails	Resets	Input	Output	ReTrn	InErr	Rsts	Total Input	Total Output	<----Errors---->		
														NoAppl	Other	
07:09:00	zvse62c	.	.	.	.	.	.	.	.	.	.	.	.	.	.
07:09:00	zvse62b	0	0	0	0	0	57.8	80.4	2.7	0	0	2.4	1.9	0	0	
07:09:00	zvse61c	.	.	.	.	.	.	.	.	.	.	.	.	.	.
07:09:00	zvse61b	0	0	0	0	0	19.8	33.3	0.9	0	0	3.0	2.5	0	0.1	

ESATCP2 - TCPIP Internetwork Layer Data - DEMO

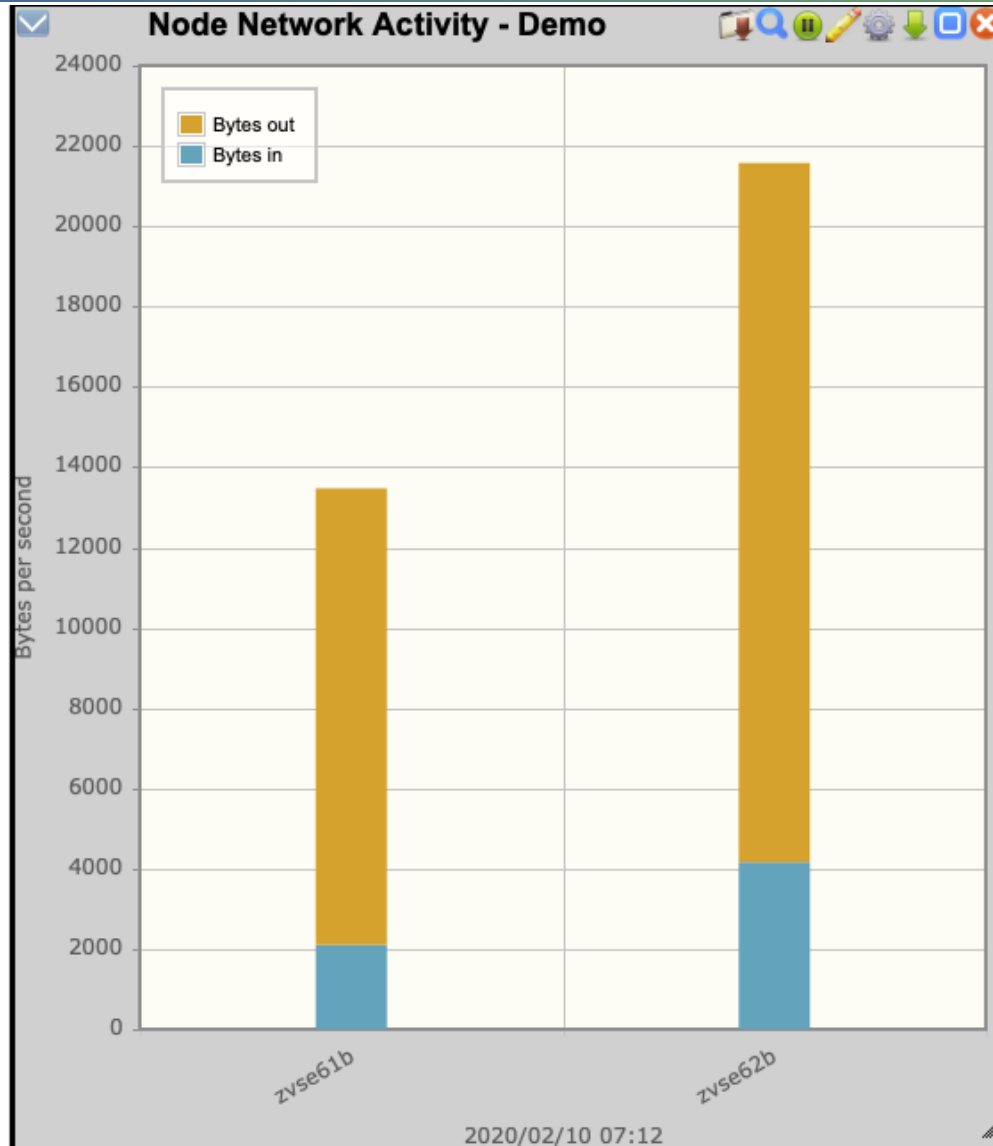
Time	Node/Group	<Internet Protocol Datagrams per Second >				<Datagram output>				<Fragment Reassembly>				<Datagram Fragmentation>				
		<Input datagrams> Total	Fwrd	Dlvrd	<Discarded Inp Errors> Hdr	Addr	Prot	Other	Reqst	NoRte	Other	Input	grams	Errors	Recvd	Notfrg	<Datagrams In> Fragments	Created
07:09:00	zvse62b	60.18	0	60.18	0	0	0	0	82.31	0	0	0	0	0	0	0	0	0
07:09:00	zvse61b	22.88	0	22.88	0	0	0	0	35.84	0	0	0	0	0	0	0	0	0

ESATCP3 - TCPIP Control Message Protocol Report - DEMO

Time	Node/Group	<-Total>		<Echo Messages>				<TimeStamp Msgs>				<AddrMask Reqsts>				<Source>		<-Input Error Msgs>								<Output Error Msgs>			
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Bad Data	Bad Dest	Bad Parm	Bad Time	Bad Data	Bad Dest	Bad Parm	Bad Time				
07:09:00	zvse62b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
07:09:00	zvse61b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			


