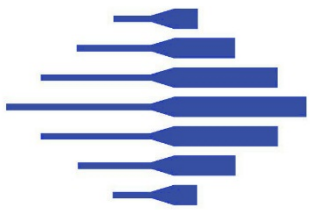

VELOCITY SOFTWARE

Performance Monitoring using zVIEW

Tim Kessler

Agenda

- Enterprise View
  - Layout options
  - Thresholds and other configuration options
  - Defining hosts

VELOCITY SOFTWARE

Agenda

- zVIEW
  - Basic layout and functions
  - Configuration options
  - Current data and adhoc queries
    - Graphs and reports
    - Thresholds
  - Tabs
  - zMAP reports
  - Capacity graphs
  - Views
  - Direct URL access
  - Path options
  - Securing zVIEW access
  - Recent changes

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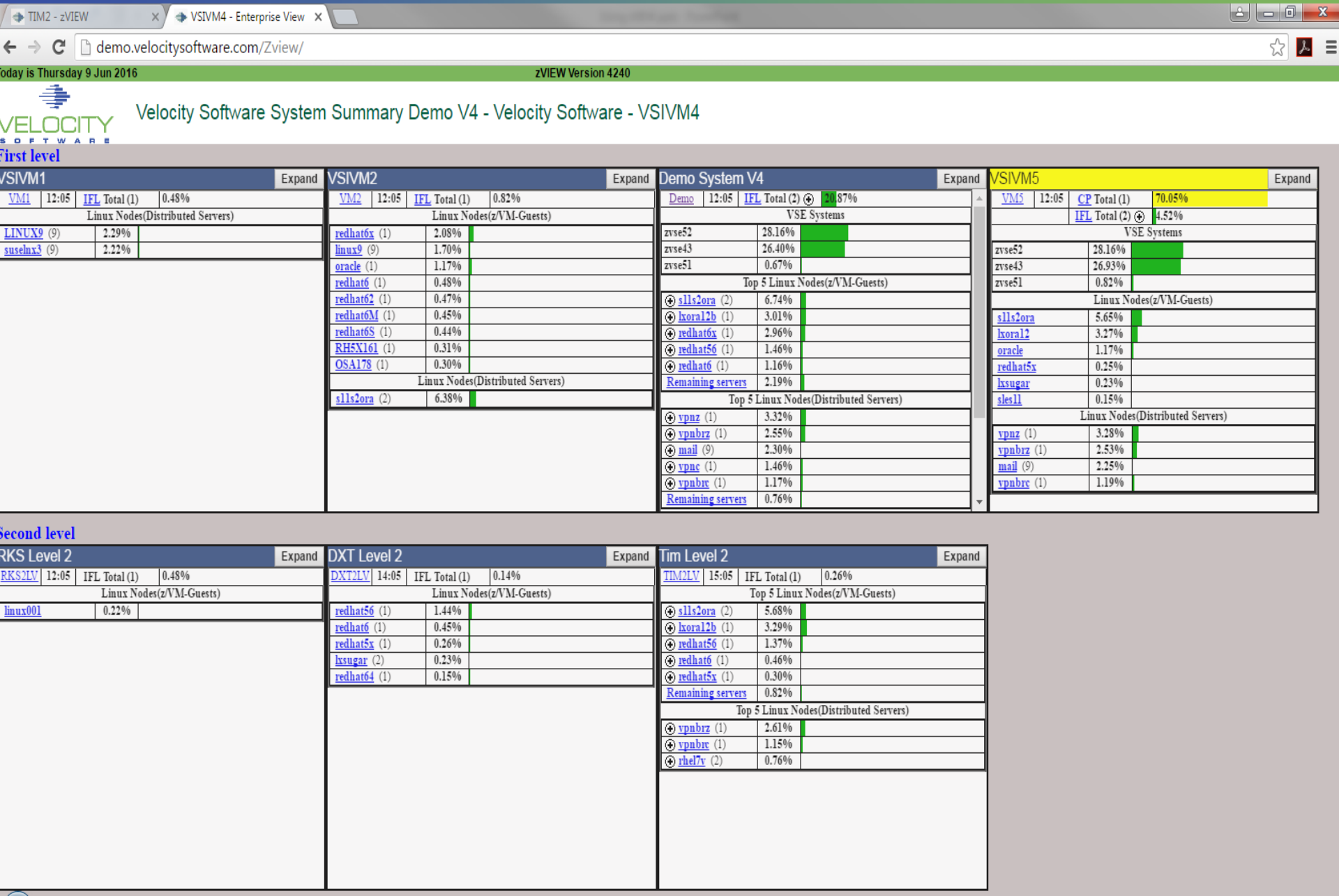
Enterprise View



Enterprise View

- Quick overview of all LPARs
  - Operations or system support
- Total and individual processor CPU utilization
- Linux servers
  - Local and Distributed
  - Number of processors
  - Swap rate and used – click on + to expand
- VSE guests
- Other users
- URL: http://hostname/ZVIEW

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Layout options

- Use VSIMAINT Config option
  - Not all options show if direct XEDIT file
  - F10 on product line
  - Fast path command: VSIMAINT CONFIG ZVIEW *configfn configft*
  - F1 on parameter for help or anywhere else for all parameter help
- Configuration file: ZVIEW CECLIST

Enterprise View

```
 CECUTIL                        Velocity Software Inc.                    ZVIEW PROD4240
                              ZVIEW CECLIST Configuration


System Overview Parameters

Web page title Velocity Software System Summary Demo V4
Number of graphs across              4
Maximum local Linux guests           5
Maximum distributed Linux guests     5
Maximum users                        5
CPU count source                     USERDATA
Server click URL /zview/zview.cgi
Server click parms graph=NODEUTTM&parm=&server
User click URL    /zview/zview.cgi
User click parms    graph=USERCPU&parm=&server

Thresholds
Threshold TOTALCPU   Warning 70     Value 90
Threshold CPU        Warning 70     Value 90
Threshold SERVERCPU  Warning 70     Value 90
Threshold SWAPRATE   Warning 3      Value 10
Threshold SWAPUSED   Warning 90     Value 95

Group names listed in display order
Group name First level
Group name Second level

System name     VM1
System URL HTTP://WWW.VELOCITYSOFTWARE.COM/ZVIEW/
System heading VSIVM1
System group First level

System name     VM2
System URL HTTP://VSIVM2.VELOCITYSOFTWARE.COM/ZVIEW/
System heading VSIVM2
System group First level



PF1: Help     PF2: Validate/Save    PF3: Exit    PF5: Add line    PF6: Delete line
              PF8: Down                        PF10: Default    PF12: Cancel
```

System Overview Parameters

- Title
- Number of columns
- Number of Linux servers (local & distributed) & users
  - *, 0 or number
- Where to get number of processors for Linux servers
  - Some older versions of net-snmp return incorrect values
  - *CPU count source* USERDATA recommended for local servers
- Linux and user name click specification
  - Specify zVIEW graph, report or view or some other URL

Thresholds

- Total CPU, individual CPU, server CPU, swap rate and swap used
- Warning (yellow) and Value (red)
- Set value for swap rate or swap used to enable
- Triggered threshold
  - Color title and line
  - Automatically expand CPUs or swap
  - Focus on first threshold

