A Glance into zVPS

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In the beginning….

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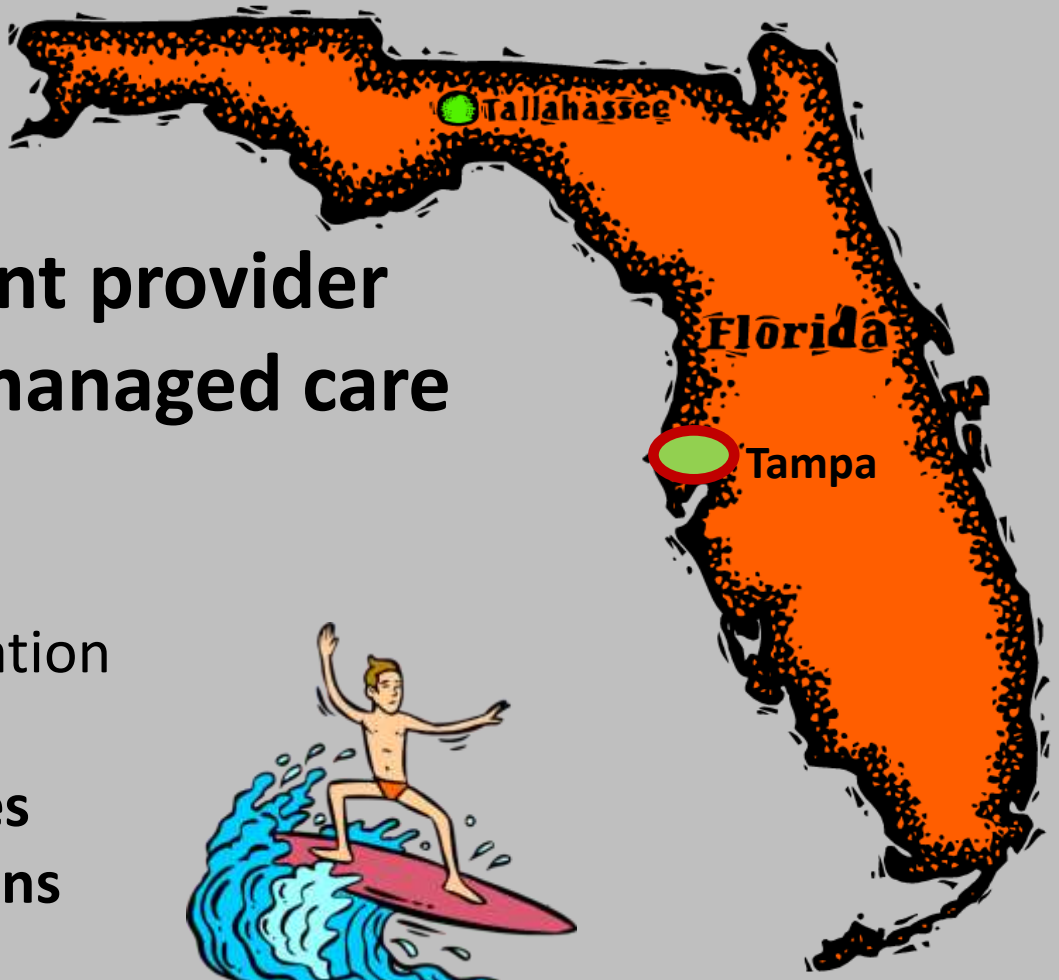
May the Force be with you. Live Long an Prosper. Good luck.

Who are we?



Largest **independent provider to insurance and managed care industries** of:

- Sales
- Benefits administration
- Retention
- **Reform / Exchanges**
- **Technology solutions**

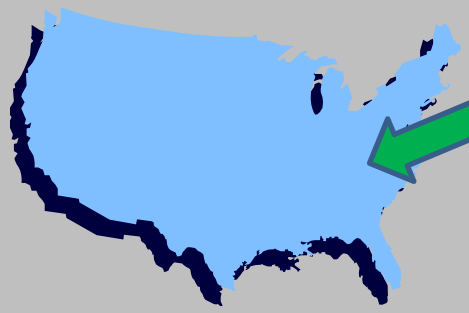
Founded 1970

ACA – Very High Level

Center for Medicare and Medicaid Services (CMS)
Healthcare.gov

Exchange Link

Insurance Carriers



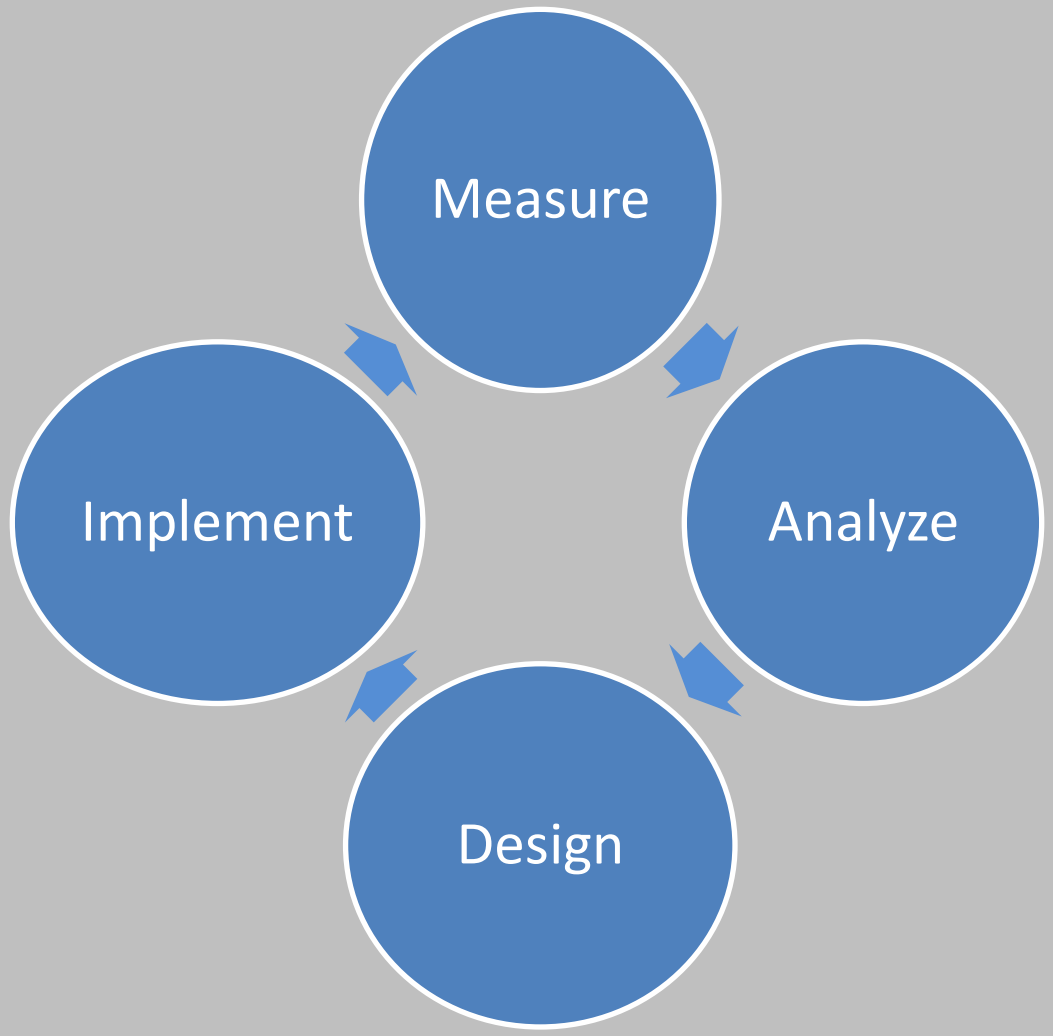
State Exchanges

Individuals

They will remain unnamed…

Politics of The Affordable Care Act

How Monitoring is supposed to work



Hot it often works

Why is that?

I need …..!!!

How did…..

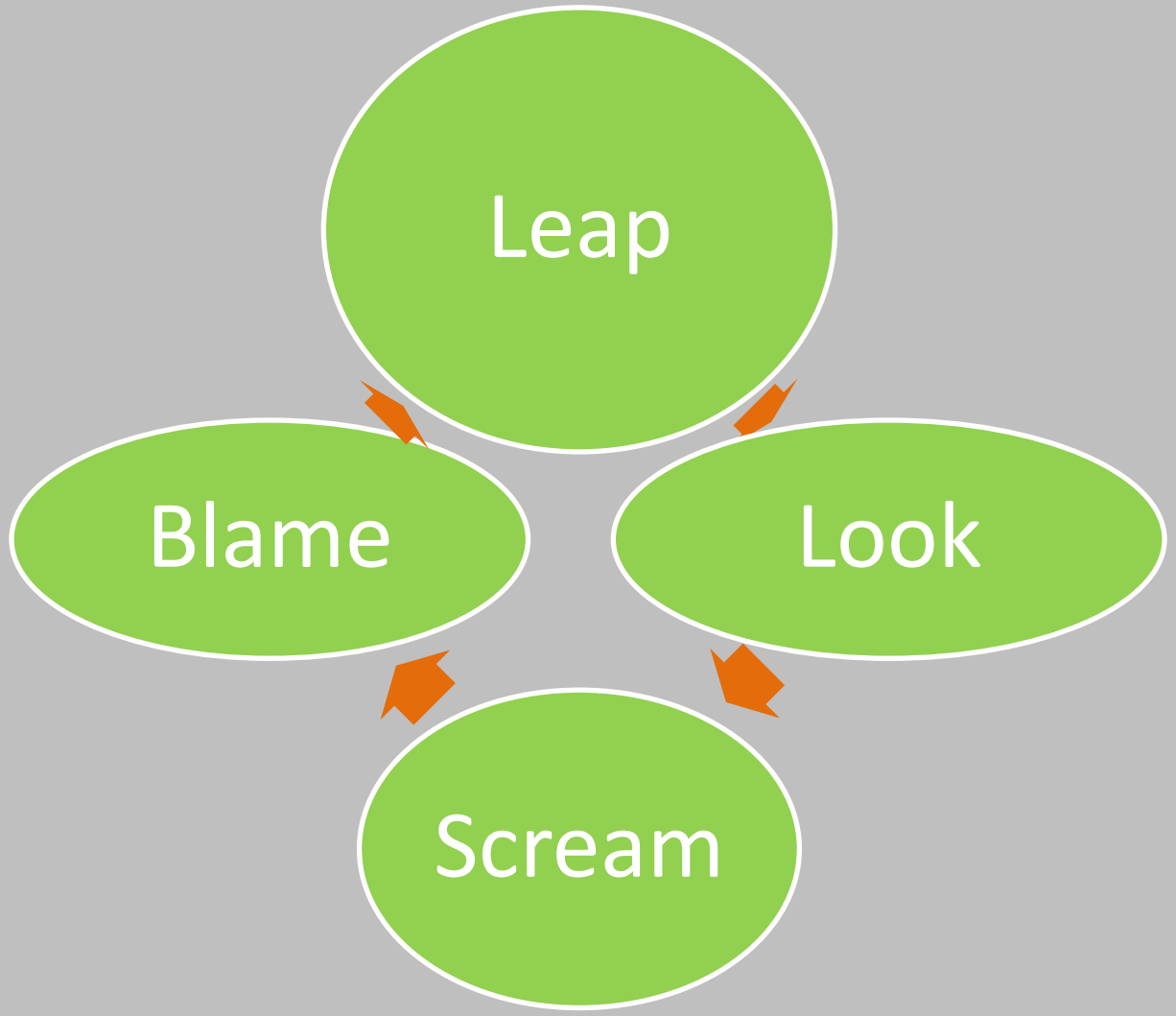
What about …..!!!

Give me…..

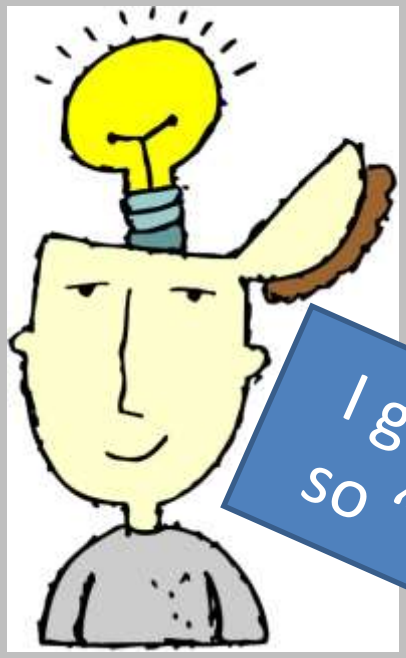
What happened at ….?

Tell me about…..