ESATCP4 - TCPIP Hardware Layer / Interfaces - DEMO

Time	Node/Group	<Total Octets>		Avg		<-Subnet packets / Sec->				<-----Packets Discarded----->					<-Average->			
		IFT	<-Per second-> Input	Output	Q	<-Unicast-> Input	Output	<NonUnicast> Input	Output	<In Error> Inpt	<NonError> Output	Unknown	Protocol	Interface	In	Out		
07:09:00	zvse62c	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
07:09:00	zvse62b	1	4566	20273	0	60.99	83.18	0	0	0	0	0	0	0	0	OSAE40	75	244
07:09:00	zvse61c	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
07:09:00	zvse61b	2	2046	10850	0	23.13	36.05	0	0	0	0	0	0	0	0	OSAE40	88	301
07:09:00	zvse61b	1	0	0	0	0	0	0	0	0	0	0	0	0	0	OSAE50	.	.



Main menu ✕

Friday 12 Jun 2020 07:42 zVIEW Version 5112



zVIEW - Velocity Software - VSIVM4 (VM4)

Performance Displays for z/VM, Linux, z/OS and z/VSE

Add tab Arrange Load View Save View Color config

VSIVM4

zMON
Graphs
zMAP

Capacity

System

Service Level Analysis

User

Shared File System

CPU

Main Storage

Paging and Spooling

Input/Output Subsystem

Network

Linux

Linux Application

SSC/Docker

zOS

zVSE

CICS

- ZOSCIX1
- ZOSCIX2
- ZOSCIX3
- ZOSCIX4

Screen Index

Emulation Screens

zALERT Definitions

zOPERATOR

zTUNE

ZOSCIX1 - VM4

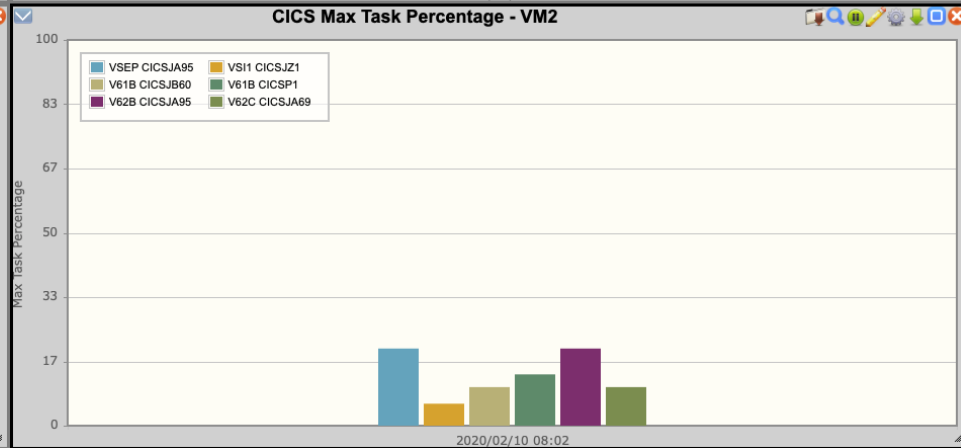
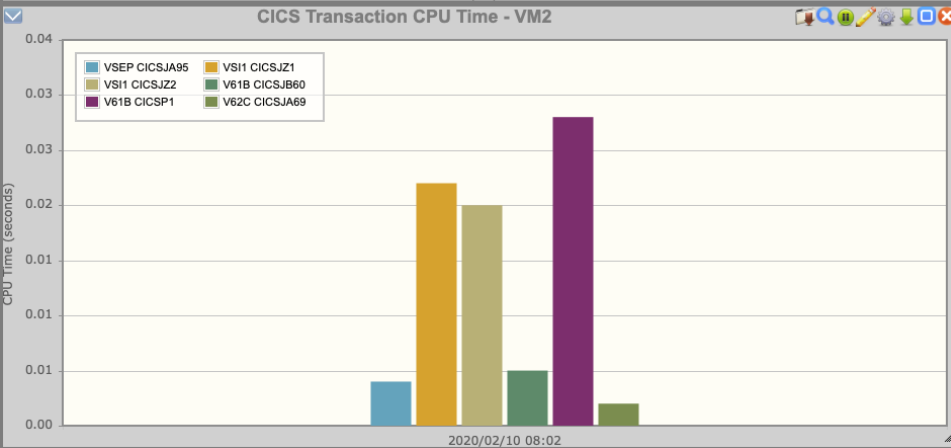
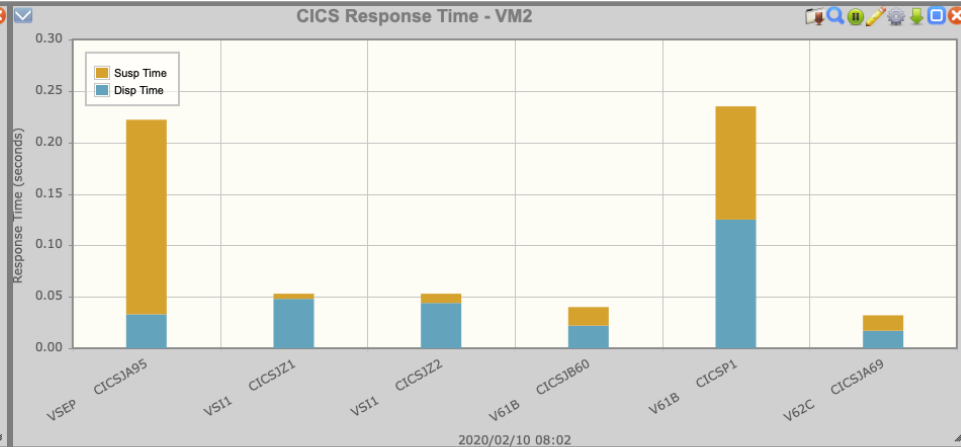
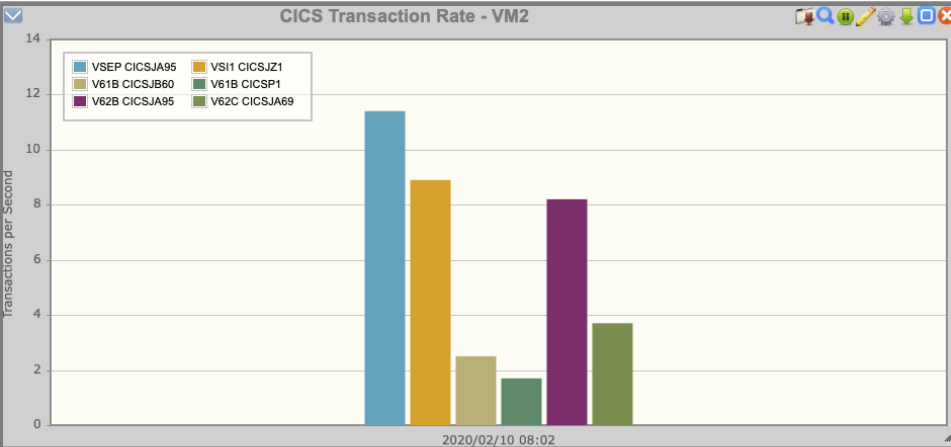
ZOSCIX1 - CICS Analysis - VM4