Enterprise View

- Groups and LPARs
  - Groups can be defined to group LPARs by CEC or location
  - Set names, heading, URL and group
    - Also used by zVIEW to define available hosts
    - Match URL to what user would enter in browser
      - IP address or host name
      - http or https
- Expand button
  - Expand LPAR data for easier viewing
  - Will stay expanded across refreshes

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Enterprise Performance Summary

DC1

V1P1	Expand
V1P1	07:12 IFL Total (20) 185.30%
Linux Nodes (z/VM-Guests)	

V1P2	Expand
V1P2	07:12 IFL Total (20) 184.02%
Linux Nodes (z/VM-Guests)	

V1P3	Expand
V1P3	07:12 IFL Total (20) 668.29%
Linux Nodes (z/VM-Guests)	

V1P4	Expand
V1P4	07:12 IFL Total (19) 433.28%
Linux Nodes (z/VM-Guests)	

V1N1	Expand
V1N1	07:12 IFL Total (8) 265.41%
Linux Nodes (z/VM-Guests)	

V1N2	Expand
V1N2	07:12 IFL Total (8) 37.91%
Linux Nodes (z/VM-Guests)	

P105	Expand
P105	07:12 IFL Total (20) 13.22%
Linux Nodes (z/VM-Guests)	

P106	Expand
P106	07:12 IFL Total (20) 12.99%
Linux Nodes (z/VM-Guests)	

P107	Expand
P107	07:12 IFL Total (14) 47.56%
Linux Nodes (z/VM-Guests)	

P108	Expand
P108	07:12 IFL Total (14) 48.56%
Linux Nodes (z/VM-Guests)	

P109	Expand
P109	07:12 IFL Total (8) 1.49%

P110	Expand
P110	07:12 IFL Total (8) 1.53%

P113	Expand
P113	07:12 IFL Total (14) 32.56%
Linux Nodes (z/VM-Guests)	

P114	Expand
P114	07:12 IFL Total (14) 34.88%
Linux Nodes (z/VM-Guests)	

DC2

V2P1	Expand
V2P1	07:12 IFL Total (32) 482.74%
Linux Nodes (z/VM-Guests)	

V2P2	Expand
V2P2	07:12 IFL Total (32) 325.26%
Linux Nodes (z/VM-Guests)	

V2P3	Expand
3E0FC7-21	86.95%
3E0FC7-22	15.24%

V2P4	Expand
V2P4	07:12 IFL Total (32) 312.03%
Linux Nodes (z/VM-Guests)	

V2P5	Expand
V2P5	07:12 IFL Total (20) 340.64%
Linux Nodes (z/VM-Guests)	

V2P6	Expand
V2P6	07:12 IFL Total (20) 348.75%
Linux Nodes (z/VM-Guests)	

P207	Expand
P207	07:12 IFL Total (24) 585.87%
Linux Nodes (z/VM-Guests)	

P208	Expand
P208	07:12 IFL Total (24) 485.11%
Linux Nodes (z/VM-Guests)	

P209	Expand
P209	07:12 IFL Total (32) 384.22%
Linux Nodes (z/VM-Guests)	

P210	Expand
P210	07:12 IFL Total (32) 336.23%
Linux Nodes (z/VM-Guests)	

P211	Expand
P211	07:12 IFL Total (32) 1032.18%
Linux Nodes (z/VM-Guests)	

P212	Expand
P212	07:12 IFL Total (28) 505.29%
Linux Nodes (z/VM-Guests)	

P213	Expand
333B77-19	72.94%
333B77-20	9.96%

P214	Expand
P214	07:12 IFL Total (28) 439.01%
Linux Nodes (z/VM-Guests)	

P215	Expand
P215	07:12 IFL Total (24) 380.90%
Linux Nodes (z/VM-Guests)	

P216	Expand
P216	07:12 IFL Total (24) 348.65%
Linux Nodes (z/VM-Guests)	

P217	Expand
P217	07:12 IFL Total (20) 102.64%
Linux Nodes (z/VM-Guests)	

P218	Expand
P218	07:12 IFL Total (20) 94.46%
Linux Nodes (z/VM-Guests)	

P219	Expand

P220	Expand
P220	07:12 IFL Total (24) 1.15%

C203	Expand
C203	07:12 IFL Total (16) 457.52%
Linux Nodes (z/VM-Guests)	

C204	Expand
C204	07:12 IFL Total (10) 290.24%
Linux Nodes (z/VM-Guests)	

C205	Expand
C205	07:12 IFL Total (10) 791.06%
3520D7-0	80.10%

C206	Expand
C206	07:12 IFL Total (10) 636.96%
Linux Nodes (z/VM-Guests)	

C207	Expand
C207	07:12 IFL Total (12) 92.29%
Linux Nodes (z/VM-Guests)	

C208	Expand
C208	07:12 IFL Total (12) 1.33%

V2N1	Expand
V2N1	07:12 IFL Total (10) 268.45%
Linux Nodes (z/VM-Guests)	

V2N2	Expand
V2N2	07:12 IFL Total (28) 132.95%
Linux Nodes (z/VM-Guests)	

V2N3	Expand
V2N3	07:12 IFL Total (12) 1.22%

V2C1	Expand
V2C1	07:12 IFL Total (16) 656.29%
Linux Nodes (z/VM-Guests)	

V2C2	Expand
V2C2	07:12 IFL Total (12) 617.71%
Linux Nodes (z/VM-Guests)	

CDL

VLB1	Expand
VLB1	07:12 IFL Total (20) 516.95%
Linux Nodes (z/VM-Guests)	

VLB2	Expand
VLB2	07:12 IFL Total (12) 1158.17%
02C2A7-0	93.38%

VLB3	Expand
VLB3	07:12 IFL Total (20) 301.97%
Linux Nodes (z/VM-Guests)	

VLB4	Expand
VLB4	07:12 IFL Total (14) 547.53%
Linux Nodes (z/VM-Guests)	