How Monitoring Should NOT work…

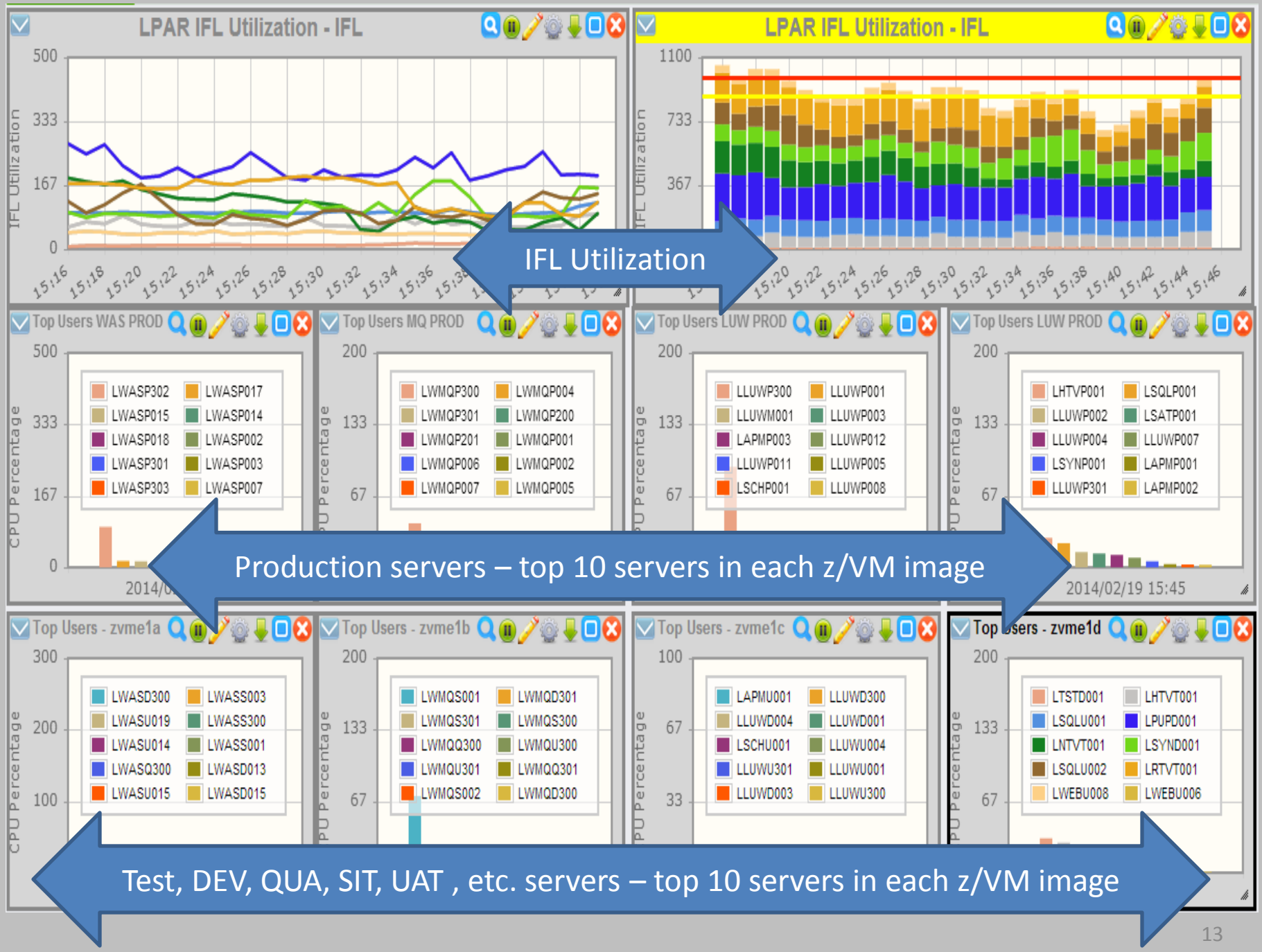


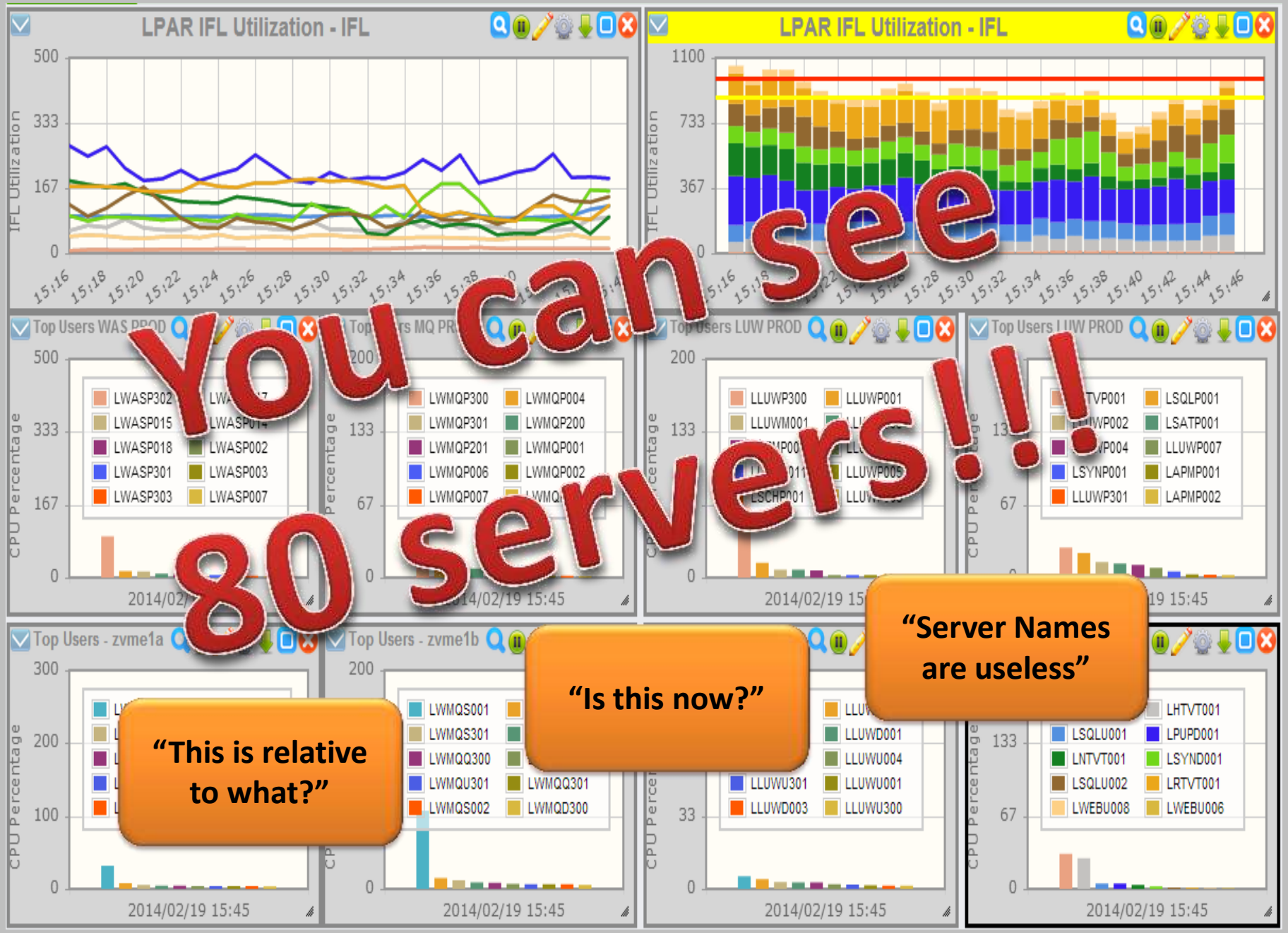
What if….

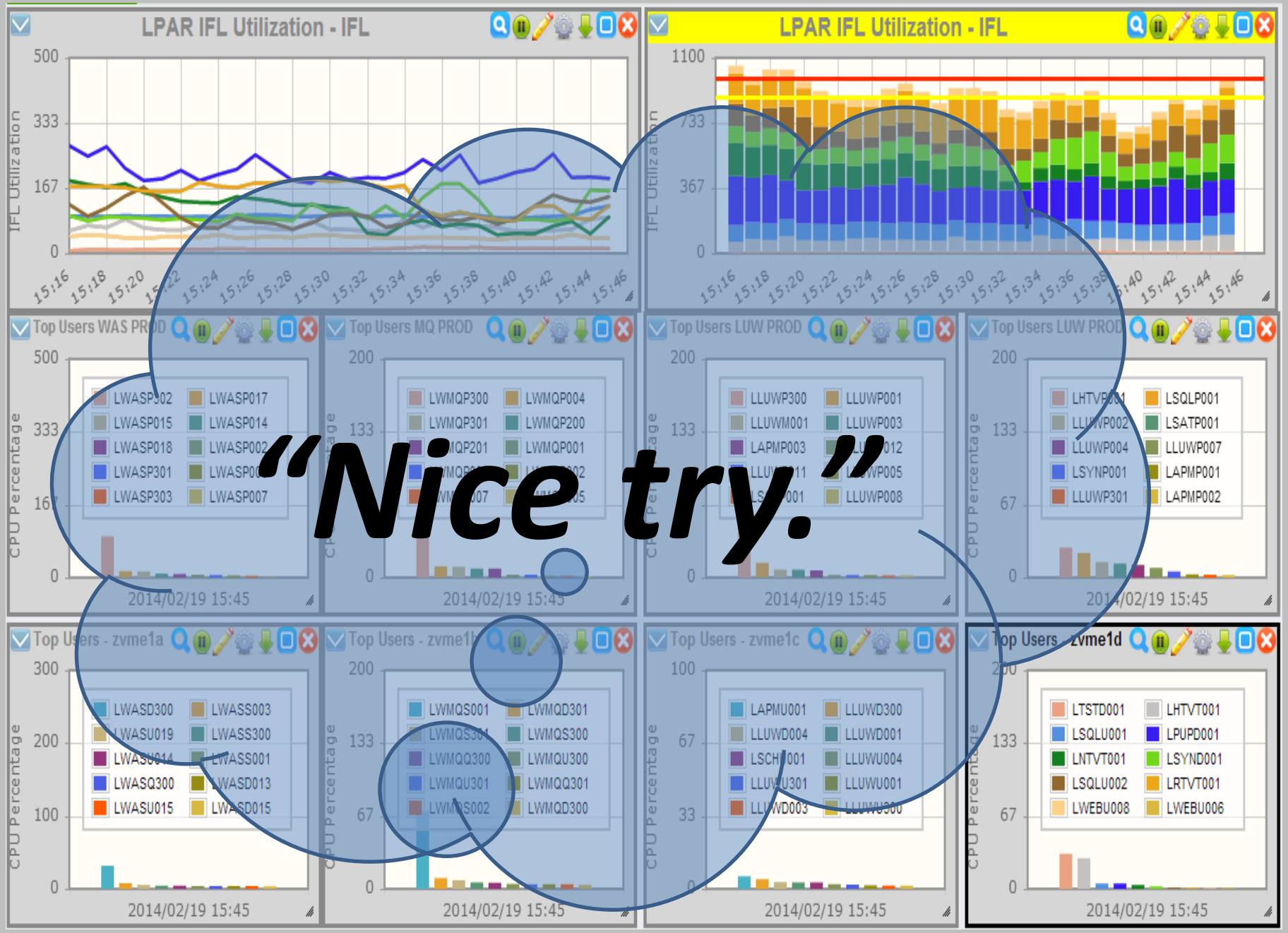


I give “them” the data so “they” can SEE IT!!!

My first attempt

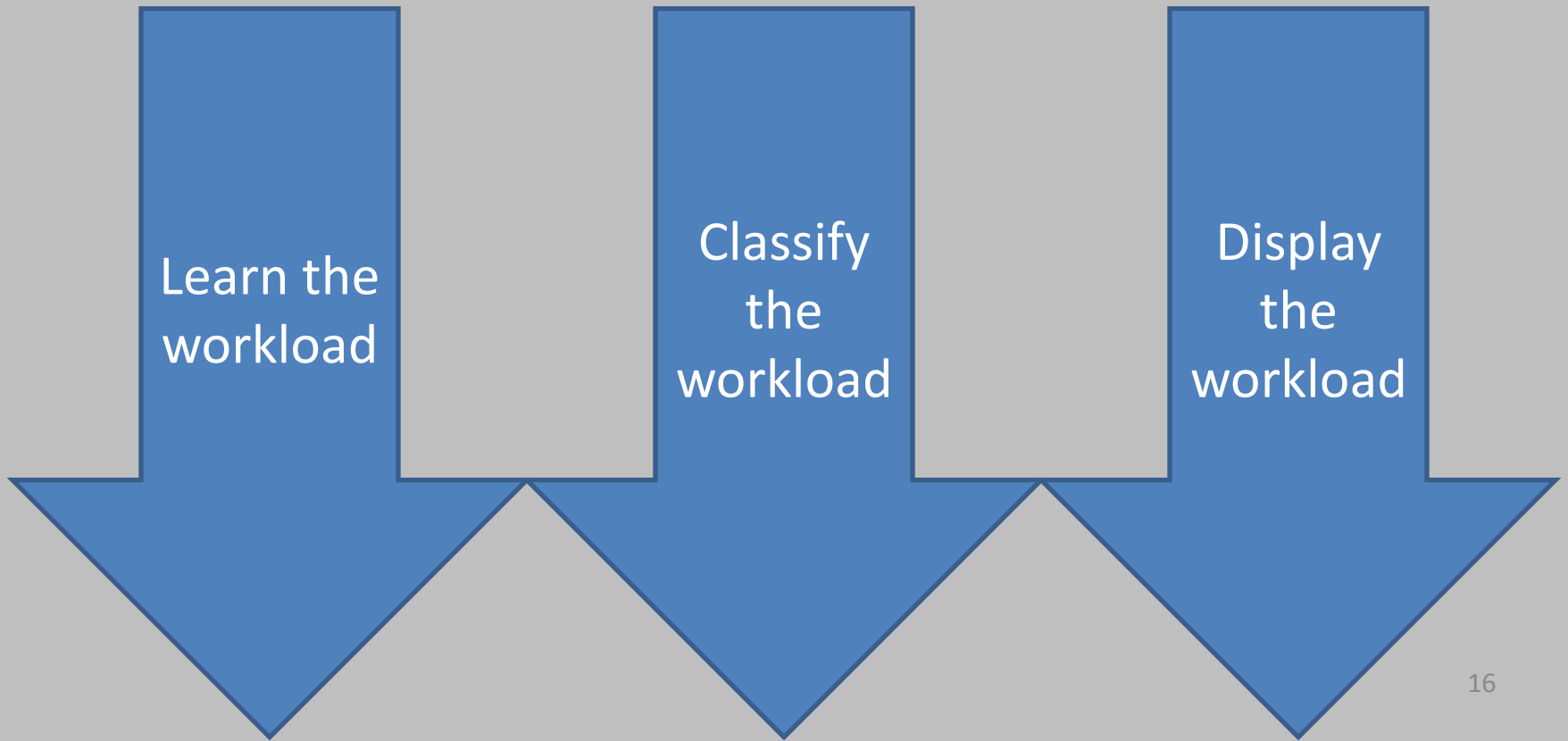

LPAR IFL Utilization - IFL
LPAR IFL Utilization - IFL
IFL Utilization
Top Users WAS PROD
Top Users MQ PROD
Top Users LUW PROD
Top Users LUW PROD
Production servers – top 10 servers in each z/VM image
Top Users - zvme1a
Top Users - zvme1b
Top Users - zvme1c
Top Users - zvme1d
Test, DEV, QUA, SIT, UAT , etc. servers – top 10 servers in each z/VM image


LPAR IFL Utilization - IFL
LPAR IFL Utilization - IFL
You can see
80 servers!!!
"This is relative to what?"
"Is this now?"
"Server Names are useless"