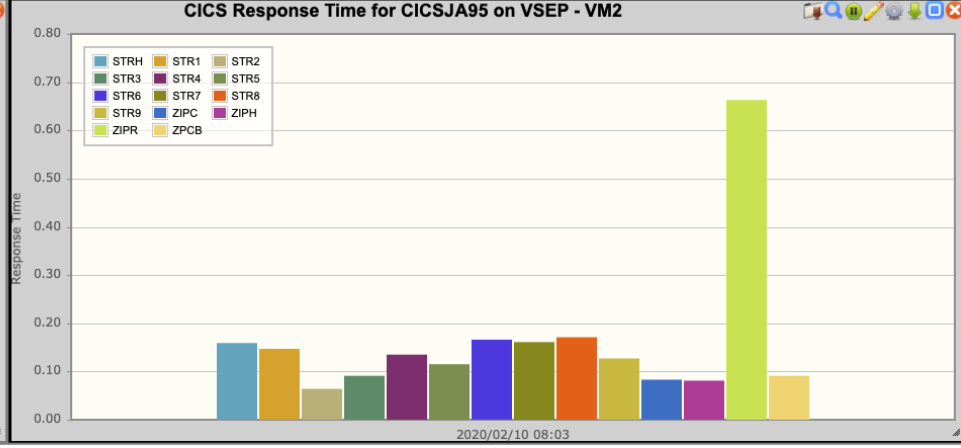
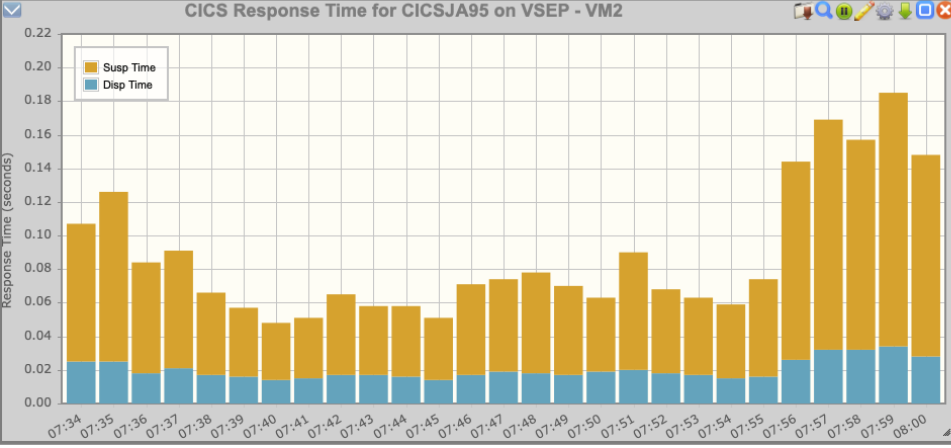
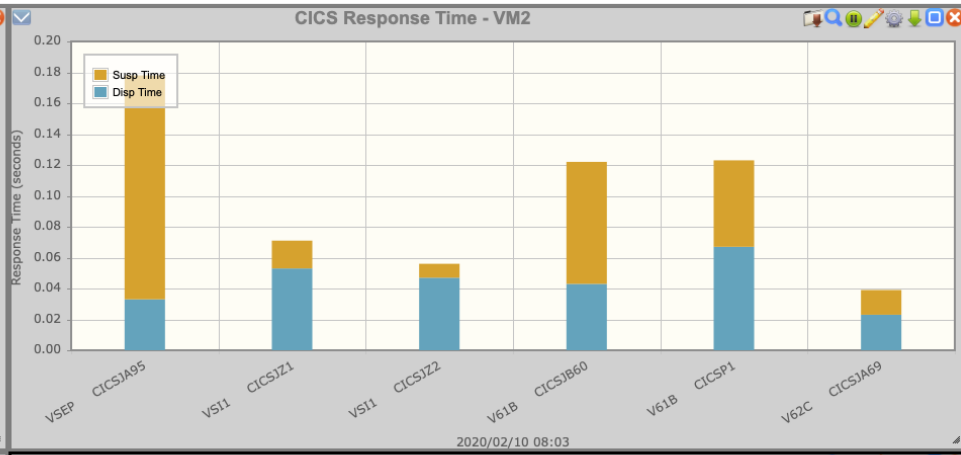
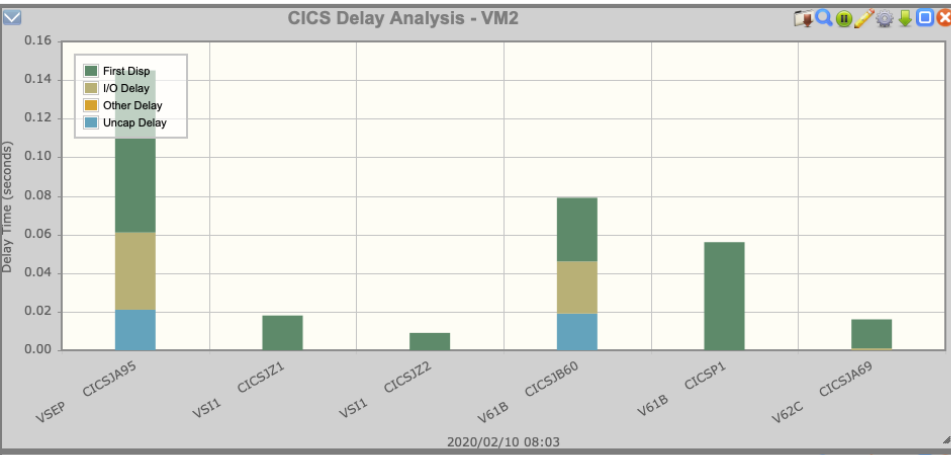
Time	SYSID	<--CICS APPLID	Program-> JobName	<----Start----> Date	Time	Platform O/S	VRM	<----Location--> LPARName	VMID	<---Transactions--> Total	Resp	CPU	<---Task Statistics--> Total	MXT	Actv	PctM	MXTQ
07:42:00	VS1I	CICSZA1	CICSJZ1	05/26/20	14:07:18	z/OS	0720	ZOSLPL1		815	0.022	0.007	816	50	1	2.0	0
07:42:00	VS1I	CICSZA2	CICSJZ2	05/26/20	14:08:46	z/OS	0720	ZOSLPL1		863	0.022	0.008	855	50	0	0	0
07:42:00	V61C	CICSJA68	CICSJA68	05/21/20	08:08:28	VSE	0420	VSIVM5	ZVSE61C	287	0.032	0.015	369	40	2	5.0	0
07:42:00	V62B	CICSJA95	CICSJA95	05/21/20	08:10:06	VSE	0430	VSIVM5	ZVSE62B	392	0.004	0.001	418	15	2	13.3	0