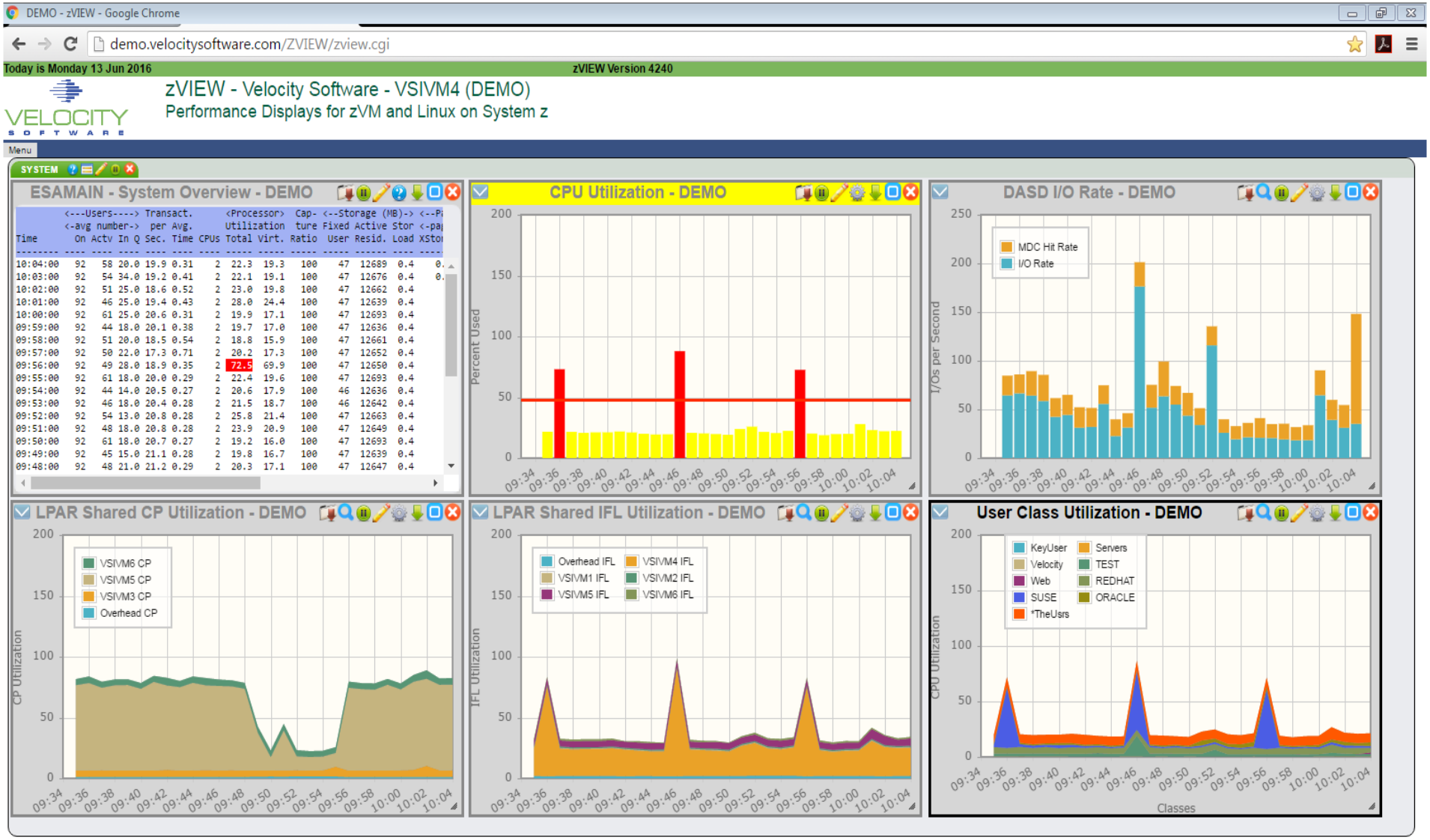
VLB5	Expand
VLB5	07:12 IFL Total (20) 0.44%

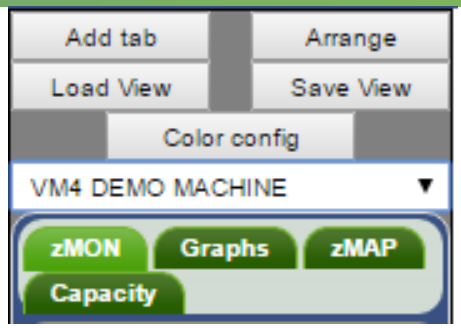
VLB6	Expand
061A67-6	82.30%
061A67-7	69.33%

VLB8	Expand
VLB8	07:12 IFL Total (20) 159.02%
Linux Nodes (z/VM-Guests)	

ZS01	Expand
ZS01	07:12 IFL Total (2) 1.01%

URL: http://hostname/ZVIEW/ZVIEW.CGI





Add tab

- New tab to organize new graphs and reports

Arrange

- Up to 12 graphs and reports

Load/Save View

- Load or save from system, cookie or local disk

LPAR

- Drop down box for LPARs defined in ZVIEW CECLIST
- LPAR to obtain data from

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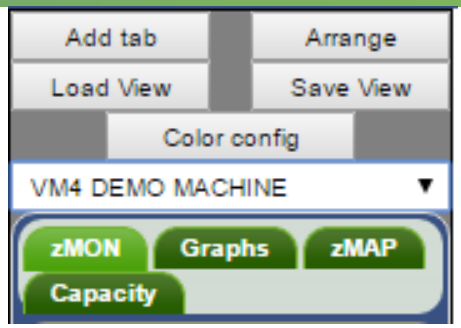

Color config

- Color wheel to define series colors
- Specific color: LPAR, server, user or class
- Alternate name for LPAR, server, user or class on graphs

ZMON & Graphs

- Realtime or adhoc reports or graphs

ZMAP

- Daily, weekly or monthly ZMAP reports

Capacity

- Daily, weekly, monthly or trending graphs
- Created with RUNCHART utility

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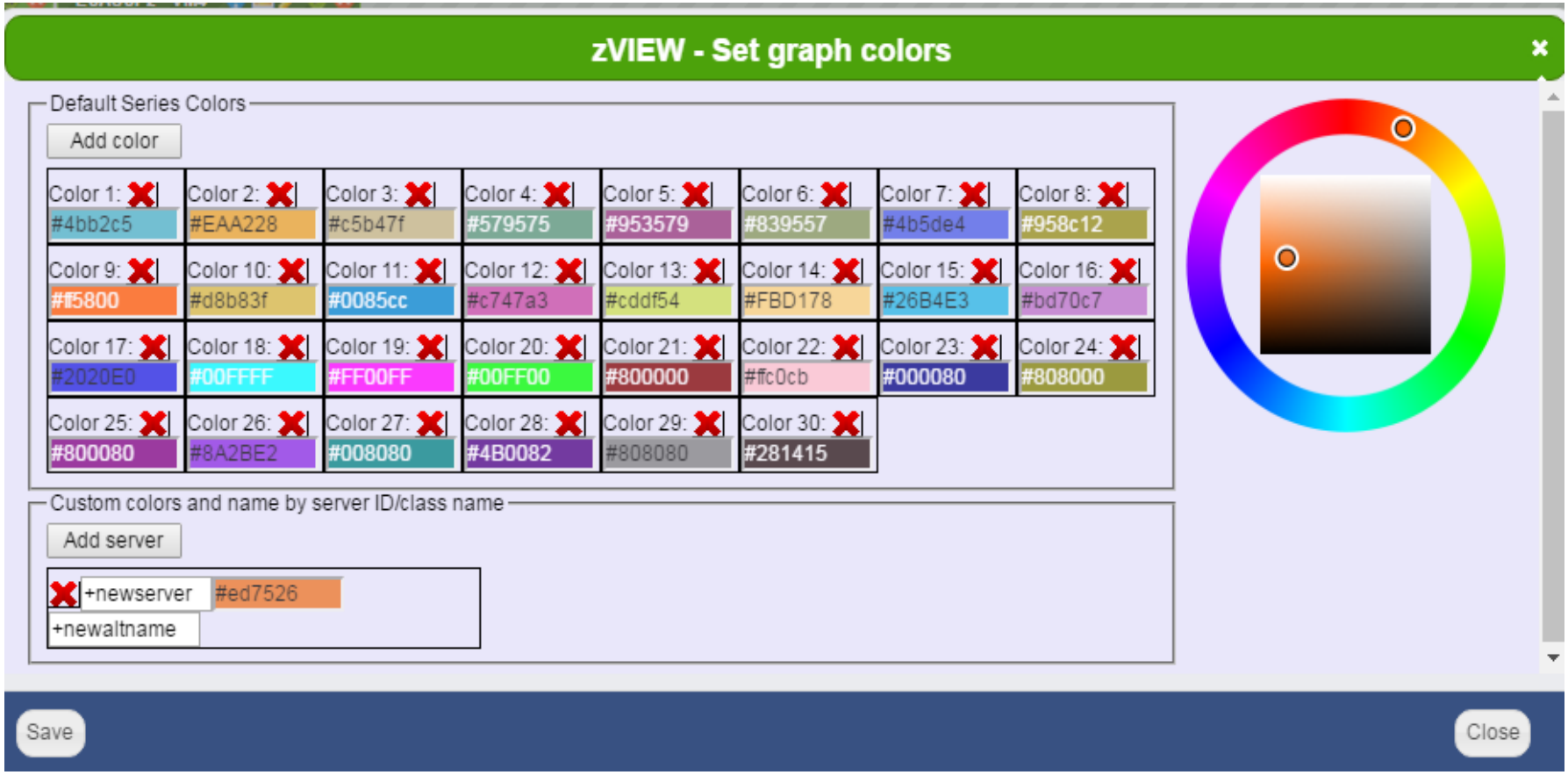
Configuration

```
 ZVIEWCFG                      Velocity Software Inc.              ZVIEW PROD4240
                             CONFIG ZVIEW Configuration

Startup view SYSTEM   Load startup view when change host NO

Header title Performance Displays for zVM and Linux on System z

Floating main menu    YES

zMap page group count 100

Host code page        1047

Debug                 NO

Graph options
Graph name ________ Threshold warn ________ Value ________ Type ____________

Excluded zMON screens ________ Exclude from Index NO

Default series colors for graphs #4bb2c5 #EAA228 #c5b47f #579575 #953579
#839557 #4b5de4 #958c12 #ff5800 #d8b83f #0085cc #c747a3 #cddf54 #FBD178
#26B4E3 #bd70c7 #2020E0 #00FFFF #FF00FF #00FF00 #800000 #ffc0cb #000080
#808000 #800080 #8A2BE2 #008080 #4B0082 #808080 #281415 _______ _______


Colors for specific servers/classes
Server/class: Name ________ Color _______
              Alternate name ________________________________

PF1: Help    PF2: Validate/Save   PF3: Exit    PF5: Add line   PF6: Delete line
             PF8: Down                       PF10: Default   PF12: Cancel
```