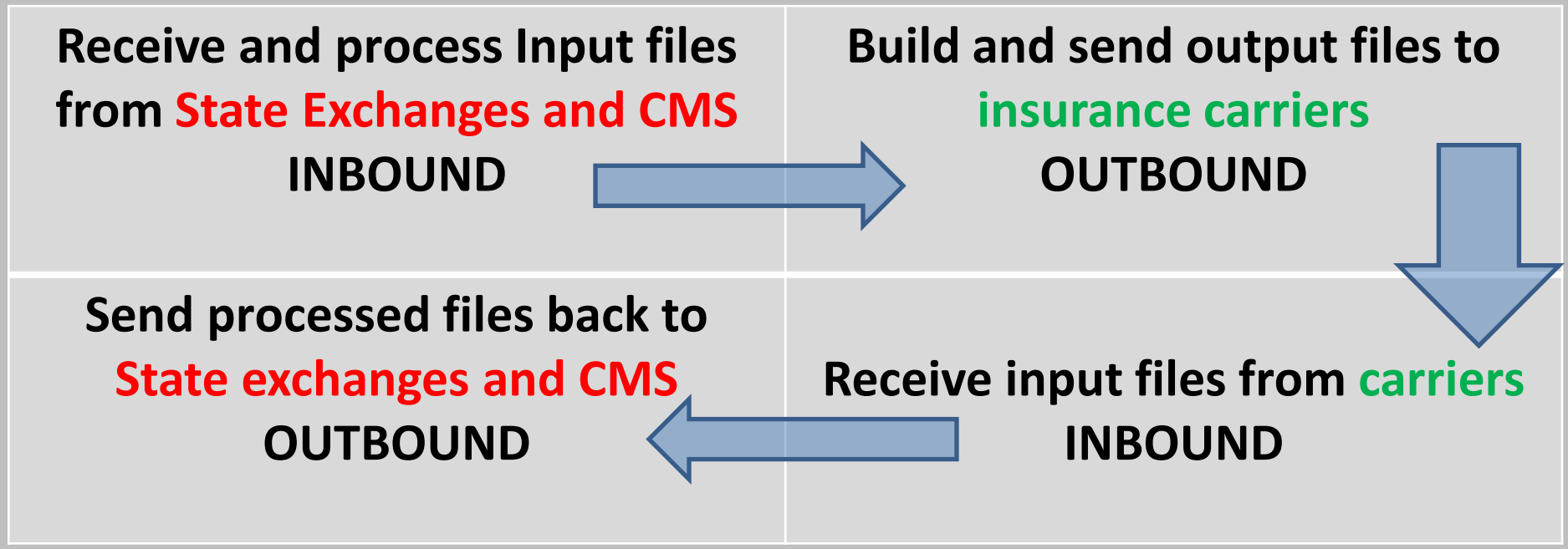

LPAR IFL Utilization - IFL
IFL Utilization
500
333
167
0
15:16
15:18
15:20
15:22
15:24
15:26
15:28
15:30
15:32
15:34
15:36
15:38
15:40
15:42
15:44
15:46
LPAR IFL Utilization - IFL
1100
733
367
0
Top Users WAS PROD
CPU Percentage
LWASP302
LWASP017
LWASP015
LWASP014
LWASP018
LWASP002
LWASP301
LWASP303
LWASP007
2014/02/19 15:45
Top Users MQ PROD
200
133
0
LWMQP300
LWMQP004
LWMQP301
LWMQP200
LWMQP001
Top Users LUW PROD
LLUWP300
LLUWP001
LLUWM001
LLUWP003
LAPMP003
LLUWP005
LLUWP008
Top Users LUW PROD
67
LHTVP001
LSQLP001
LLUWP002
LSATP001
LLUWP004
LLUWP007
LSYNP001
LAPMP001
LLUWP301
LAPMP002
Top Users - zvme1a
300
LWASD300
LWASS003
LWASU019
LWASS300
LWASS001
LWASQ300
LWASD013
LWASU015
LWASD015
Top Users - zvme1b
LWMQS001
LWMQD301
LWMQS300
LWMQQ300
LWMQU300
LWMQU301
LWMQQ301
LWMQS002
LWMQD300
Top Users - zvme1c
100
LAPMU001
LLUWD300
LLUWD004
LLUWD001
LLUWU004
LLUWU001
Top Users - zvme1d
LTSTD001
LHTVT001
LSQLU001
LPUPD001
LNTVT001
LSYND001
LSQLU002
LRTVT001
LWEBU008
LWEBU006

"Nice try."

"Mike, you're doing it Wrong!"



Exchange Link Processing



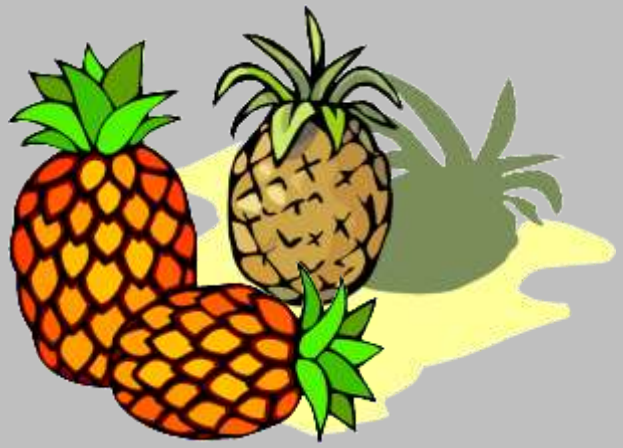
Learn the workload

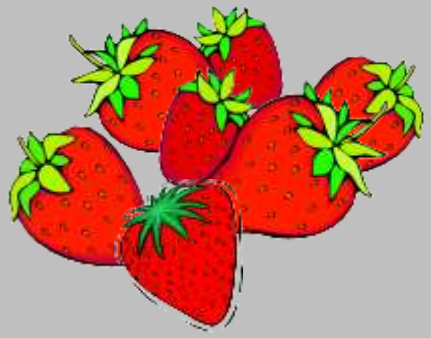
What runs on this server? Database, application, Web, Integration Bus, etc.

What business processes does this sever support? Processing customer data, common services, reporting, etc.

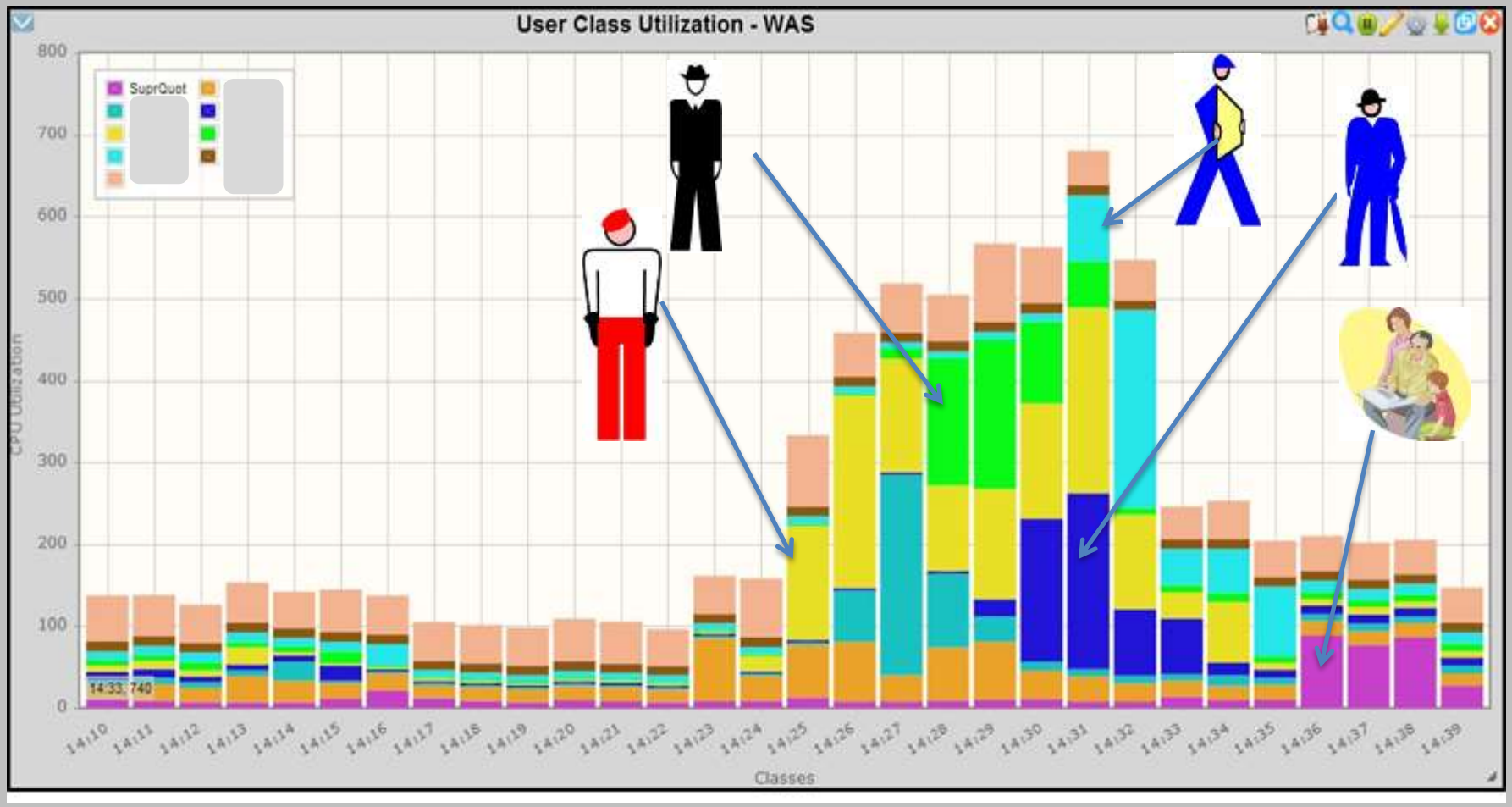
Who manages this server? Linux, other software, applications, etc.