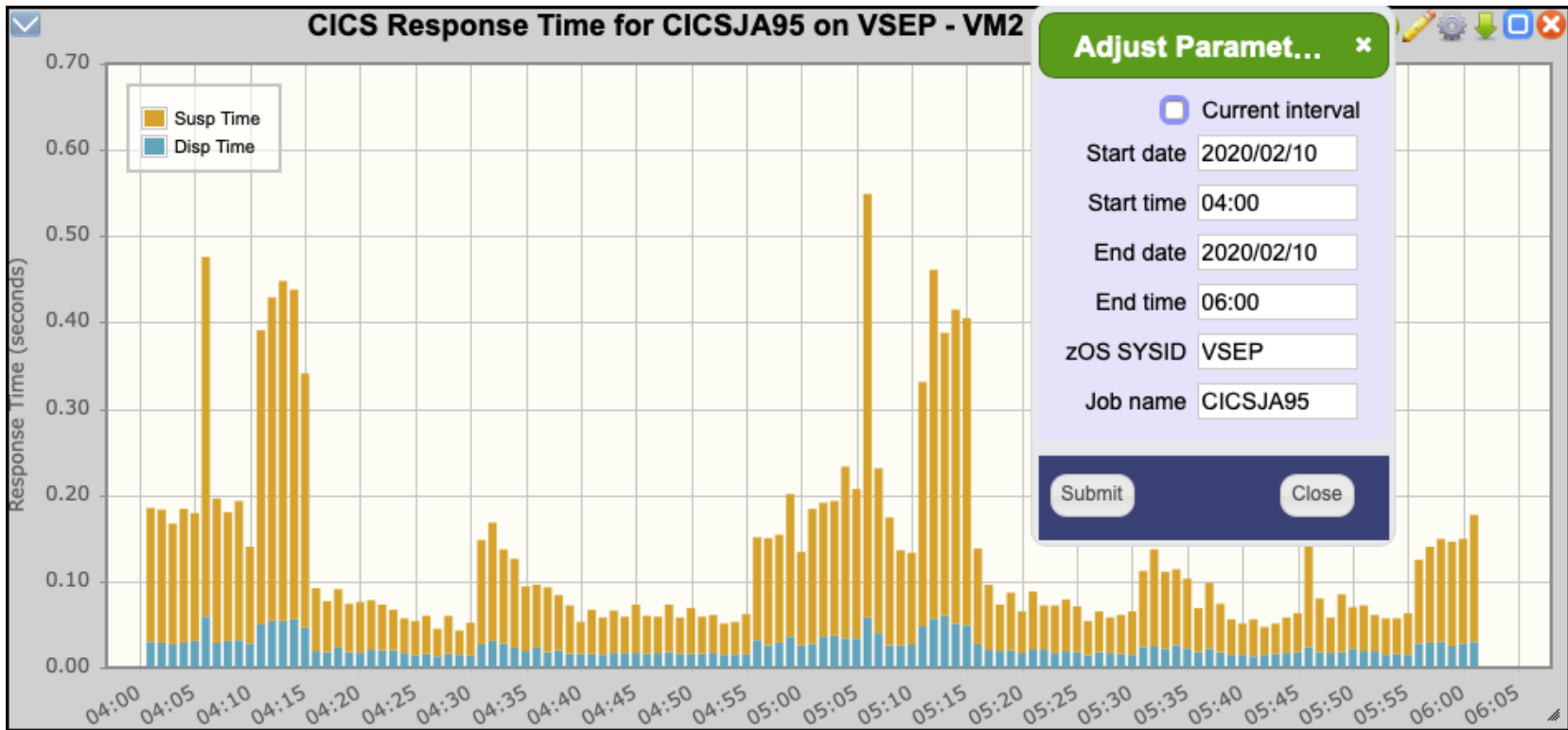
ZOSCIX2 - CICS Transaction Analysis - VM4