- Startup view
  - Start up view or NONE and on host change
- Title
- Floating menu
- zMAP page group count
  - Can affect response time and web server storage
- Host code page
  - May need to change webserver DEFAULT_CHARSET ISO-8859-1
- Debug

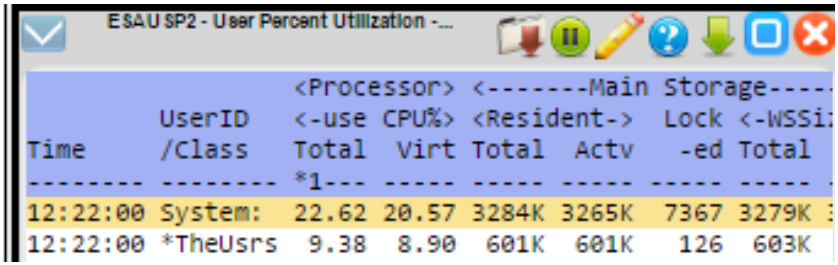
- Graph options
  - Graph names from graph Preferences, About
  - Default threshold values
  - Default graph type
    - Vertical and horizontal bar and stacked bar
    - Area and stacked area
    - Line
    - Table
    - Pie and pie percentage
- Excluded ZMON screens
  - Excluded from screen index

- Series colors
  - Easier specified with Color config button
- Alternate server/class names

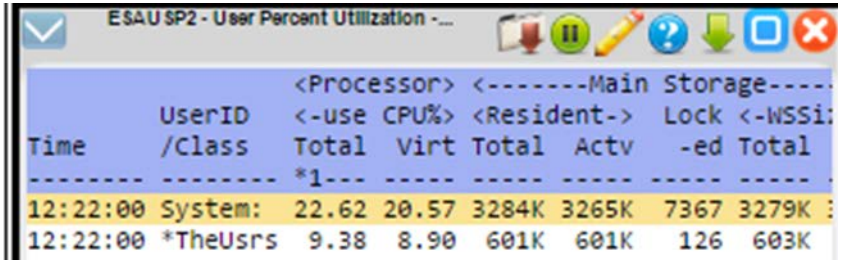


Performance data and adhoc queries

- ZMON reports
  - Over 195 reports
  - Hover report for description
  - Symbols across the top
    - Drill down available – single click on a line, click again to close
    - Title with host name – click and hold to move
    - Download report – PDF, text or CSV
    - Pause or resume
    - Change time range, node, user, class, etc – adhoc reports
    - Report fields help
    - Fully minimize
    - Minimize or maximize
    - Close report



VELOCITY SOFTWARE



- ZMON reports
  - Refresh every minute
  - Sort on columns
    - Primary, secondary, tertiary – last selected column primary
    - First click descending, then ascending
    - Click anywhere else in heading to revert to default sort
  - Thresholds
    - Set in MONPROF COPY – defaults in ESAMONDF COPY
  - zALERT
    - Click thru on alert to report, graph or view
  - zOPERATOR
  - zTUNE

```
alert.ESAMAIN     = 'ON'
alert.ESAMAIN.8   = '> 80 RED REVVIDEO 80*NCPUS'
alert.ESAMAIN.17  = '> 25 RED REVVIDEO'
alert.ESAMAIN.20  = '> 95 YELLOW REVVIDEO'
```

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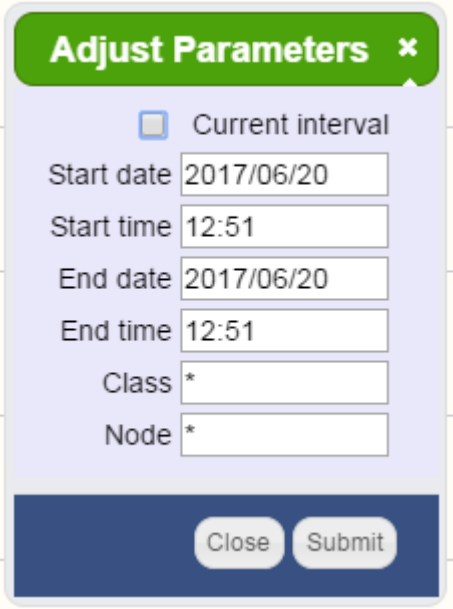
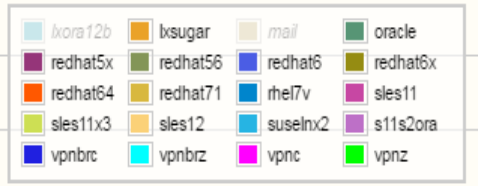
- Graphs
  - 129 graphs
  - Symbols across the top
    - Drill down available – last interval get last 30 minutes of data
    - Title with host name – click and hold to move
    - Download graph – PDF, PNG or JPG
    - Hide or show legend
    - Pause or resume
    - Change time range, node, user, class, etc – adhoc reports
    - Preferences
    - Fully minimize
    - Minimize or maximize
    - Close graph