Classify, Classify, Classify

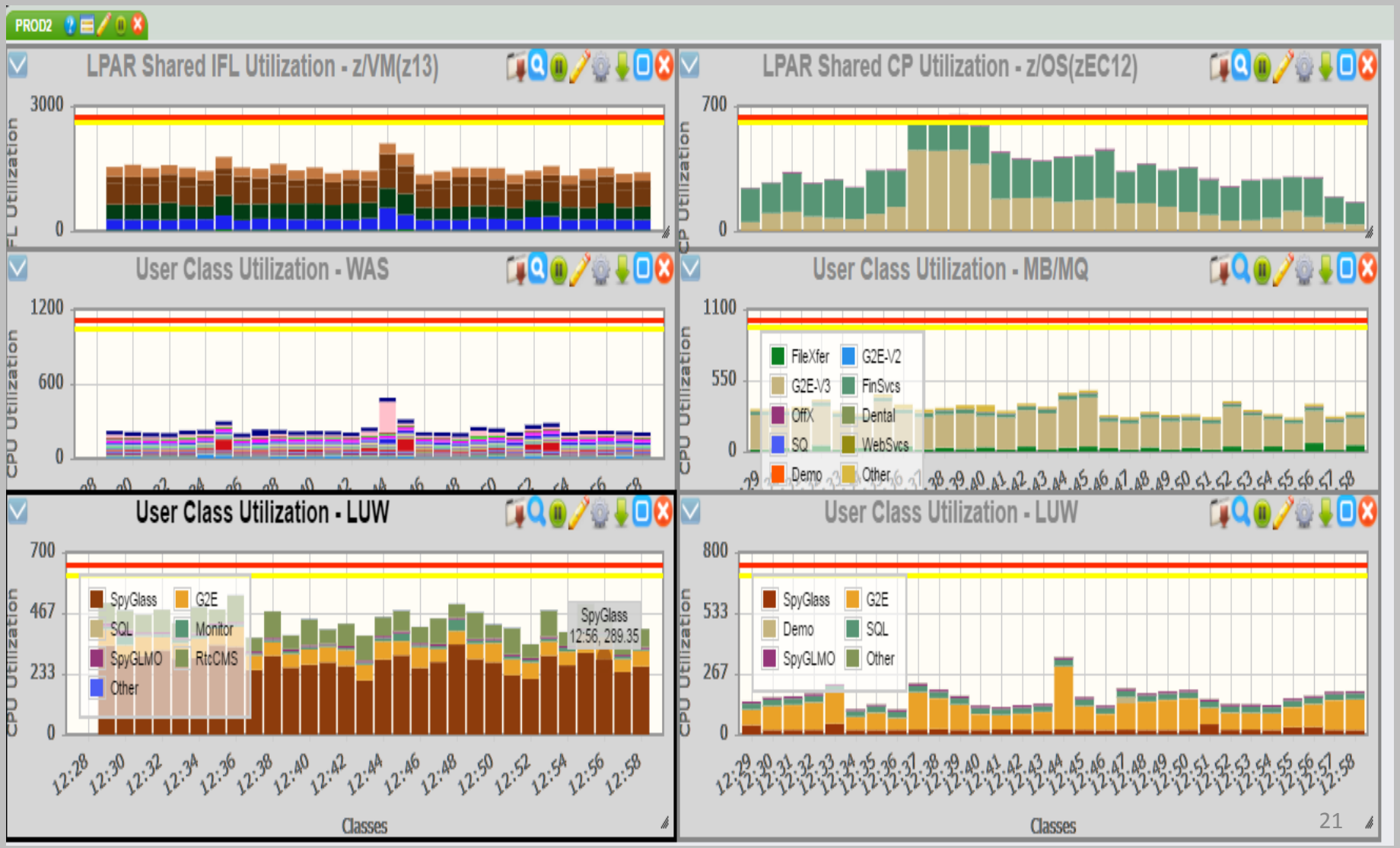


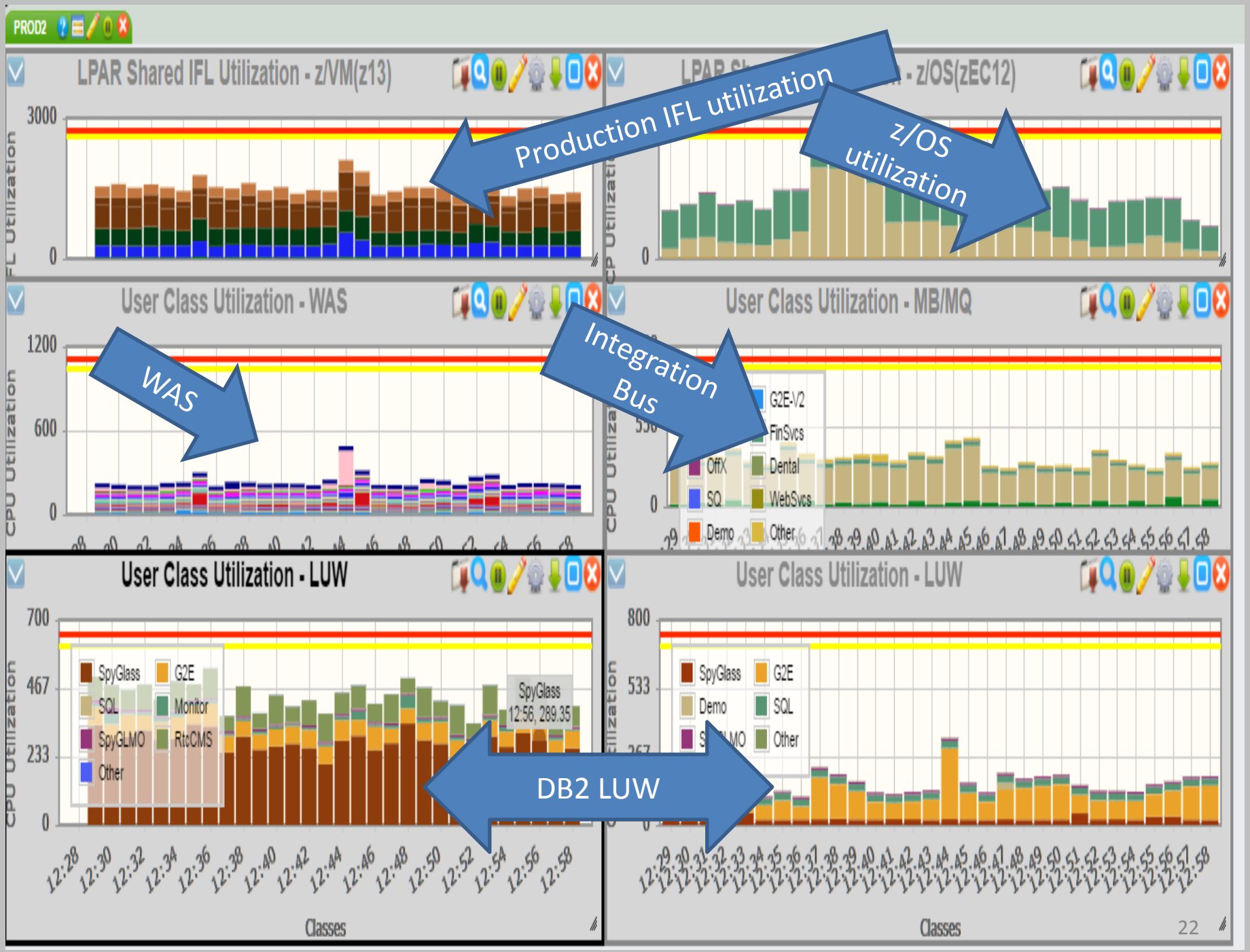


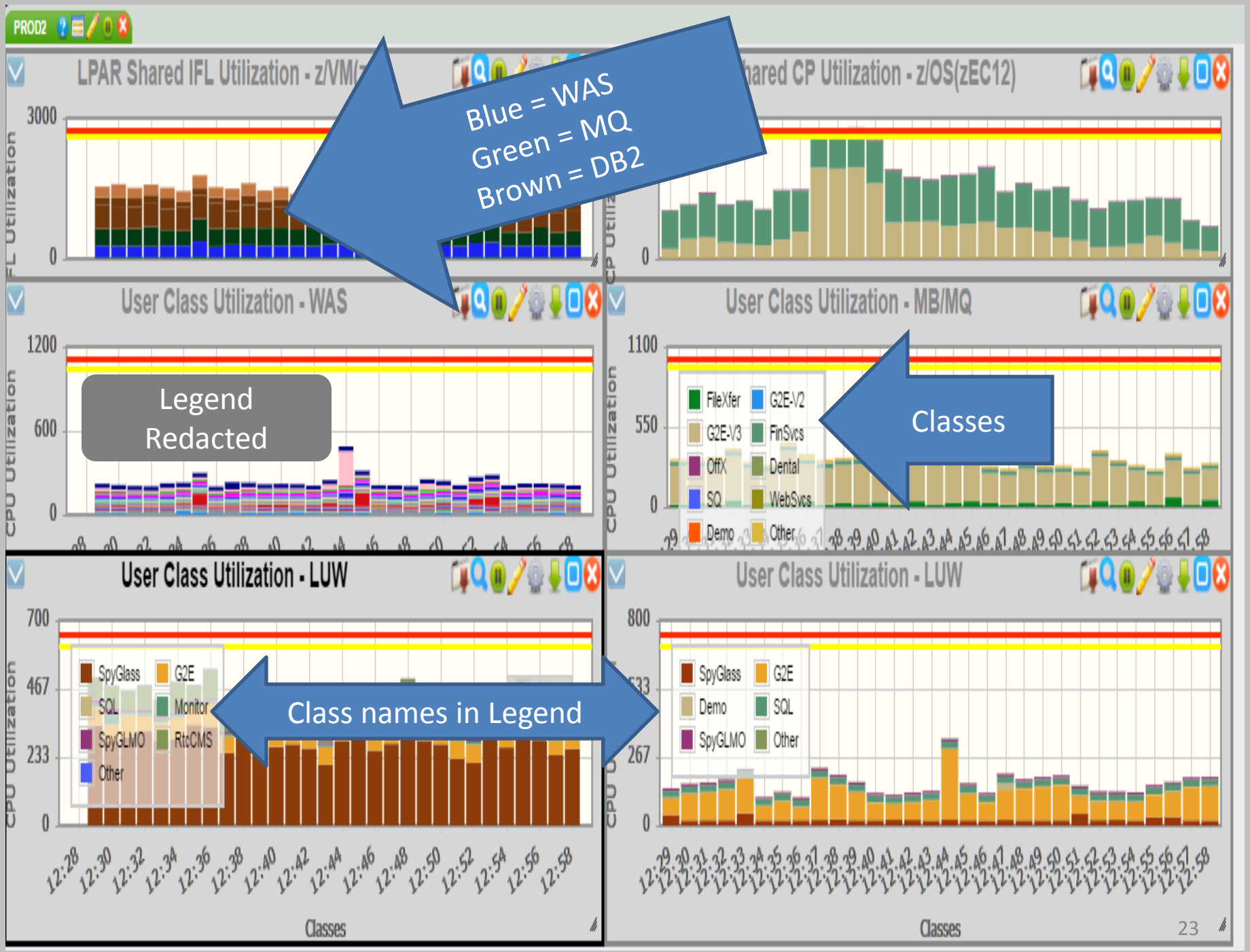
Display

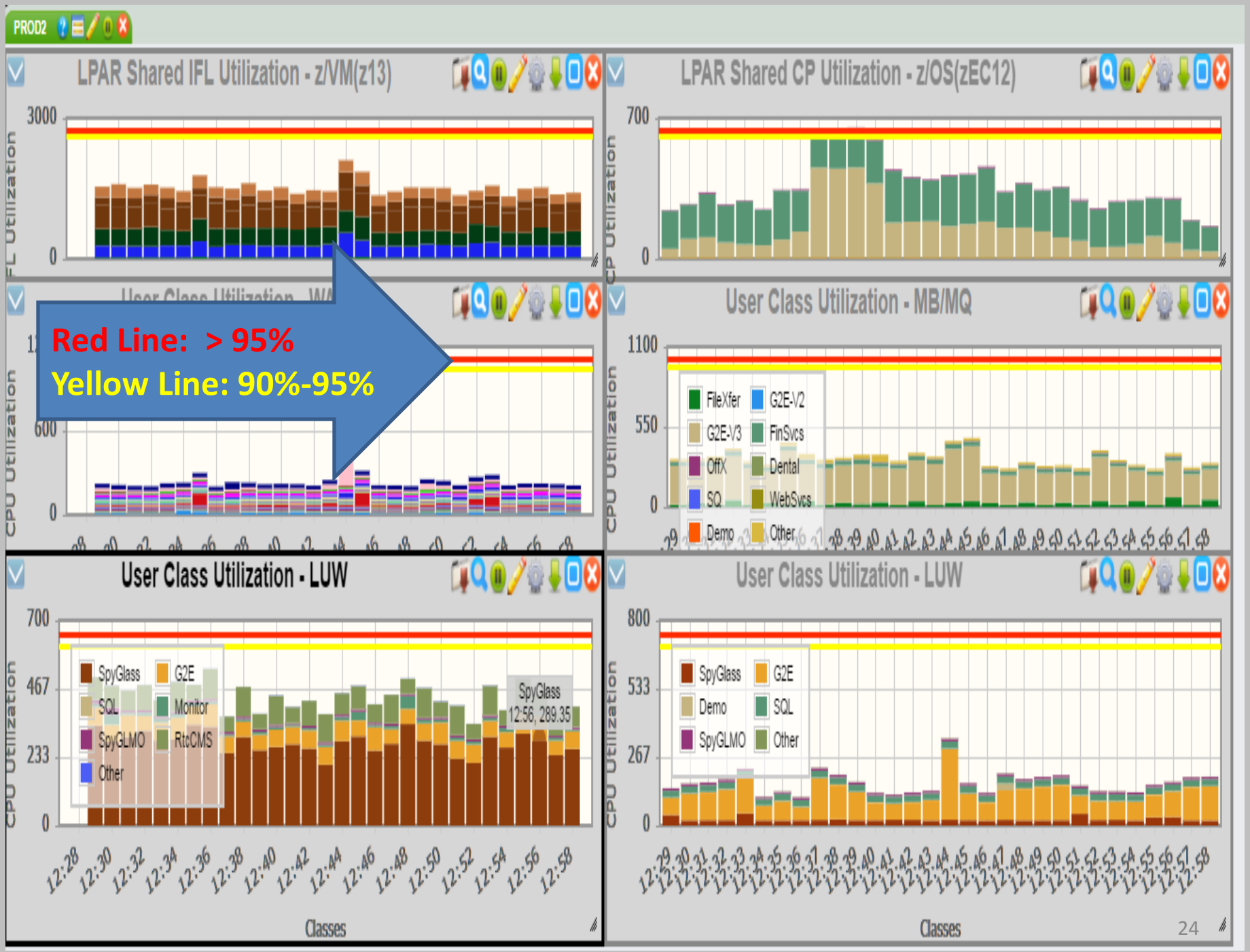

User Class Utilization - WAS
SuprQuot
CPU Utilization
800
700
600
500
400
300
200
100
0
14:33:740
14:10
14:11
14:12
14:13
14:14
14:15
14:16
14:17
14:18
14:19
14:20
14:21
14:22
14:23
14:24
14:25
14:26
14:27
14:28
14:29
14:30
14:31
14:32
14:33
14:34
14:35
14:36
14:37
14:38
14:39
Classes

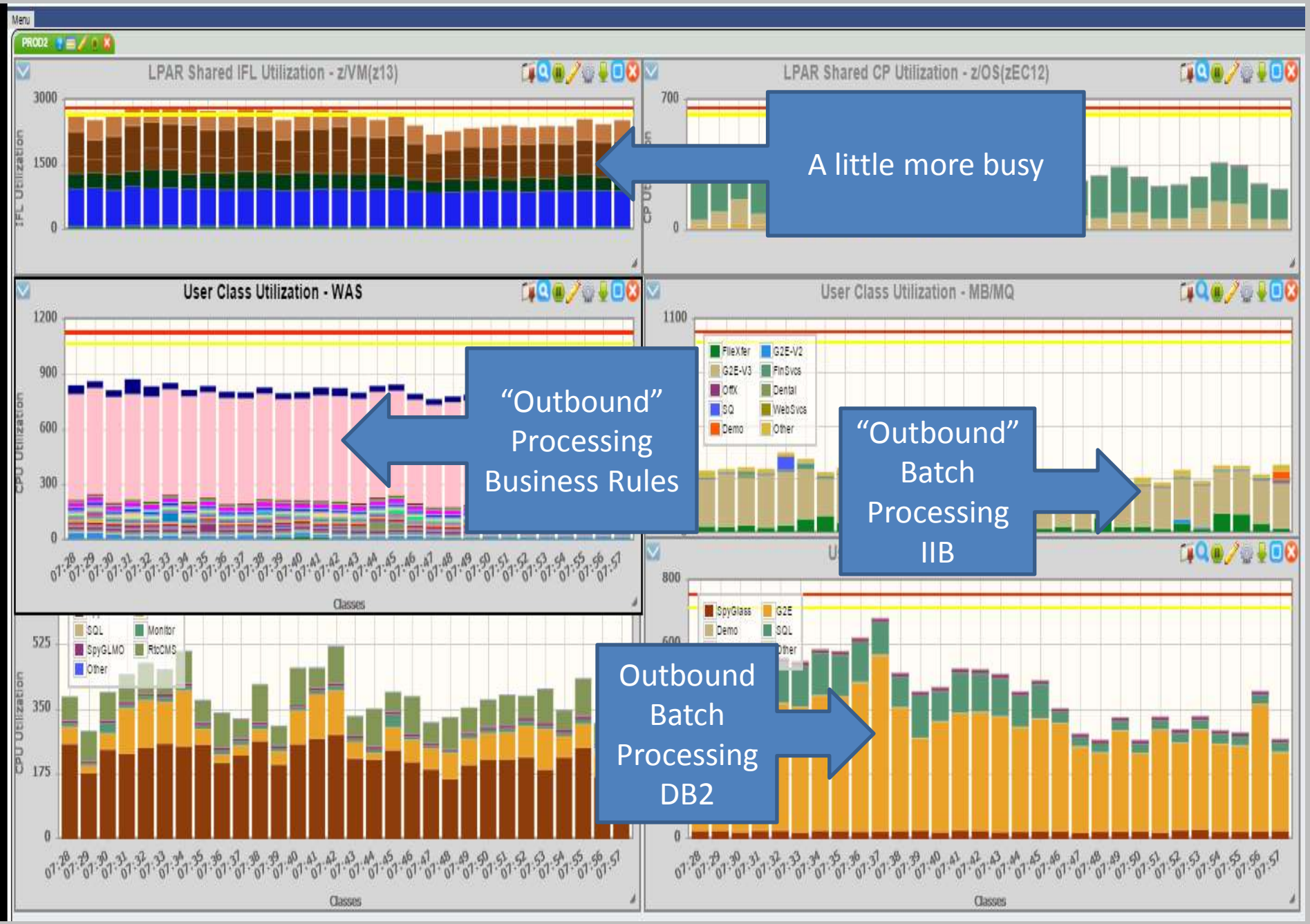
Group of Displays: Production Workload




PROD2
LPAR Shared IFL Utilization - z/VM(z13)
3000
0
FL Utilization
Production IFL utilization
z/OS utilization
- z/OS(zEC12)
CP Utilizati
User Class Utilization - WAS
1200
600
0
CPU Utilization
WAS
Integration Bus
User Class Utilization - MB/MQ
G2E-V2
FinSvcs
OffX
Dental
SQ
WebSvcs
Demo
Other
CPU Utiliza
User Class Utilization - LUW
700
467
233
0
CPU Utilization
SpyGlass
G2E
SQL
Monitor
SpyGLMO
RtcCMS
Other
SpyGlass
12:56, 289.35
12:28
12:30
12:32
12:34
12:36
12:38
12:40
12:42
12:44
12:46
12:48
12:50
12:52
12:54
12:56
12:58
Classes
DB2 LUW
User Class Utilization - LUW
800
533
SpyGlass
G2E
Demo
SQL
Other
Classes


PROD2
LPAR Shared IFL Utilization - z/VM(
hared CP Utilization - z/OS(zEC12)
Blue = WAS
Green = MQ
Brown = DB2
User Class Utilization - WAS
Legend Redacted
User Class Utilization - MB/MQ
FileXfer
G2E-V2
G2E-V3
FinSvcs
OffX
Dental
SQ
WebSvcs
Demo
Other
Classes
User Class Utilization - LUW
SpyGlass
G2E
SQL
Monitor
SpyGLMO
RtcCMS
Other
Class names in Legend
User Class Utilization - LUW
SpyGlass
G2E
Demo
SQL
SpyGLMO
Other
CPU Utilization
Classes