Time	SYSID	APPLID	<Transactions> Group	Count	<-Response Time-> Total	Susp	Disp	<---Dispatch---> CPU	PC	zIIP	Total	First	<---Dispatch Delays----> I/O	Uncapt	Wait	Wait	CPU	Disp	Ratio
07:50:00	VS1I	CICSZA1	Totals	824	0.024	0.010	0.028	0.007	0	0	5.94	0.005	0.003	0.001	0.001			51.893	
07:50:00	VS1I	CICSZA1	Inflight	0	.	.	.	0	.	.	0	.	.	.	.	.	.
07:50:00	VS1I	CICSZA2	Totals	832	0.023	0.010	0.026	0.007	0	0	6.16	0.007	0.000	0.003	0.000			56.345	
07:50:00	VS1I	CICSZA2	Inflight	0	.	.	.	0	.	.	0	.	.	.	.	.	.
07:50:00	V61C	CICSJA68	Totals	328	0.035	0.004	0.031	0.017	0	.	5.62	0.004	0	0	0			111.762	
07:50:00	V61C	CICSJA68	Inflight	0	.	.	.	0	.	.	0	.	.	.	.	.	.
07:50:00	V62B	CICSJA95	Totals	360	0.003	0.001	0.002	0.001	0	.	0.22	0.001	0	0.000	0.000			49.928	
07:50:00	V62B	CICSJA95	Inflight	0	.	.	.	0	.	.	0	.	.	.	.	.	.