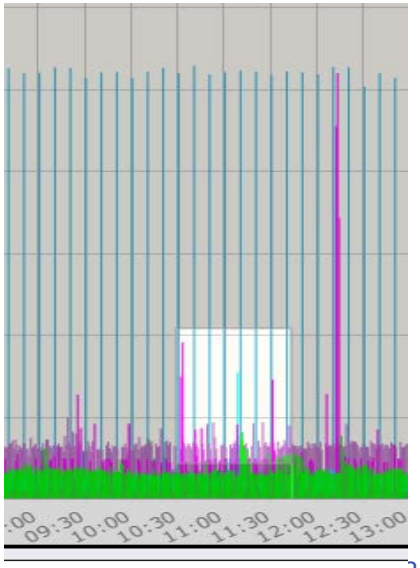
- Graphs
  - Preferences
    - Change graph
      - Vertical and horizontal bar and stacked bar
      - Area and stacked area
      - Line
      - Table
      - Pie and pie percentage
      - Only shows options available for the data
    - Adjust parms – same as pencil
    - Adjust y axis – change scale
    - Help – general zVIEW help
    - About – graph name and zVIEW version



- Graphs
  - Preferences
    - Thresholds
      - Threshold and warning values and bars
      - Refresh clear
        - Clear title and tab colors when data refreshed
      - Relative CPU
        - Enter values between 0 and 100%
        - Thresholds adjusted based on the number of processors
        - Good to use if varying processors on and off
  - Rescale axis
    - Single click in y axis area to scale to present data
    - Good to view small values

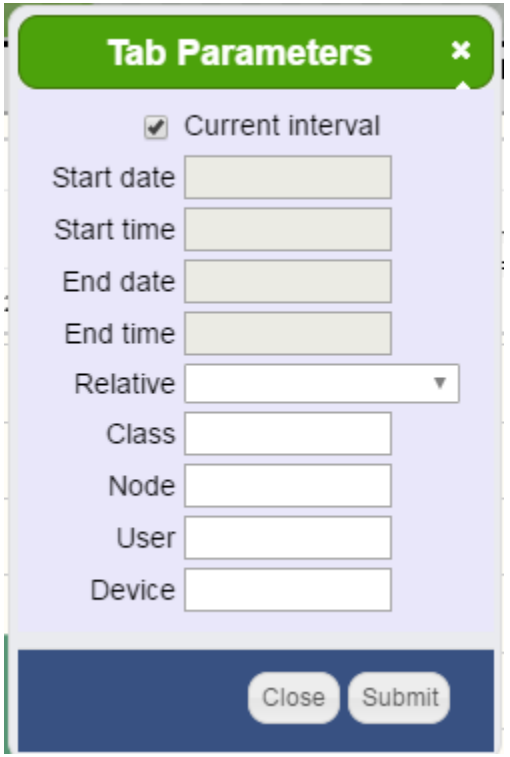
- Graphs
  - Hover interval to show data values
  - Turning off data series
    - Click on name in legend to turn off/on
    - Not for stacked graphs or inconsistent data
    - Turn off high series to rescale Y axis
  - Zoom
    - Blow up area to see values or drill down
    - Right click, hold and drag area to zoom
    - Multiple zooms allowed
    - Double click to return to original graph
    - Pause graph first, refresh will unzoom





VELOCITY SOFTWARE

- Tabs

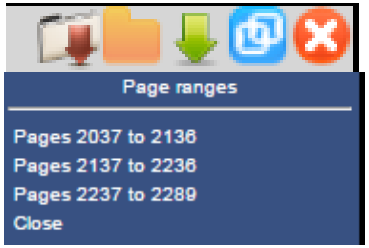


  - Organize by server, LPAR, etc
  - Views will load in new tab
  - Symbols on tab
    - Graph or report title in focus or view name and host name
    - General zVIEW help
    - Window list – bring hidden windows into focus
    - Tab parameters
      - All existing and new graphs or reports will use parameters
      - Good for looking at a specific time frame and/or server
    - Pause or resume all graphs and reports in the tab
    - Close tab and all the graphs and reports in the tab