PROD2
LPAR Shared IFL Utilization - z/VM(z13)
3000
0
IFL Utilization
LPAR Shared CP Utilization - z/OS(zEC12)
700
0
CP Utilization
Red Line: > 95%
Yellow Line: 90%-95%
CPU Utilization
600
0
User Class Utilization - MB/MQ
1100
550
0
CPU Utilization
FileXfer
G2E-V2
G2E-V3
FinSvcs
OffX
Dental
SQ
WebSvcs
Demo
Other
User Class Utilization - LUW
700
467
233
0
CPU Utilization
SpyGlass
G2E
SQL
Monitor
SpyGLMO
RtcCMS
Other
SpyGlass
12:56, 289.35
12:28
12:30
12:32
12:34
12:36
12:38
12:40
12:42
12:44
12:46
12:48
12:50
12:52
12:54
12:56
12:58
Classes
User Class Utilization - LUW
800
533
267
0
CPU Utilization
SpyGlass
G2E
Demo
SQL
SpyGLMO
Other
Classes


LPAR Shared IFL Utilization - z/VM(z13)
LPAR Shared CP Utilization - z/OS(zEC12)
A little more busy
User Class Utilization - WAS
"Outbound" Processing Business Rules
User Class Utilization - MB/MQ
"Outbound" Batch Processing IIB
Outbound Batch Processing DB2
Classes

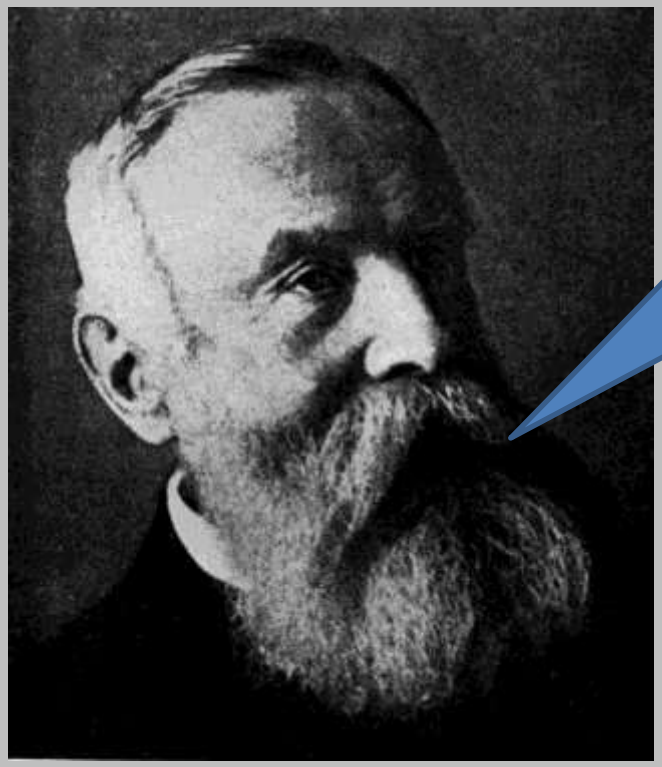
Time to think!

Let me show you.....

Did you see.....

Did something break.....

What is going with.....



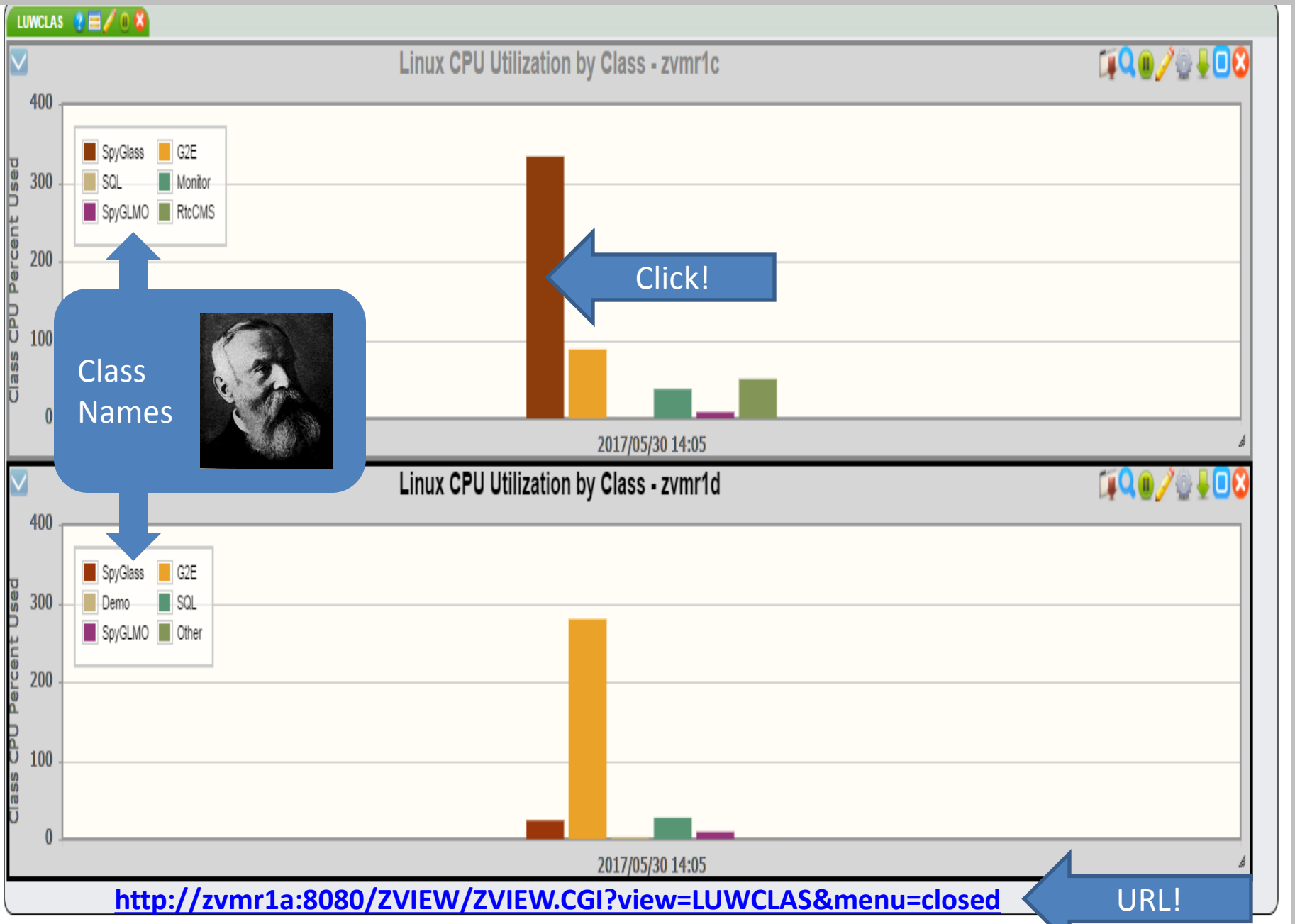
"Mike, I need a display that shows the CPU consumed by the DB2 production servers."

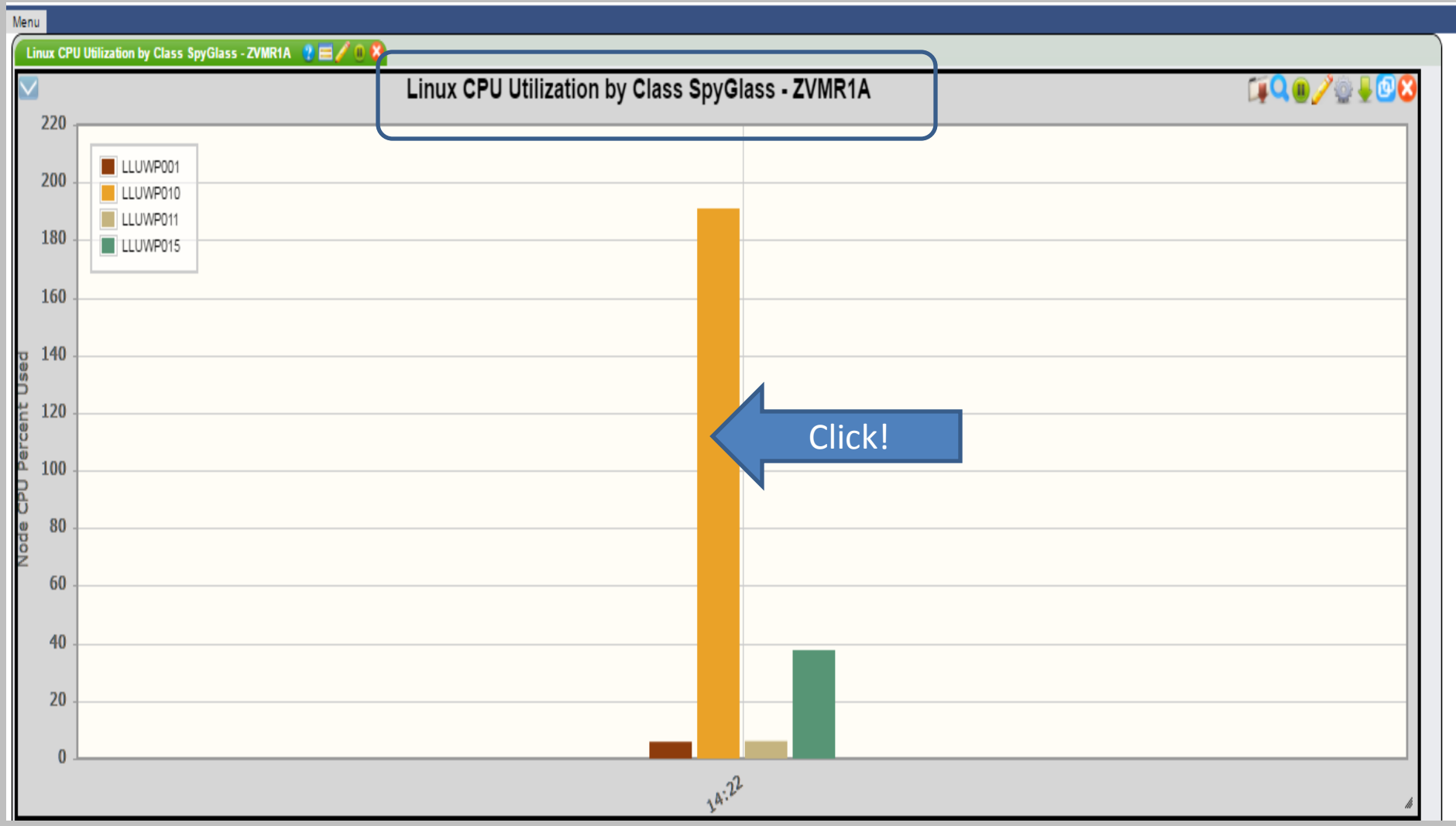
Steve does not care about WebSphere

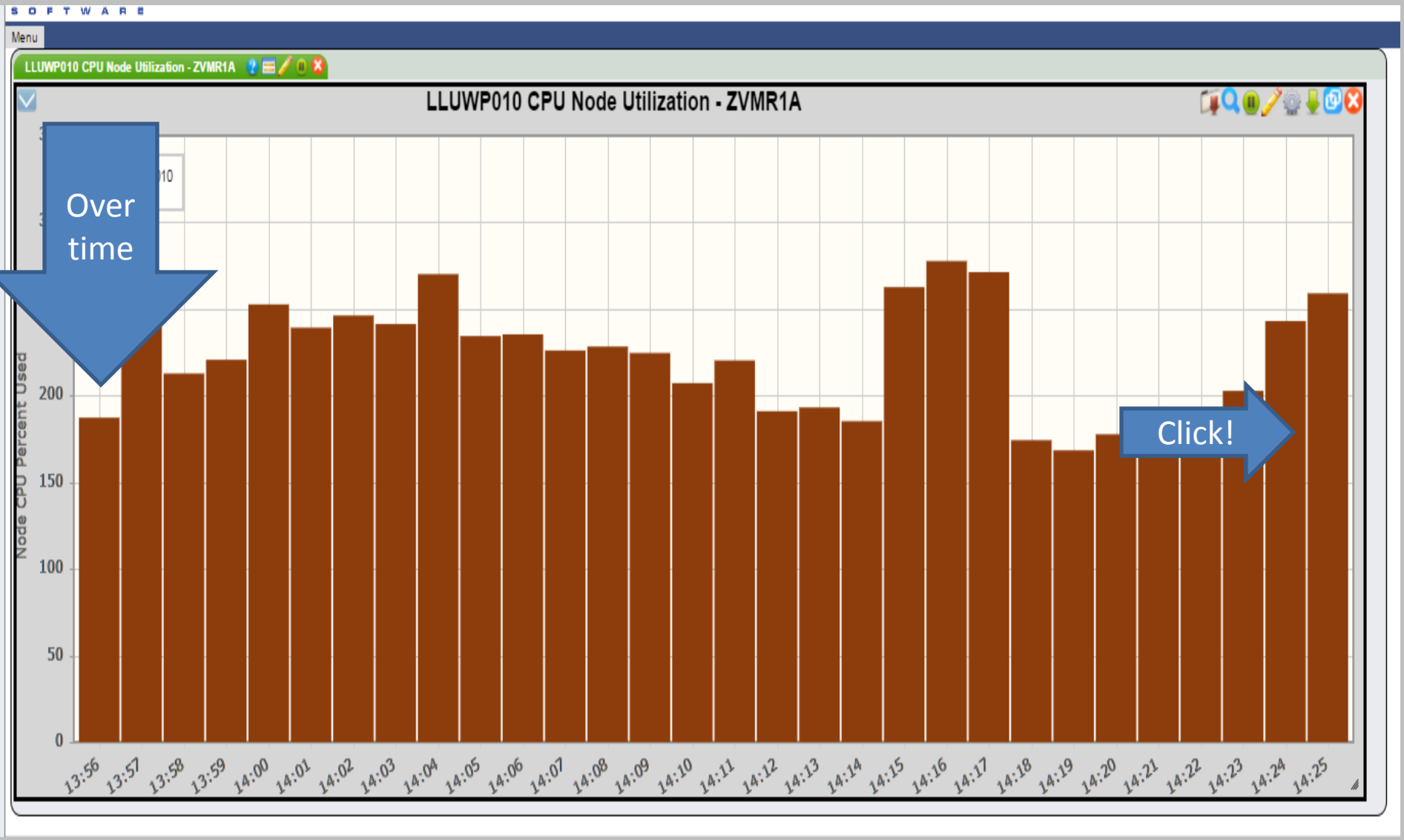
Steve does not care about Integration Bus