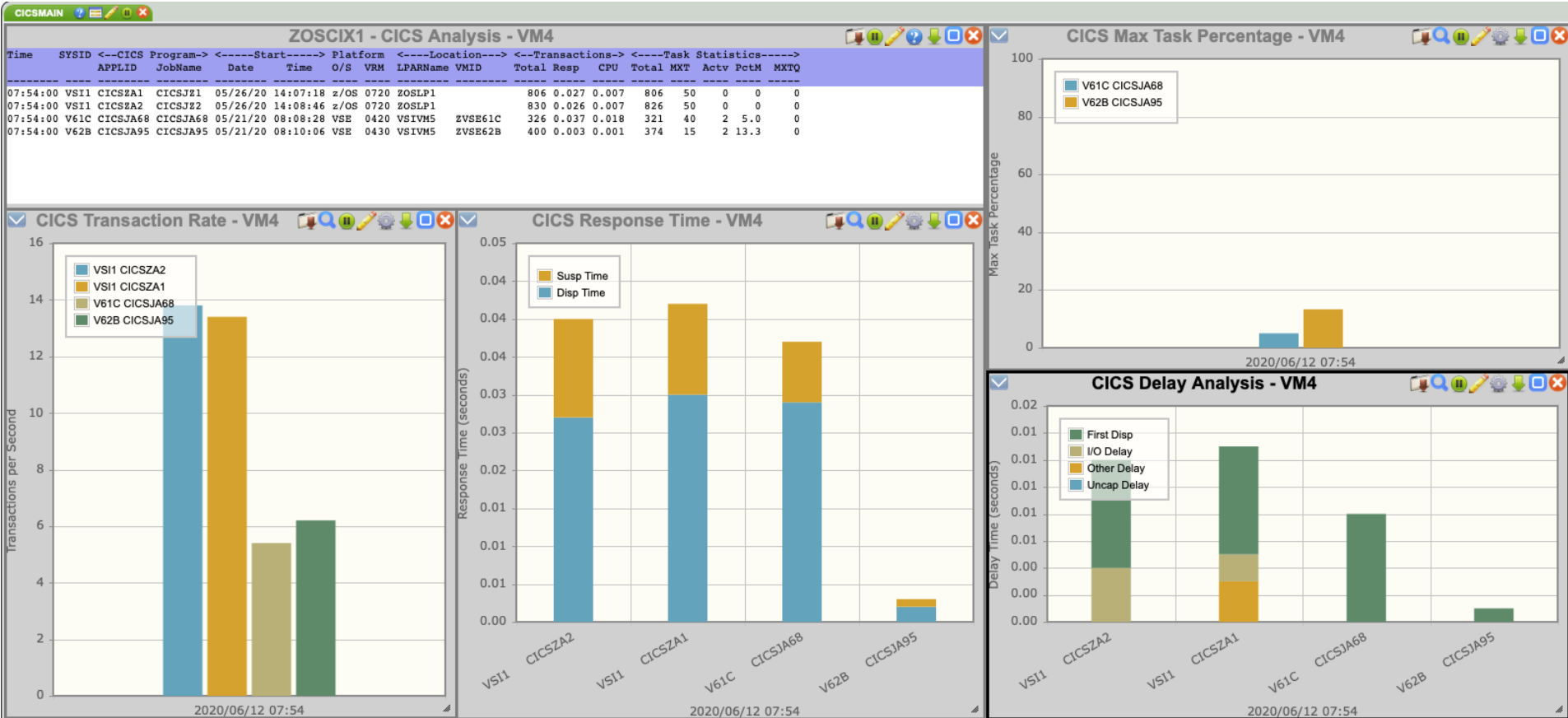
CICS Menu



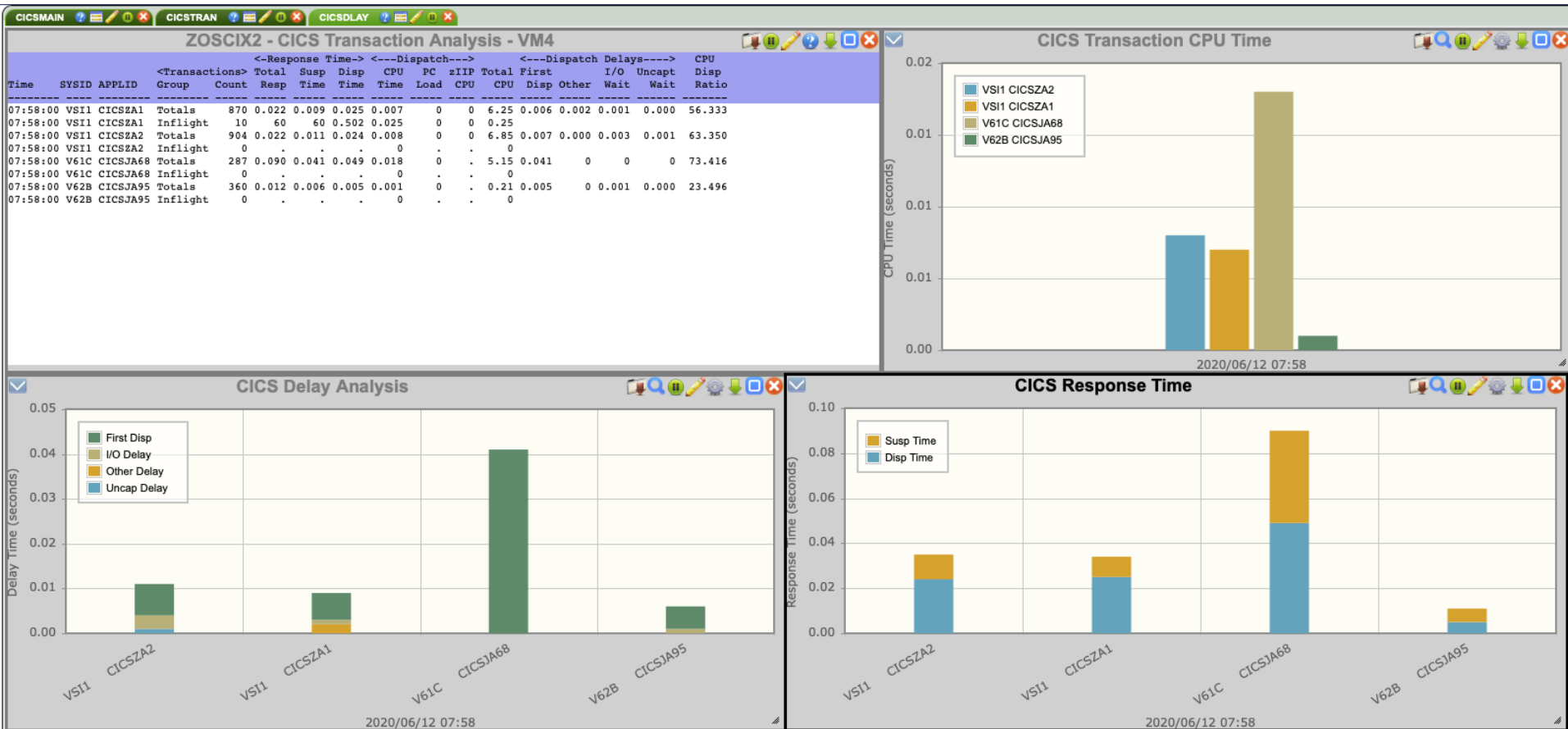




CICS Views



CICS Views



zALERT is a component that comes with zVPS

It provides the ability to look at one minute data based on customer supplied rules

zALERT can also generate notifications when any data elements exceed certain thresholds

```
F4 0004 // JOB LIBRDIRC
      DATE 06/13/2020, CLOCK 15/49/44
F4 0004 EOJ LIBRDIRC  MAX.RETURN CODE=0008
      DATE 06/13/2020, CLOCK 15/49/44, DURATION  00/00/00
F4 0001 1Q34I    F4 WAITING FOR WORK
```

```
15:50:10 ZALERT  VSER Job LIBRDIRC on zvse61b ended at 15:49:44 with rc=0008
```