VELOCITY SOFTWARE

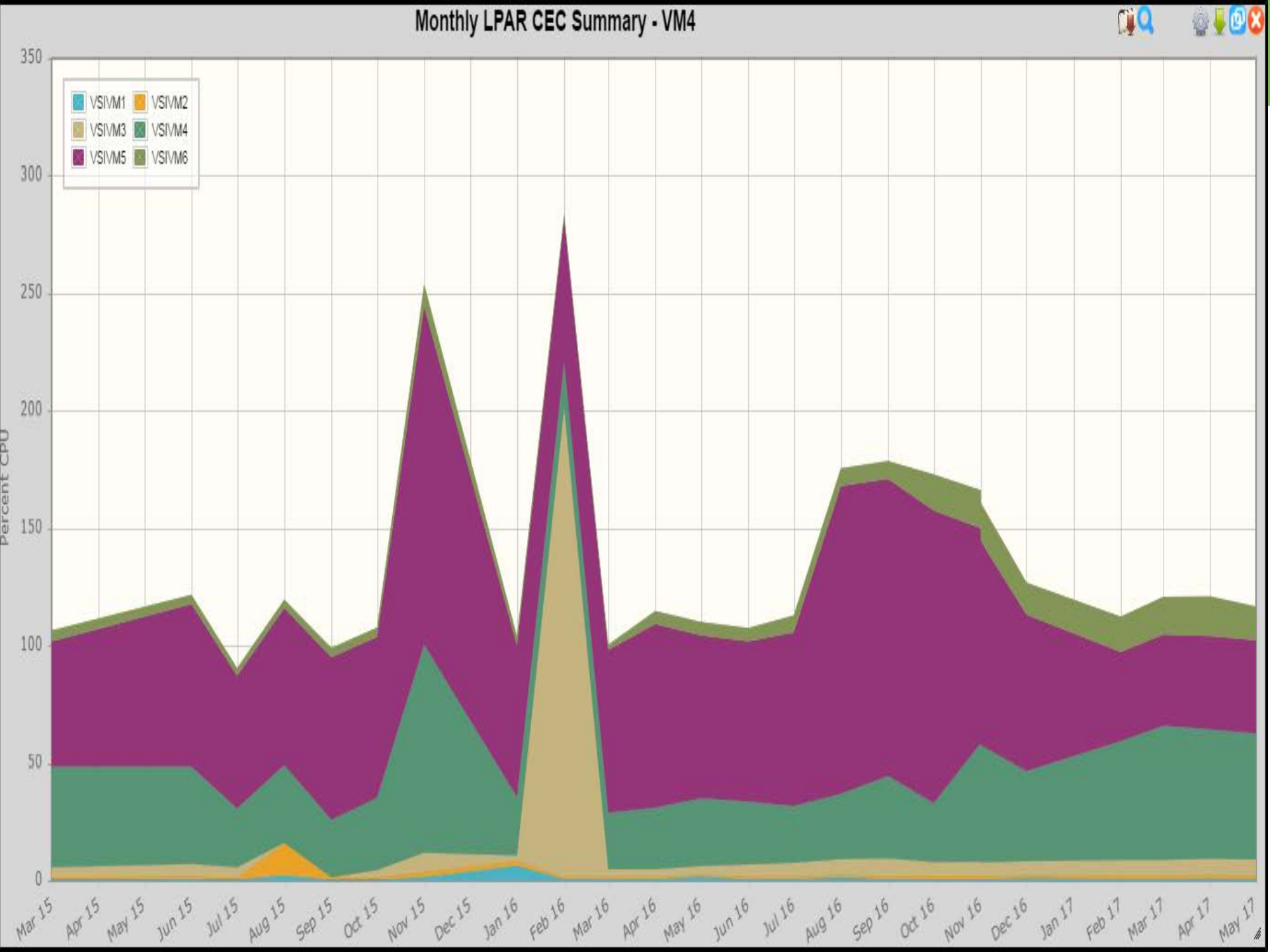
ZMAP reports

- Read from ZMAP 191 disk – OUT01 file type
- Daily, weekly and monthly
- Number of days kept depends on size of disk
- Select day, week or month for available reports
- Page range selection
  - Number of pages determined by *zMap page group count* parm

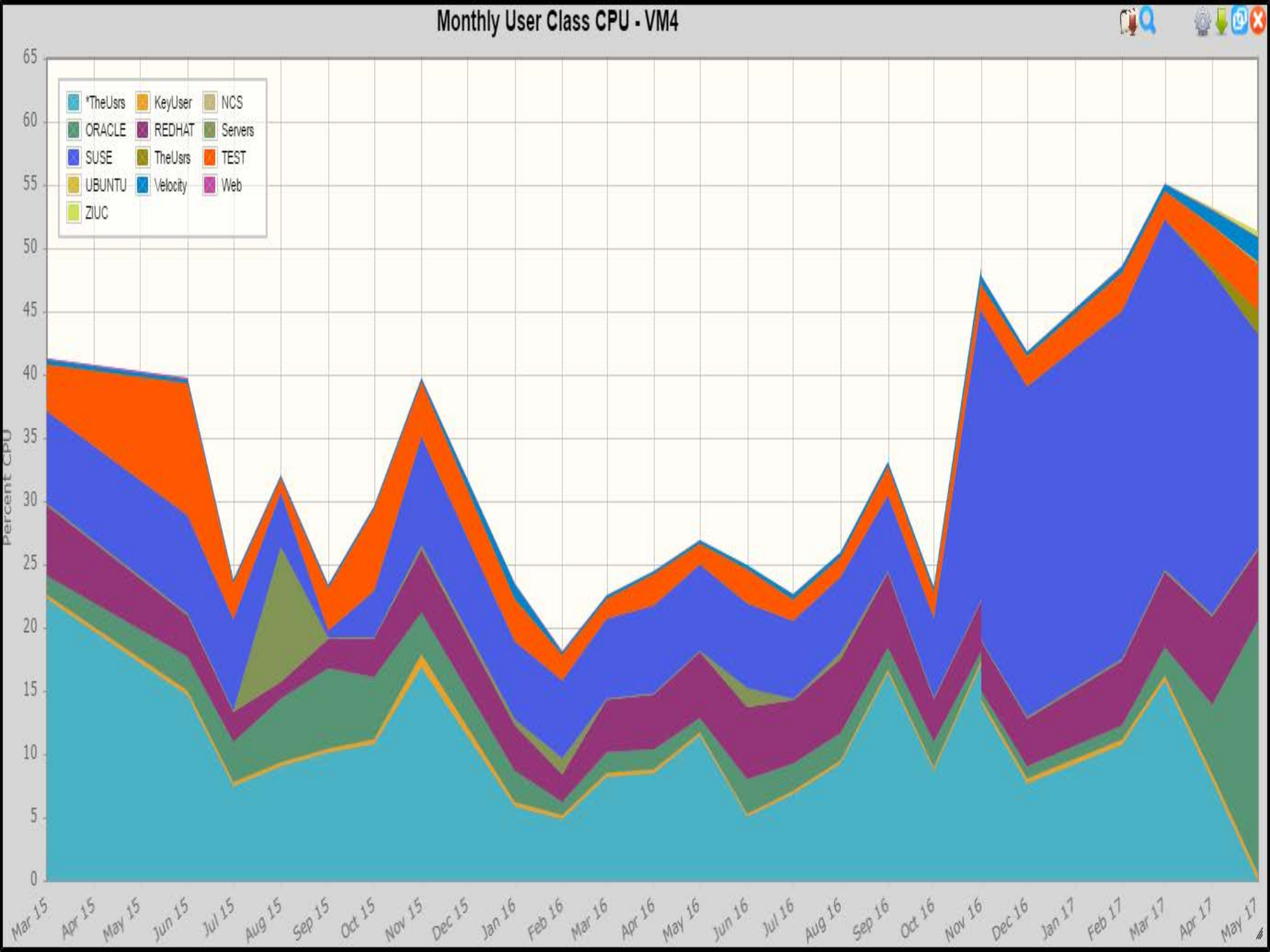


Capacity Graphs

- Long term graphs to analyze trends
- Daily, weekly, monthly and trending
  - Daily – One or 15 minute intervals
  - Trending - Daily, weekly and monthly
- Created during nightly ZMAP processing
  - Fast data retrieval and graphing
- Uses ESAEXTR
- Defined in ZMAP RUNCHART PARMS file
  - Samples provided
  - Some need customization


Monthly LPAR CEC Summary - VM4
VSIVM1
VSIVM2
VSIVM3
VSIVM4
VSIVM5
VSIVM6
Percent CPU
350
300
250
200
150
100
50
0
Mar 15
Apr 15
May 15
Jun 15
Jul 15
Aug 15
Sep 15
Oct 15
Nov 15
Dec 15
Jan 16
Feb 16
Mar 16
Apr 16
May 16
Jun 16
Jul 16
Aug 16
Sep 16
Oct 16
Nov 16
Dec 16
Jan 17
Feb 17
Mar 17
Apr 17
May 17

Monthly User Class CPU - VM4



Views

- Save and reload commonly used graphs and reports
- Create system or personalized start-up view
- Save/load views
  - System – CONFIG disk – must be signed onto Portal
  - Cookie – Limited to max size of cookie ~4k
  - PC – Can’t use for start-up
- Parameters and other customization saved with view

Views

- Tab parms
  - Change graphs and reports for particular user or node
  - Relative option for capacity graphs
    - Depending on graph type can set for:
      - Yesterday
      - Last business day
      - Last week
      - Last month
- Load view host selection
  - Check box to use current host or use host saved
- Load or Save view to remove personal start-up

- Direct URL access
  - Can save as bookmark
  - Create HTML page with links

```
<p><a target="_blank" href="zview.cgi?graph=procutil&node=suselnx2">Process graph</a></p>
```

  - URL for report graph or view
    - http://myhost.com/zview/zview.cgi?screen=esamain
    - http://myhost.com/zview/zview.cgi?graph=cpuutil
    - http://myhost.com/zview/zview.cgi?view=linux
  - Menu options
    - &menu=open – Open floating menu
    - &menu=closed – Closed floating menu
    - &menu=fixed – Fixed menu on left
    - &menu=no – No menu will be displayed