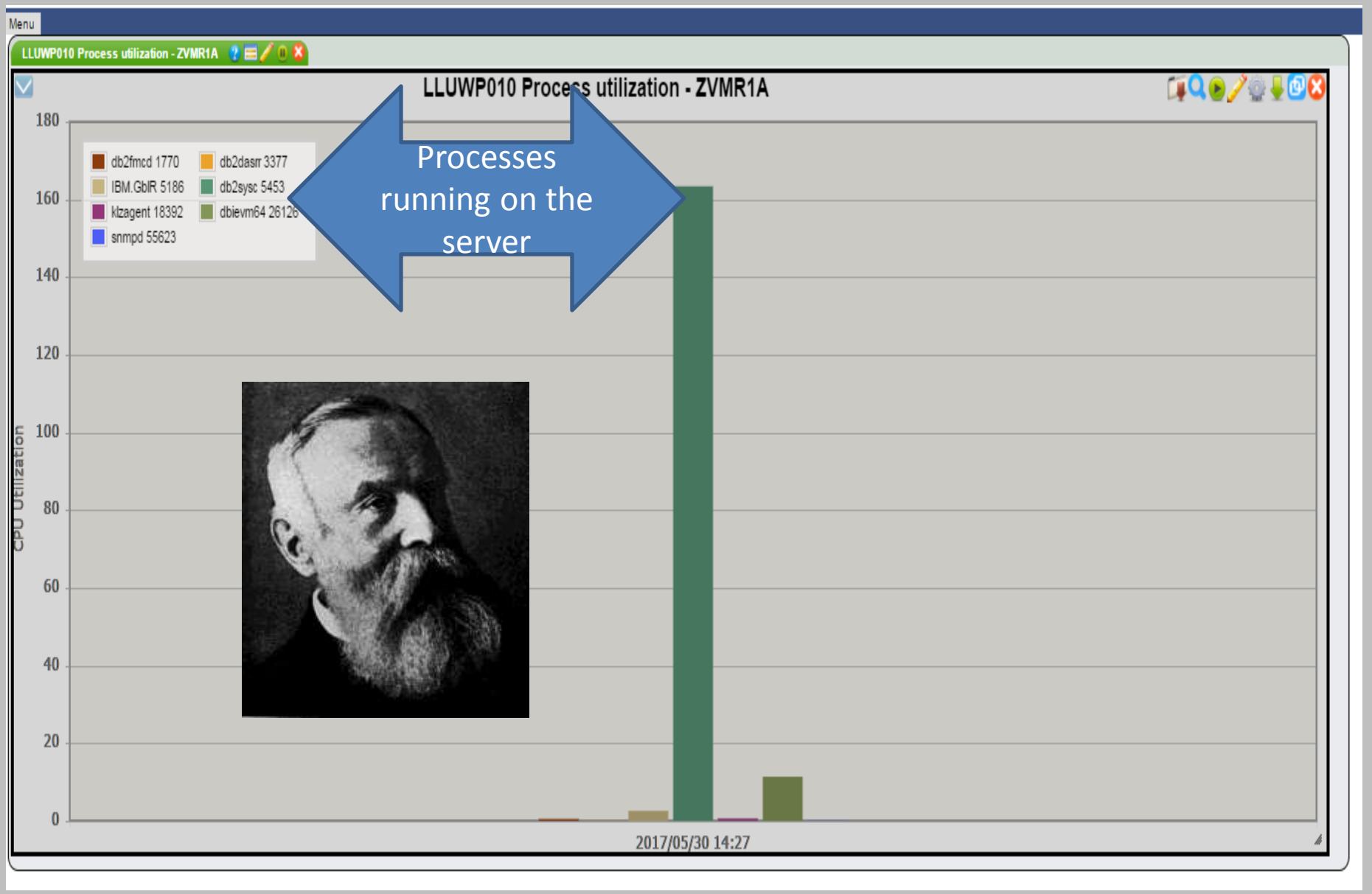
Steve does not care about IFLs

Steve - DBA


LUWCLAS
Linux CPU Utilization by Class - zvmr1c
Class CPU Percent Used
400
300
200
100
0
SpyGlass
G2E
SQL
Monitor
SpyGLMO
RtcCMS
2017/05/30 14:05
Click!
Class Names
Linux CPU Utilization by Class - zvmr1d
Class CPU Percent Used
400
300
200
100
0
SpyGlass
G2E
Demo
SQL
SpyGLMO
Other
2017/05/30 14:05
http://zvmr1a:8080/ZVIEW/ZVIEW.CGI?view=LUWCLAS&menu=closed
URL!


Menu
Linux CPU Utilization by Class SpyGlass - ZVMR1A
Linux CPU Utilization by Class SpyGlass - ZVMR1A
LLUWP001
LLUWP010
LLUWP011
LLUWP015
Node CPU Percent Used
220
200
180
160
140
120
100
80
60
40
20
0
14:22
Click!


SOFTWARE
Menu
LLUWP010 CPU Node Utilization - ZVMR1A
LLUWP010 CPU Node Utilization - ZVMR1A
Over time
Click!
Node CPU Percent Used
0
50
100
150
200
13:56
13:57
13:58
13:59
14:00
14:01
14:02
14:03
14:04
14:05
14:06
14:07
14:08
14:09
14:10
14:11
14:12
14:13
14:14
14:15
14:16
14:17
14:18
14:19
14:20
14:21
14:22
14:23
14:24
14:25


Menu
LLUWP010 Process utilization - ZVMR1A
LLUWP010 Process utilization - ZVMR1A
db2fmcd 1770
db2dasrr 3377
IBM.GblR 5186
db2sysc 5453
klzagent 18392
dbievm64 26126
snmpd 55623
Processes running on the server
CPU Utilization
180
160
140
120
100
80
60
40
20
0
2017/05/30 14:27

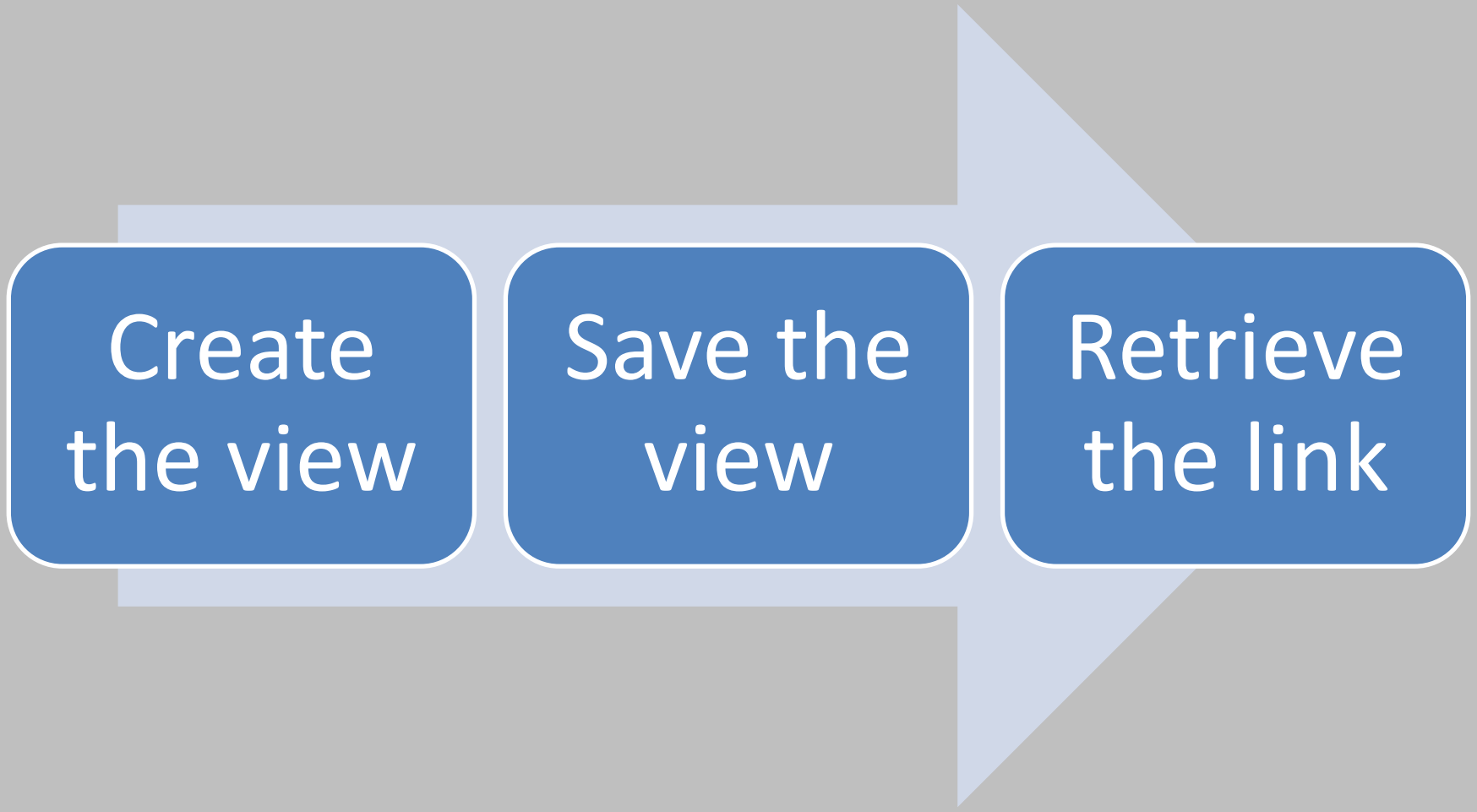
One month later….

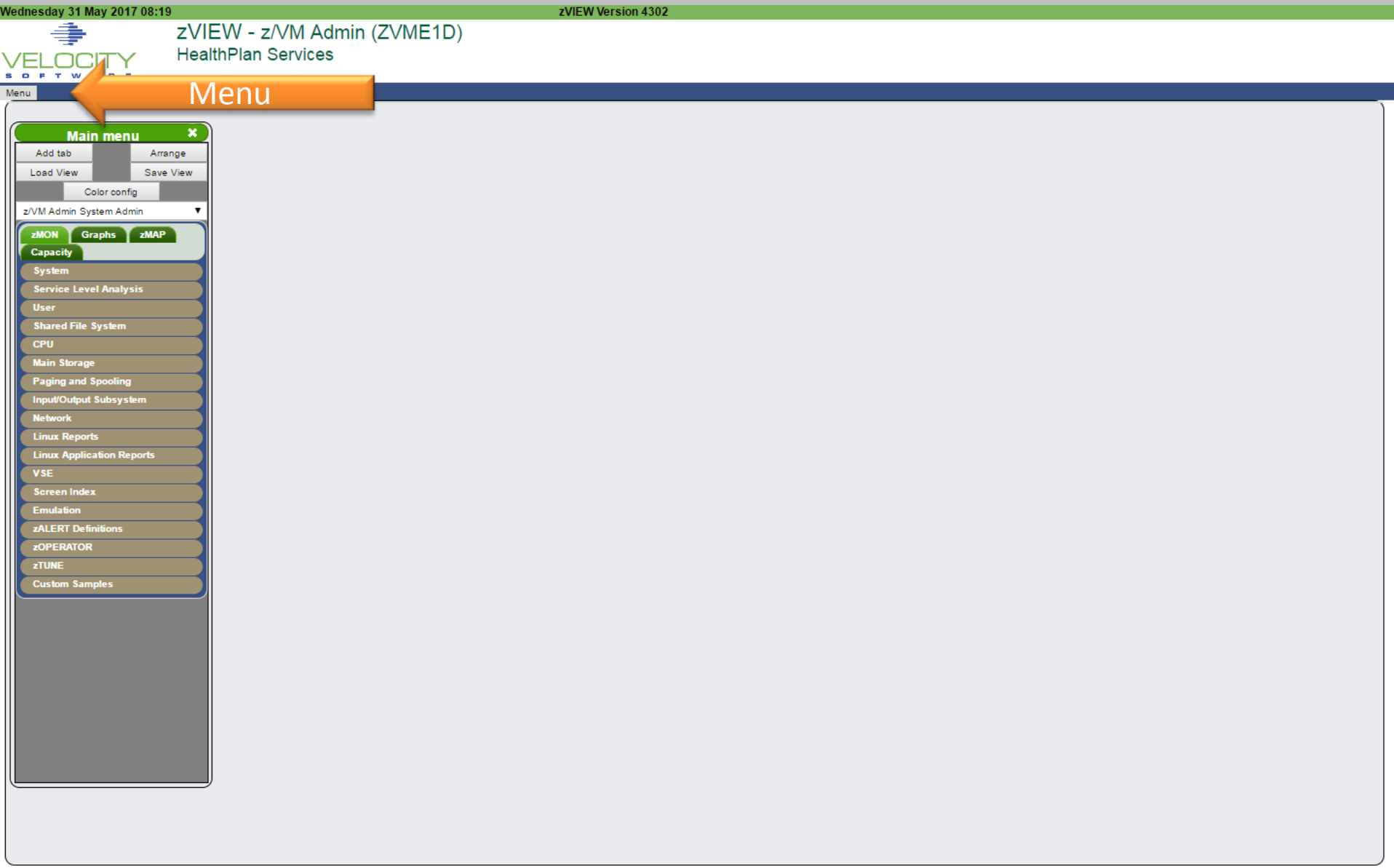
"Hey Mike, what <u>was the name</u> of that display that shows the CPU consumed by the DB2 production servers."

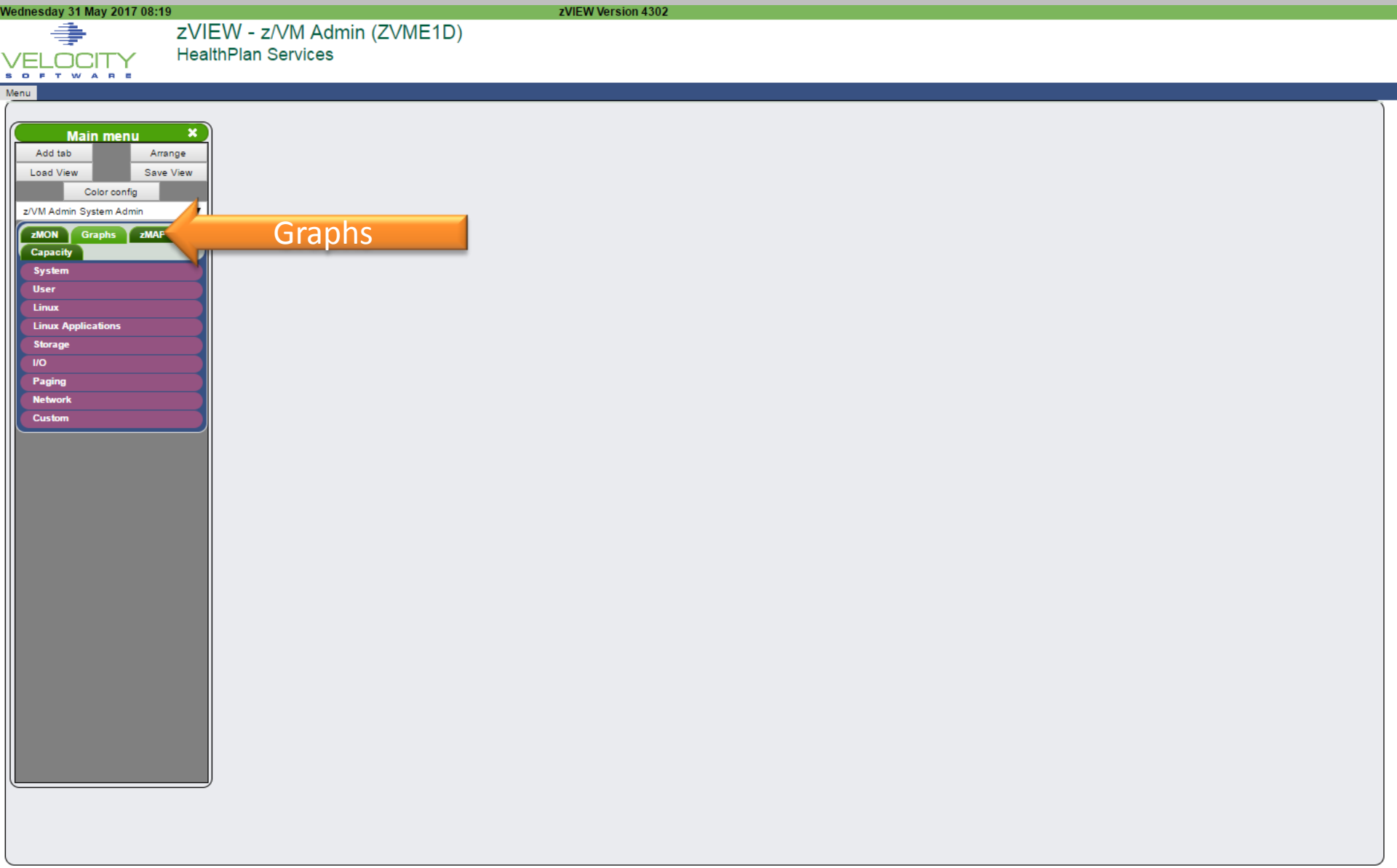
Really? You Forgot?

http://zvmr1a:8080/ZVIEW/ZVIEW.CGI?view=LUWCLAS&menu=closed

How do you save a view in zVIEW?