Real Time vs Long Term

All of the real time data is displayed in one minute intervals

At the end of the day the one minute data is summarized into 15 minute intervals

This provides a long term database and is the source for capacity planning

In addition, reports are generated in the 15 minute format

These reports cover z/VM, Linux, and of course, z/VSE

Reports

Main menu



Add tab

Arrange

Load View

Save View

Color config

VSIVM4

zMON

Graphs

zMAP

Capacity

Daily Reports

Fri 12 Jun 2020

ESAHDR
ESATUNE

Performance Summary
ESASSUM
ESASUM
ESAILMT

VSE Reporting

ESAVSEC
ESAVSES
ESAVSEP
ESAVSEJ

Daily VSE System Performance Report - VM4 - Fri 12 Jun 2020



Report: ESAVSEC VSE System Performance Report Velocity Software Corporat

Monitor initialized: 06/12/20 at 00:00:00 on 8562 serial 040F78 First record analyzed: 06/

NODE /Time	Pages/Sec		<Rate/Sec>		<CPU Utilization>			<-Job CPU->		All Bound	Pct NP	Seconds OfData
	In	Out	SVC	DSP	Total	Mstr	Spin	TOTAL	Ovhd			
06/12/20												
00:15:00												
zvse61b	0	0	2140	1923	10.2	3.1	0	9.1	1.1	85.0	30.5	899.3 15.0
zvse61c	0	0	4508	2215	10.5	6.2	0	9.0	1.4	75.1	59.7	899.9 15.0
zvse62b	0	0	3347	1293	4.6	2.2	0	3.9	0.7	92.1	48.0	899.9 15.0
zvse62c	0	0	3652	1512	5.5	2.7	0	4.7	0.8	81.1	48.1	900.0 15.0
00:30:00												
zvse61b	0	0	6934	3349	18.8	8.5	0	17.9	2.3	78.8	45.0	900.0 15.0

Daily VSE System Configuration Report - VM4 - Fri 12 Jun 2020



Report: ESAVSES VSE System Configuration Report Velocity Software Corporate ZMAP 5.1.1

Monitor initialized: 06/12/20 at 00:00:00 on 8562 serial 040F78 First record analyzed: 06/12/20 00:00:00

NODE /Time	<---z/VM--->		<LogicalPart>		<-----CPU model----->			<--Partitions-->			<----CPU Counts---->			
	VirtID	Lvl	Name	Nbr	<IBM/<model>/Cps/	serial	Max	Cur	Stat	Dyn	Tot	Actv	Quies	Inact
06/12/20														
00:15:00														
zvse61b	ZVSE61B	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	20	12	8	1	1	0	0
zvse61c	ZVSE61C	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	18	12	6	1	1	0	0
zvse62b	ZVSE62B	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	19	12	7	1	1	0	0
zvse62c	ZVSE62C	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	18	12	6	1	1	0	0
00:30:00														
zvse61b	ZVSE61B	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	20	12	8	1	1	0	0
zvse61c	ZVSE61C	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	18	12	6	1	1	0	0
zvse62b	ZVSE62B	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	19	12	7	1	1	0	0
zvse62c	ZVSE62C	1	VSIVM5	5	IBM	8562-A02 02 (40F78 2)	80	18	12	6	1	1	0	0

00:45:00

Daily VSE Partition Performance Report - VM4 - Fri 12 Jun 2020



Report: ESAVSEP VSE Partition Performance Report Velocity Software Corporate ZMAP 5.1.1 06/13/20 Pg 1244

Monitor initialized: 06/12/20 at 00:00:00 on 8562 serial 040F78 First record analyzed: 06/12/20 00:00:00

NODE /Time	Part ID	Job Name	Phase Name	<-CPU Pct--> CPU	Overhd	<I/O Rates/sec--> DISK	Vdisk	Other	<---Starting---> date	Time	<---End---> Time	User INFO	Prty	Shr	Job Nbr	Step Flag	Ret Code
06/12/20																	
00:15:00																	
zvse61b																	
Totals				9.1	1.1	10.0	0	0.4									
	BG	LLST	DTRIATTN	0.0	0.0	0.8	0	0.3	06/12/20	00:05:01	00:05:01		10	100	55369	L	
	j	DMFSWTC	ARXREXX	0.0	0.0	0.1	0	0.0	06/12/20	00:00:01	00:00:04		10	100	55367	L	0000
	j	DUMPMFB	DFHDFOU	0.0	0.0	0.2	0	0.1	06/12/20	00:00:05	00:00:06	RICH	10	100	55368	S	0000
	j	DUMPMFB	DFHDFOU	0.0	0.0	0.2	0	0.1	06/12/20	00:00:06	00:00:07	RICH	10	100	55368	S	0000
	j	DUMPMFB	BSTFTPC	0.0	0.0	0.1	0	0.1	06/12/20	00:00:07	00:00:10	RICH	10	100	55368	L	0000
	j	JDEL	DTRIATTN	0.0	0.0	0.0	0	0.0	06/12/20	00:00:10	00:00:10		10	100	55366	L	0000
	j	LLST	DTRIATTN	0.0	0.0	0.0	0	0.0	06/12/20	00:05:01	00:05:01		10	100	55369	S	0000
	j	LLST	DTRIATTN	0.0	0.0	0.0	0	0.0	06/12/20	00:05:01	00:05:01		10	100	55369	L	0000
	FB	SECSERV	BSTPSTS	0.0	0.0	0	0	0	05/21/20	07:55:57		.	2	0	0	S	
	j	SECSERV	BSTPSTS	0.0	0.0	0	0	0	05/21/20	07:55:57		.	2	0	0	S	
	F1	POWSTART	IPWPOWER	0.0	0.0	0.4	0	0.0	05/21/20	07:55:58		.	1	0	0	S	