- Direct URL access
  - Other qualifiers
    - &sdate - Start date (yy/mm/dd)
    - &stime - Start time (hh:mm)
    - &edate - End date
    - &etime - End time
    - &node - Node name
    - &user - User name
    - &class - Class name
    - &lpar - LPAR name
    - &device - device number

Path options

- Set view, graph or report for a path
- Initial class, node, user, LPAR and/or device
- Fixed, floating, closed or no menu
- Restrict menu and submenu items
- Good for linux admin or manager so they can see what they need/want
- Setup:
  - Define path to ZVWS in DEFAULT WEBHOST and restart
  - VSIMAINT CONFIG ZVIEW, cursor to PTHPARMS SAMPPATH and press F5.
  - Set path name and select to define path options
- URL: http://*host*/*path*/zview.cgi

```
Parms for path

View          LNXNODE
Graph
zMON report

Class         ORACLE
Node          S11S2ORA
User
LPAR
Device

Menu option   FIXED

ZMON menu     YES
  System                      NO
  Service Level Analysis      NO
  User                        NO
  Shared File System          NO
  CPU                         NO
  Main Storage                NO
  Paging and Spooling         NO
  Input/Output Subsystem      NO
  TCP/IP Network              NO
  Linux Reports               YES
  Linux Applications Reports  YES
  VSE                         NO
  Screen Index                NO
  Emulation                   NO
  z/ALERT Definitions         NO
  zOPERATOR                   NO
  zTUNE                       NO
  Custom Samples              NO
  Locally defined             NO

Graph menu    YES
  System                      NO
  User                        NO
  Linux                       YES
  Linux Applications          YES
  Storage                     NO
  I/O                         NO
  Paging                      NO
  Network                     NO
  Custom                      NO

ZMAP menu     NO

Capacity menu NO
```

VELOCITY SOFTWARE

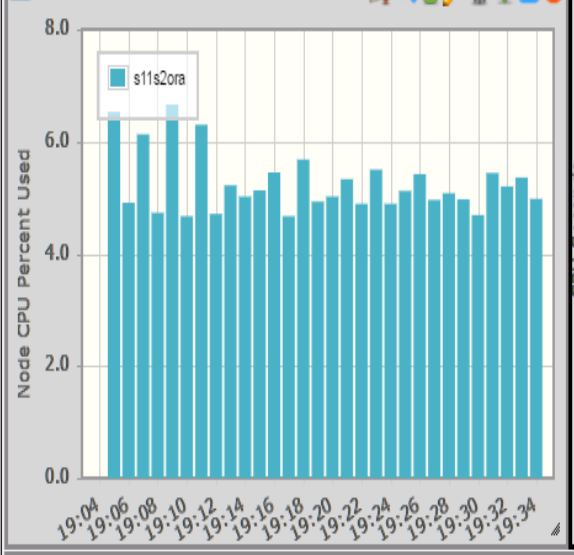
zVIEW - Tim's Test Machine (TIM2)

Performance Displays for zVM and Linux on System z

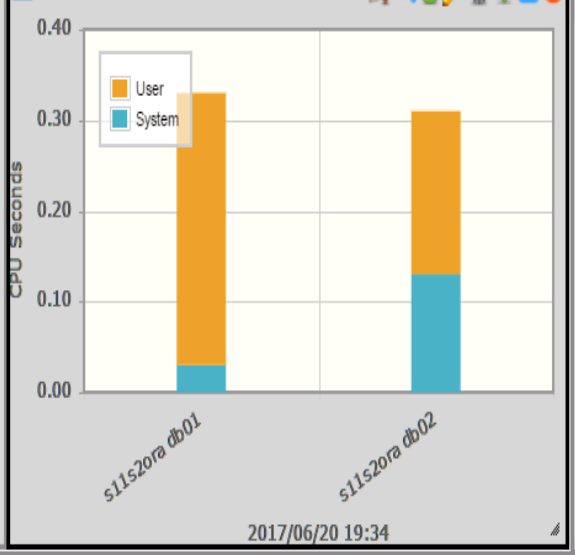
Add tab | Arrange
Load View | Save View
Color config
TIMS TEST MACHINE 1234567
zMON | Graphs
Network
Linux Reports
Linux Application Reports

LNXNODE

S11S2ORA CPU Node Utilization - TIM2



Oracle CPU Seconds - TIM2



ZOPER - zOPERATOR Console - TIM2

```
17:05:06 S11S2ORA -- MARK --
17:25:06 S11S2ORA -- MARK --
17:45:06 S11S2ORA -- MARK --
18:05:06 S11S2ORA -- MARK --
18:25:06 S11S2ORA -- MARK --
18:45:06 S11S2ORA -- MARK --
19:05:06 S11S2ORA -- MARK --
19:25:06 S11S2ORA -- MARK --
19:45:06 S11S2ORA -- MARK --
20:05:06 S11S2ORA -- MARK --
20:25:06 S11S2ORA -- MARK --
20:45:06 S11S2ORA -- MARK --
21:05:06 S11S2ORA -- MARK --
21:25:07 S11S2ORA -- MARK --
21:45:07 S11S2ORA -- MARK --
22:02:06 S11S2ORA AgentX master disconnected us, reconnecting in 60
22:03:06 S11S2ORA NET-SNMP version 5.4.2.1 AgentX subagent connected
22:05:07 S11S2ORA -- MARK --
22:25:07 S11S2ORA -- MARK --
22:45:07 S11S2ORA -- MARK --
23:00:01 S11S2ORA /usr/sbin/cron[54952]: (root) CMD (/home/oracle/clean
23:20:01 S11S2ORA -- MARK --
```

ESALNXC - Linux Process Configuration - TIM2

Node	Process Name	Process ID	Process PPID	Process Group	Appl Appl	Appl Name	User Id Userid
s11s2ora	init	1	1	1	1	init	root
s11s2ora	kthreadd	2	1	0	1	Kernel	root
s11s2ora	ksoftirqd/0	3	2	0	1	Kernel	root
s11s2ora	kworker/u:0	5	2	0	1	Kernel	root
s11s2ora	migration/0	6	2	0	1	Kernel	root
s11s2ora	migration/1	7	2	0	1	Kernel	root
s11s2ora	ksoftirqd/1	9	2	0	1	Kernel	root
s11s2ora	cpuset	11	2	0	1	Kernel	root
s11s2ora	khelper	12	2	0	1	Kernel	root
s11s2ora	netns	13	2	0	1	Kernel	root
s11s2ora	sync_supers	14	2	0	1	Kernel	root
s11s2ora	bdi-default	15	2	0	1	Kernel	root
s11s2ora	kintegrityd	16	2	0	1	Kernel	root
s11s2ora	kblockd	17	2	0	1	Kernel	root
s11s2ora	md	18	2	0	1	Kernel	root
s11s2ora	cio	19	2	0	1	Kernel	root
s11s2ora	cio_chp	20	2	0	1	Kernel	root
s11s2ora	kworker/u:1	21	2	0	1	Kernel	root