Wednesday 31 May 2017 08:19
zVIEW Version 4302
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
Menu
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
Service Level Analysis
User
Shared File System
CPU
Main Storage
Paging and Spooling
Input/Output Subsystem
Network
Linux Reports
Linux Application Reports
VSE
Screen Index
Emulation
zALERT Definitions
zOPERATOR
zTUNE
Custom Samples


Wednesday 31 May 2017 08:19
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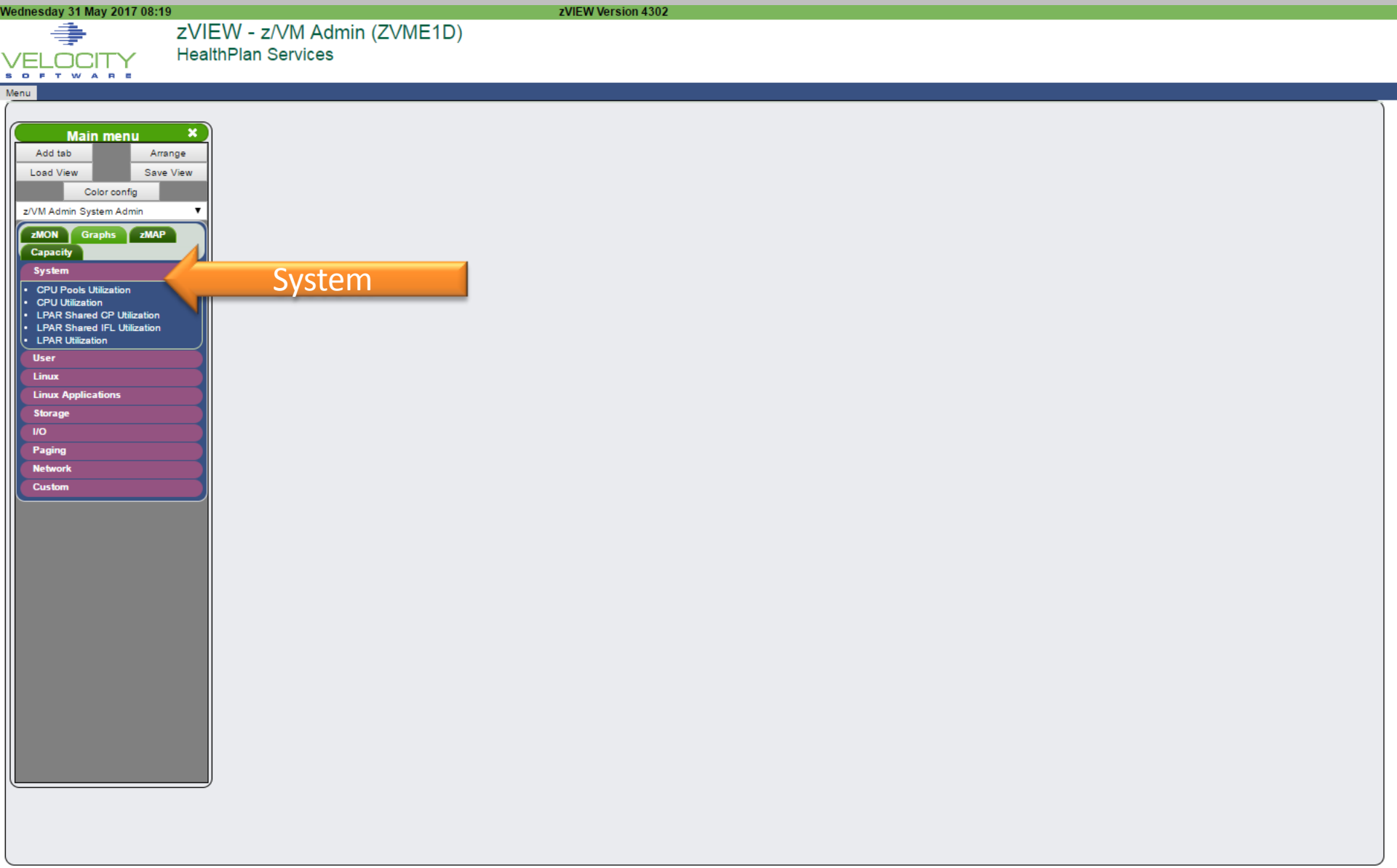
Capacity
System
User
Linux
Linux Applications
Storage
I/O
Paging
Network
Custom
Graphs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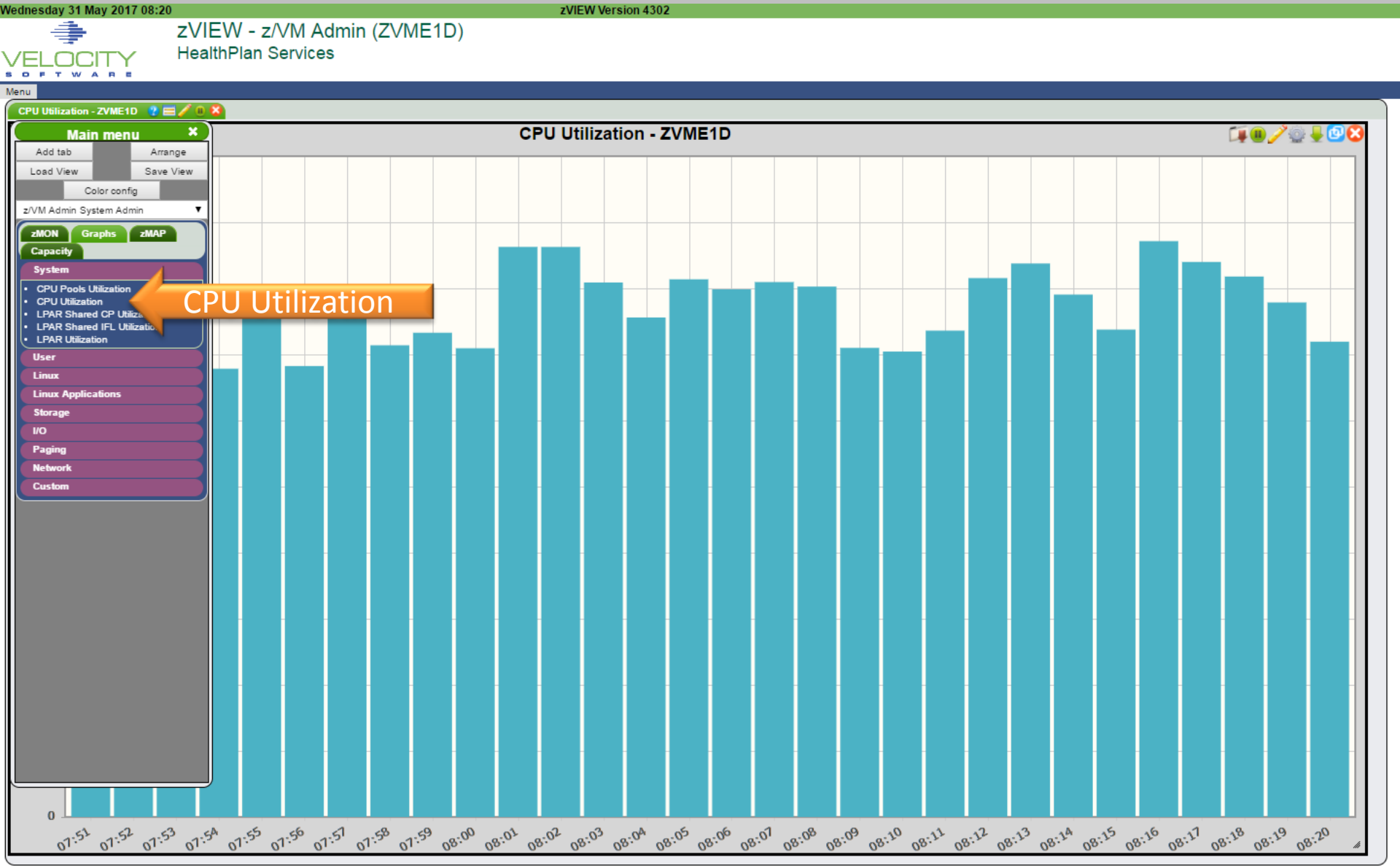
zMON
Graphs
zMAP
Capacity
System
CPU Pools Utilization
CPU Utilization
LPAR Shared CP Utilization
LPAR Shared IFL Utilization
LPAR Utilization
User
Linux
Linux Applications
Storage
I/O
Paging
Network
Custom
System


Wednesday 31 May 2017 08:20
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VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
CPU Utilization - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
CPU Pools Utilization
CPU Utilization
LPAR Shared CP Utiliz
LPAR Shared IFL Utilizatio
LPAR Utilization
User
Linux
Linux Applications
Storage
I/O
Paging
Network
Custom
CPU Utilization
CPU Utilization - ZVME1D
0
07:51
07:52
07:53
07:54
07:55
07:56
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
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08:12
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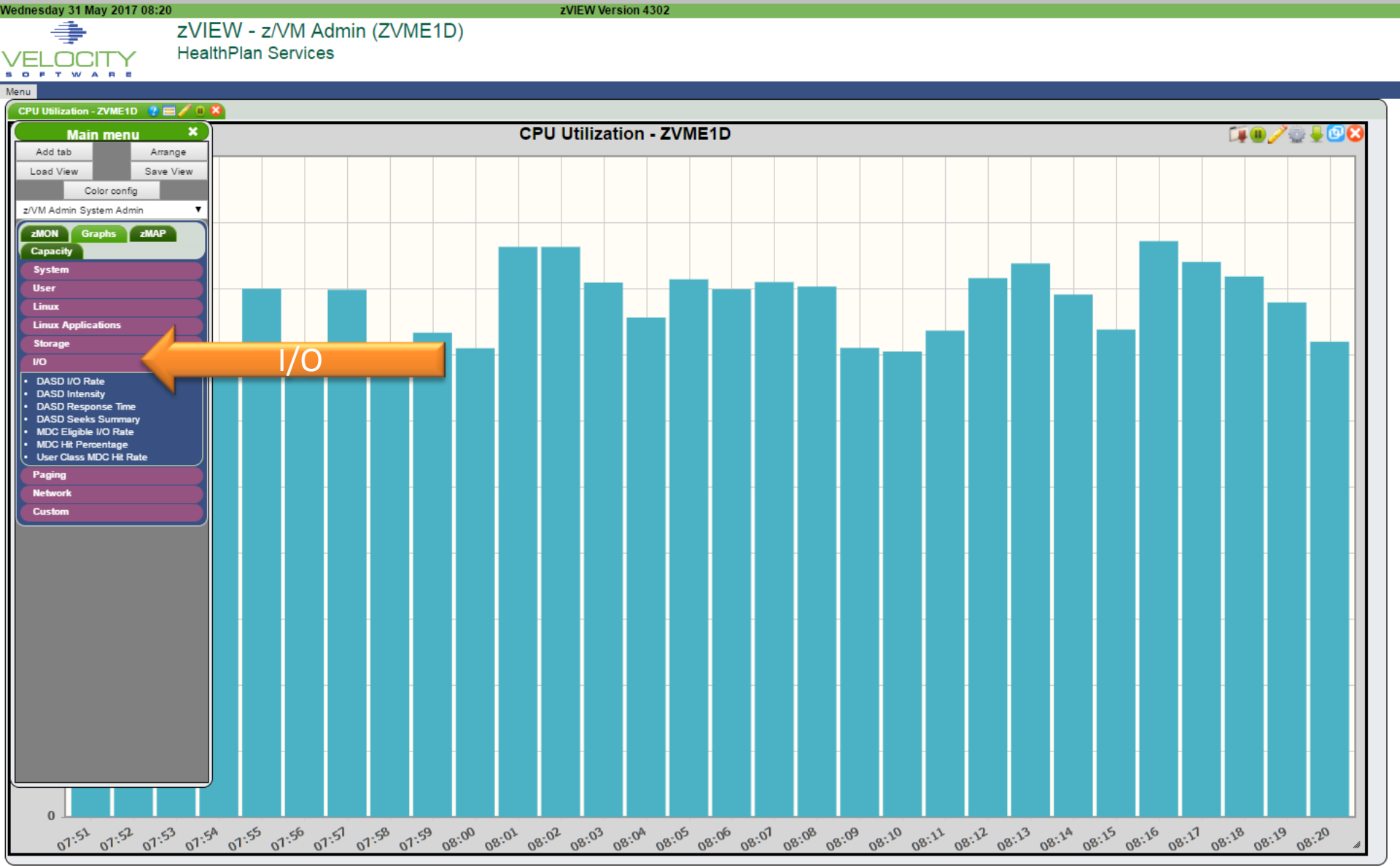
08:14
08:15
08:16
08:17
08:18
08:19
08:20