Daily VSE Completed Job Step Report - VM4 - Fri 12 Jun 2020



Report: ESAVSEJ VSE Completed Job Step Report Velocity Software Corporate ZMAP 5.1.1 06/13/20 Pg 1321

Monitor initialized: 06/12/20 at 00:00:00 on 8562 serial 040F78 First record analyzed: 06/12/20 00:00:00

NODE /Time	Part ID	Job Name	Phase Name	<-CPU Secs--> CPU	Overhd	<--I/O Counts--> DISK	Vdisk	Other	<---Starting---> date	Time	<---End---> Time	User INFO	Prty	Shr	Job Nbr	Step Flag	Ret Code
06/12/20																	
00:15:00																	
zvse61b																	
	BG	DMFSWTC	ARXREXX	0.0	0.0	132	0	25	06/12/20	00:00:01	00:00:04		10	100	55367	L	0000
	BG	DUMPMFB	DFHDFOU	0.0	0.0	180	0	75	06/12/20	00:00:05	00:00:06	RICH	10	100	55368	S	0000
	BG	DUMPMFB	DFHDFOU	0.0	0.0	148	0	58	06/12/20	00:00:06	00:00:07	RICH	10	100	55368	S	0000
	BG	DUMPMFB	BSTFTPC	0.2	0.0	124	0	99	06/12/20	00:00:07	00:00:10	RICH	10	100	55368	L	0000
	BG	JDEL	DTRIATTN	0.0	0.0	39	0	12	06/12/20	00:00:10	00:00:10		10	100	55366	L	0000
	BG	LLST	DTRIATTN	0.0	0.0	39	0	8	06/12/20	00:05:01	00:05:01		10	100	55369	S	0000
	BG	LLST	DTRIATTN	0.0	0.0	34	0	5	06/12/20	00:05:01	00:05:01		10	100	55369	L	0000
zvse61c																	
	BG	JDEL	DTRIATTN	0.0	0.0	39	0	12	06/12/20	00:00:00	00:00:00		9	0	56445	L	0000
	BG	DMFSWTC	ARXREXX	0.0	0.0	106	0	25	06/12/20	00:00:01	00:00:03		9	0	56449	L	0000
	BG	DUMPMFA	DFHDFOU	0.1	0.0	180	0	75	06/12/20	00:00:03	00:00:06	RICH	9	0	56450	S	0000
	BG	DUMPMFA	DFHDFOU	0.1	0.0	152	0	58	06/12/20	00:00:06	00:00:07	RICH	9	0	56450	S	0000
	BG	DUMPMFA	BSTFTPC	0.1	0.0	94	0	65	06/12/20	00:00:07	00:00:09	RICH	9	0	56450	L	0008
	BG	LLST	DTRIATTN	0.0	0.0	39	0	8	06/12/20	00:05:00	00:05:00		9	0	56451	S	0000
	BG	LLST	DTRIATTN	0.0	0.0	34	0	5	06/12/20	00:05:00	00:05:00		9	0	56451	L	0000
	Y1	SCANVSM1	LIBR	0.0	0.0	154	0	194	06/12/20	00:00:18	00:00:19	VSM1	20	0	56446	S	0000
	Y1	SCANVSM1	ARXREXX	1.5	0.2	2072	0	10	06/12/20	00:00:19	00:00:53	VSM1	20	0	56446	L	0000
	Y2	SCANVSM2	ARXREXX	6.8	0.9	5167	0	89	06/12/20	00:00:08	00:01:32	VSM2	20	0	56447	S	0000
	Y2	SCANVSM2	ARXREXX	6.8	0.9	5138	0	48	06/12/20	00:01:32	00:02:36	VSM2	20	0	56447	S	0000
	Y2	SCANVSM2	ARXREXX	6.6	0.9	5136	0	50	06/12/20	00:02:36	00:03:01	VSM2	20	0	56447	L	0000
	Y3	SCANVSM3	ARXREXX	7.5	1.1	1429	0	57	06/12/20	00:00:03	00:01:36	VSM3	20	0	56448	S	0000
	Y3	SCANVSM3	ARXREXX	7.5	1.0	1400	0	16	06/12/20	00:01:36	00:02:38	VSM3	20	0	56448	S	0000
	Y3	SCANVSM3	ARXREXX	7.2	0.9	1400	0	16	06/12/20	00:02:38	00:03:02	VSM3	20	0	56448	S	0000
	Y3	SCANVSM3	ARXREXX	7.1	0.9	1398	0	18	06/12/20	00:03:02	00:03:12	VSM3	20	0	56448	L	0000



Velocity Software is the recognized leader for performance and cloud management tools for the z/VM, z/VSE, and Linux on Z platforms

- We recently added the collection of some z/OS records to our portfolio

Performance monitoring should not be the performance problem

We listen to customers and strive to provide the information and add the functions that they (or you) need to our products

Questions and requests: info@velocitysoftware.com

Thank you!

Questions?

<http://www.velocitysoftware.com>