ESALNXP - LINUX VSI Process Statistics Report - TIM2

Time	Node	Name	Process Ident ID	PPID	GRP	CPU Percents Total	sys	user	syst	usrt	nice value	CPU Seconds Total	sys	user	syst	usrt	Stg (k) Size	RSS	Faults/Second min	maj	mint	majt	User
19:34:00	s11s2ora	oracle	51755	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	415K	29K	139	0	0	0	oracle
19:34:00	s11s2ora	oracle	50858	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	472K	89K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50796	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	467K	81K	1	0	0	0	oracle
19:34:00	s11s2ora	oracle	50794	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	472K	101K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50786	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	482K	12K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50780	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	468K	14K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50770	1	0	0.5	0.2	0.2	0	0	0	0.3	0.1	0.1	0	0	467K	6276	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50718	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	421K	76K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50696	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	424K	101K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50639	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	418K	100K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50635	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	423K	89K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50633	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	414K	13K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50631	1	0	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	429K	12K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50625	1	0	0.1	0	0.1	0	0	0	0.0	0	0.0	0	0	415K	14K	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50615	1	0	0.5	0.2	0.3	0	0	0	0.3	0.1	0.2	0	0	413K	6364	0	0	0	0	oracle
19:34:00	s11s2ora	oracle	50613	1	0	0.0	0.0	0	0	0	0	0.0	0.0	0	0	0	413K	6008	1	0	3	0	oracle
19:34:00	s11s2ora	oracle	14399	1	14399	0.0	0	0.0	0	0	0	0.0	0	0.0	0	0	471K	79K	0	0	0	0	oracle
19:34:00	s11s2ora	vsiora	3292	3269	1159	0.3	0.1	0.2	0	0	-10	0.2	0.0	0.1	0	0	58K	6872	28	0	0	0	root

Securing ZVIEW

- ZVWS AUTHLIST file
  - Put in ZVIEW directory
  - Add ALLOWs for allowed users
  - OMIT *.GIF *.PNG *.JPG
  - May want to OMIT CECUTIL.CGI for Enterprise View
- ZVWS PASSWORD_TIMEOUT parameter
  - Set in CONFIG ZVWS
  - Inactivity time to reprompt for password
  - Default 15 minutes

Recent changes

- New reports
  - ESAHPP – HyperPAV
  - ESAHSTC – Linux HOST processes
  - ESAJVMT – Java thread analysis
  - ESALNXF – Linux file system
  - ESALNXI – Linux process I/O
  - ESATCPU – UDP analysis
  - ESAUSP5/ESAUSR5 – User SMT analysis
- Updated reports
  - ESAPSDV – z/VM 6.4 paging
  - Several LNX and TCP reports to include LPAR and MIB level

Recent changes

- New graphs
  - FCP, QDIO and VSWITCH
  - Linux file system I/O
  - Java thread CPU
- Graph menu reorganization
- Less ‘No data available’
  - Use interval data when no history data
  - Don’t stop on large time period requests
- Use variable definitions in MONPROF COPY (NCPUS)
- ZMAP reports headings locked and dates and times highlighted

Daily User Resource Rate Report - TIM2 - Sun 11 Jun 2017

Report: ESAUSP2 User Resource Rate Report Velocity Software Corporate ZMAP 4.3.0 06/12/17 Page 44
Monitor initialized: 06/11/17 at 00:00:00 on 2828 serial 0414C7 First record analyzed: 06/11/17 00:00:00

UserID /Class	CPU time (Percent) Total	Virt	T:V Rat	Main Storage (pages) Resident Totl	Activ	Lock -ed	WSS Totl	Activ	Avg	Paging (pages) Allocated Total	ExStg	Disk	Pgs/Secnd Read	Write	Spooling(pages) IO/Second Alloc	Read	Write	Q'd Pg/ Sec	Resid Per Reset	Frame List Reord	Address Spaces Avg	Max
ZSXLBRO	2.05	1.90	1.1	97K	96539	1	116K	116K	116K	34122	34122	0	0	0	4	0	0	0	0	0	0	0
ZALERT	1.64	1.55	1.1	304	303.7	0	293	292.5	293	318	36	282	0	0	19	0	0	0	0	0	0	0
SLES12	1.44	0.90	1.6	201K	201K	97	200K	200K	200K	68777	7701	61076	0	0	0	0	0	0	0	0	0	0
TIML2	0.87	0.74	1.2	48K	48295	0	48K	48290	60K	4845	389	4456	0	0	0	0	0	0	0	0	0	0
01:15:00	37.91	35.25	1.1	3.5M	3470K	860	3.6M	3594K	31K	2201K	250K	1950K	0.2	0	1521K	0	0.1	0	4403	0.0	0	0
***Key User Analysis ***																						
RACFVM	0.00	0.00	1.1	131	17.9	0	131	17.8	18	1870	316	1554	0	0	105	0	0	0	0	0	0	0
RSCS	0.00	0.00	1.2	95.0	95.0	0	94.0	94.0	94	1342	85	1257	0	0	869K	0	0	0	0	0	0	0
TCPIP	0.26	0.08	3.3	1815	1815	71	1221	1221	1221	3479	526	2953	0	0	77810	0	0.0	0	0	0	0	0
TCPIP2	0.17	0.08	2.1	1786	1786	113	1001	1001	1001	2669	143	2526	0.0	0	380	0	0	0	0	0	0	0
TCPIP3	0.00	0.00	1.1	66.0	66.0	3	63.0	63.0	63	4121	1046	3075	0	0	32	0	0	0	0	0	0	0
User Class Analysis																						
Servers	0.12	0.10	1.2	5653	4966	0	5781	4959	496	18599	4068	14531	0	0	23610	0	0.0	0	0	0	0	0
Velocity	0.42	0.38	1.1	4507	4382	0	4439	4315	719	13303	3295	10008	0	0	434K	0	0.1	0	0	0	0	0
TEST	2.29	1.80	1.3	88K	87960	14	88K	87896	8790	21532	3950	17582	0	0	4960	0	0.0	0	0	0	0	0
Web	0.02	0.02	1.2	1739	971.7	0	1721	956.1	74	18652	11964	6688	0	0	2796	0	0.0	0	0	0	0	0
REDHAT	2.57	2.42	1.1	632K	632K	209	658K	658K	94K	121K	17728	103K	0.1	0	0	0	0	0	0	0	0	0
SUSE	5.45	4.85	1.1	514K	514K	307	512K	512K	85K	377K	48613	328K	0.1	0	98750	0	0	0	4403	0.0	0	0
ORACLE	7.10	7.09	1.0	239K	239K	61	238K	238K	238K	30847	5491	25356	0	0	0	0	0	0	0	0	0	0
*TheUsrs	19.51	18.44	1.1	2.0M	1983K	81	2.1M	2085K	35K	1586K	153K	1433K	0.1	0	8955	0	0	0	0	0	0	0
***Accounting Code Analysis**																						
CONSERVE	1.15	1.14	1.0	1784	1784	1	1768	1768	1768	9863	67	9796	0	0	0	0	0	0	0	0	0	0
DEMOSIG	2.69	2.53	1.1	124K	124K	0	131K	131K	131K	6778	6778	0	0	0	4	0	0	0	0	0	0	0
ORACLE	7.10	7.09	1.0	239K	239K	61	238K	238K	238K	30847	5491	25356	0	0	0	0	0	0	0	0	0	0

Questions ?