Wednesday 31 May 2017 08:20
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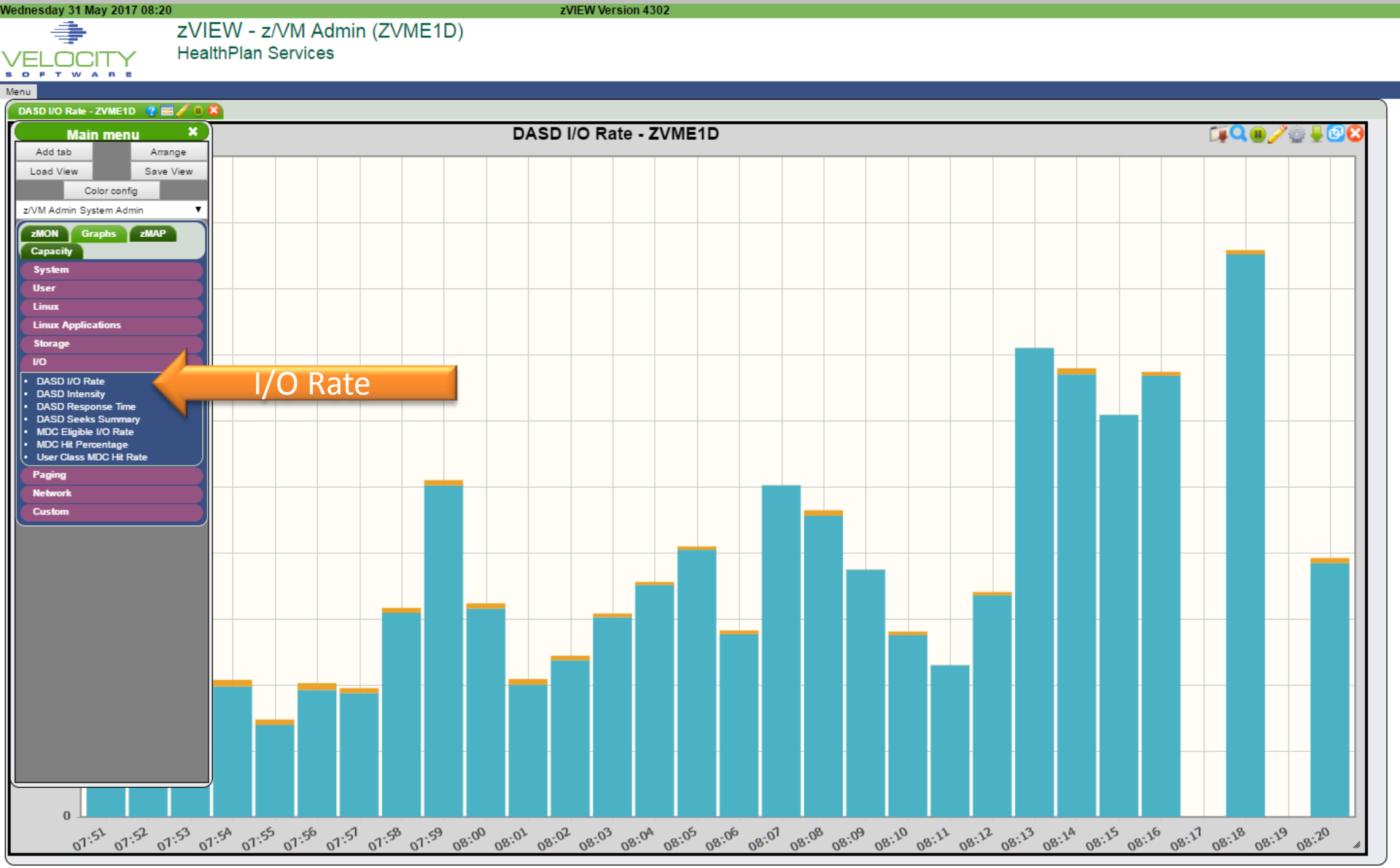
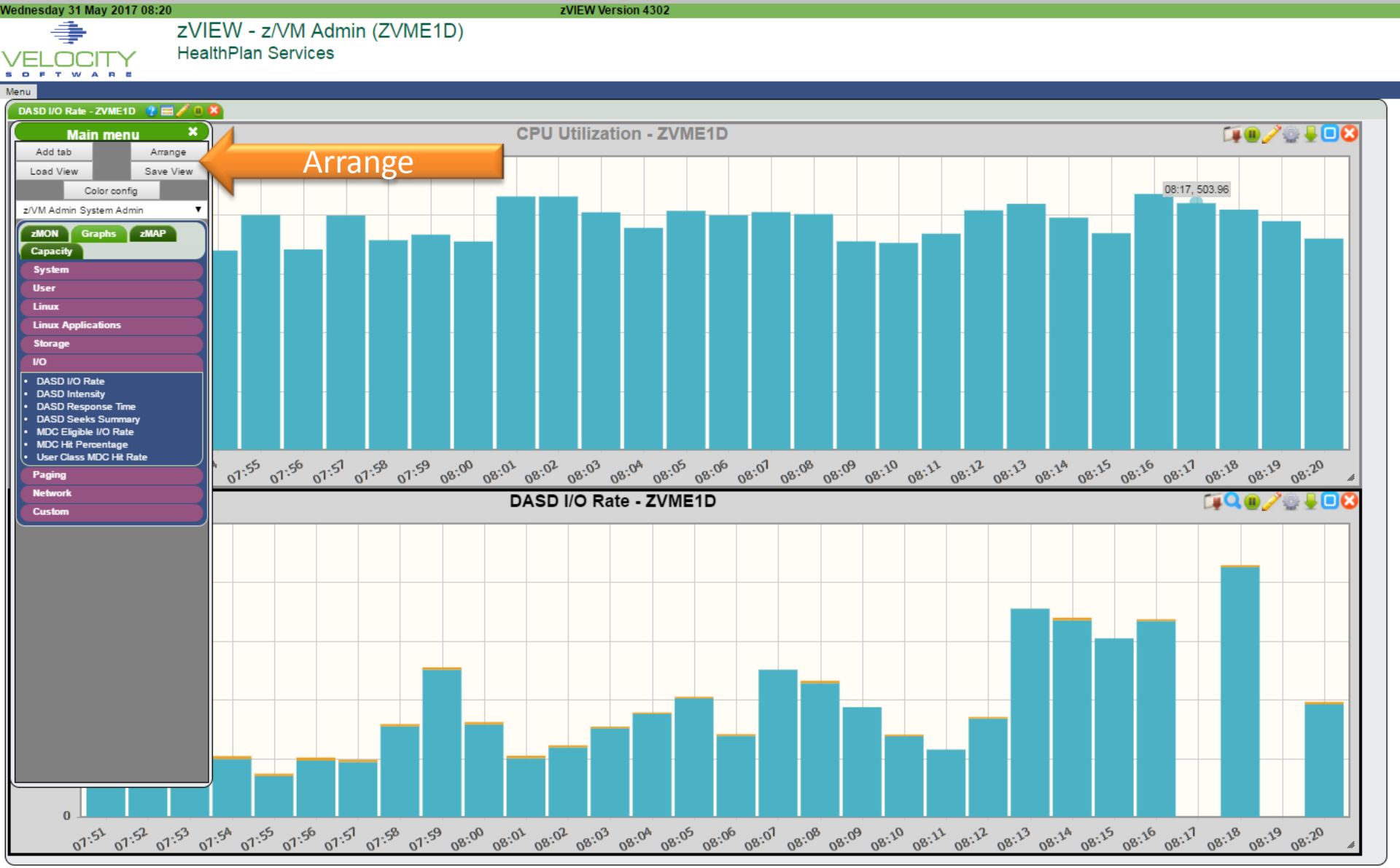
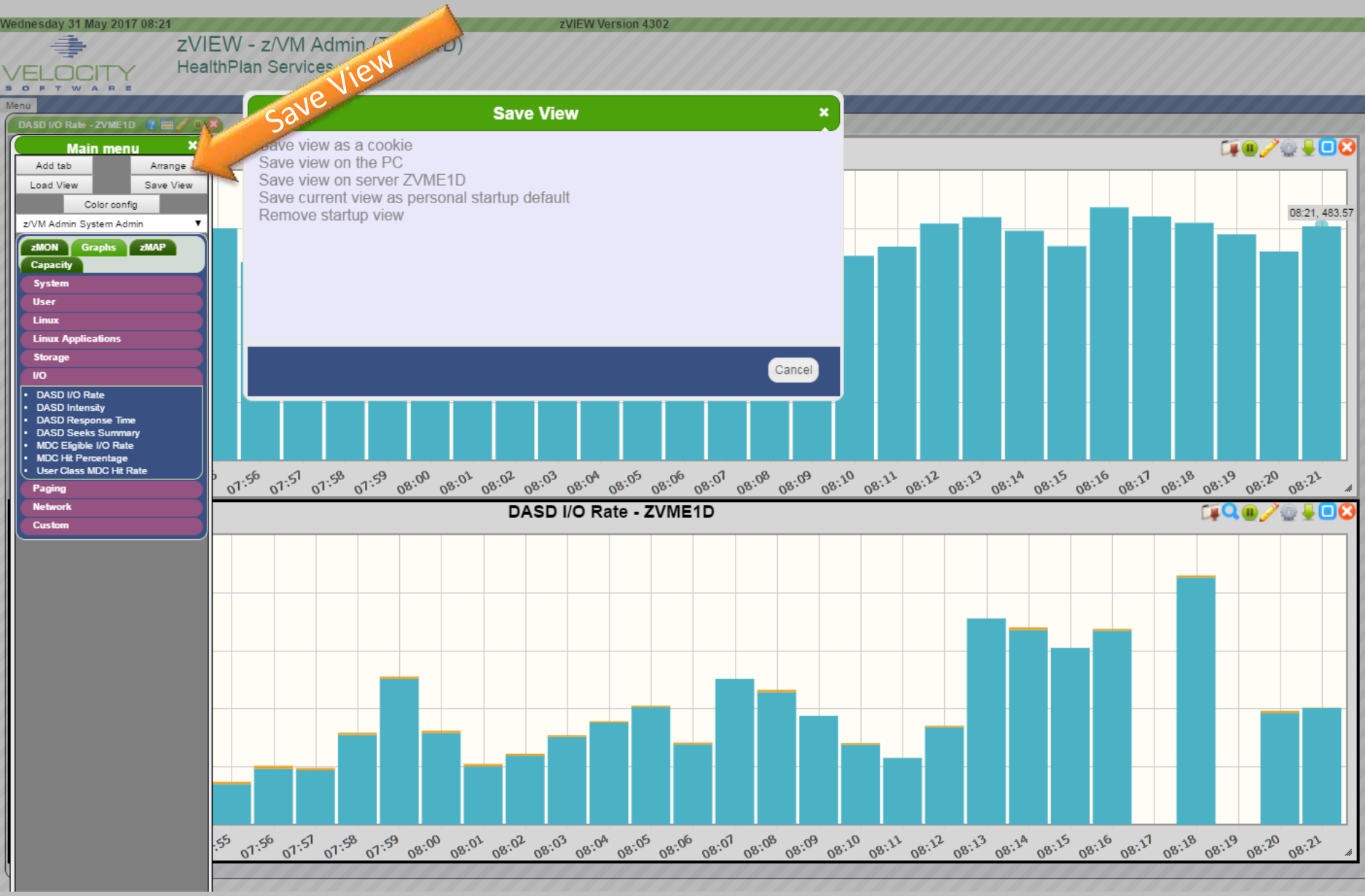
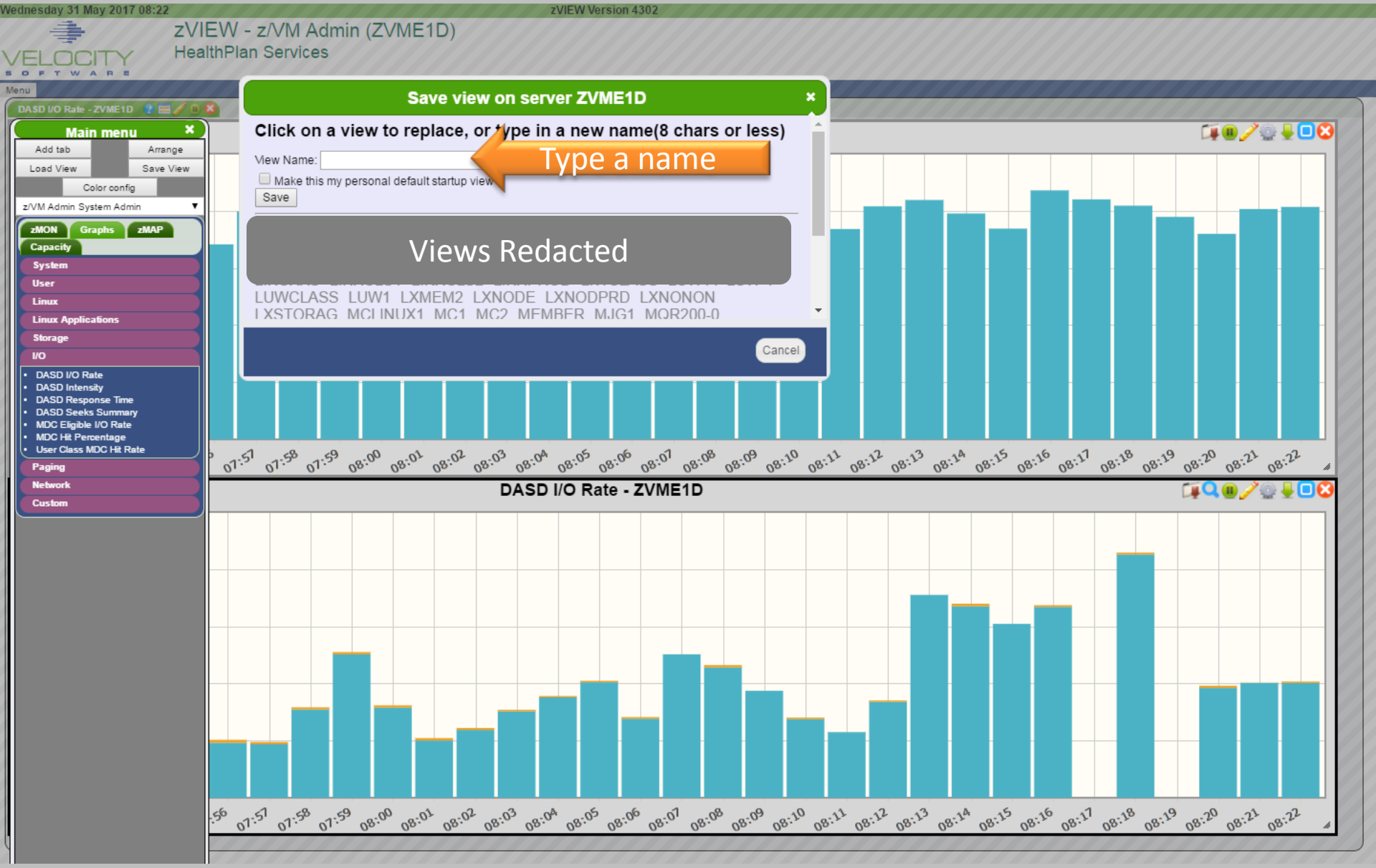
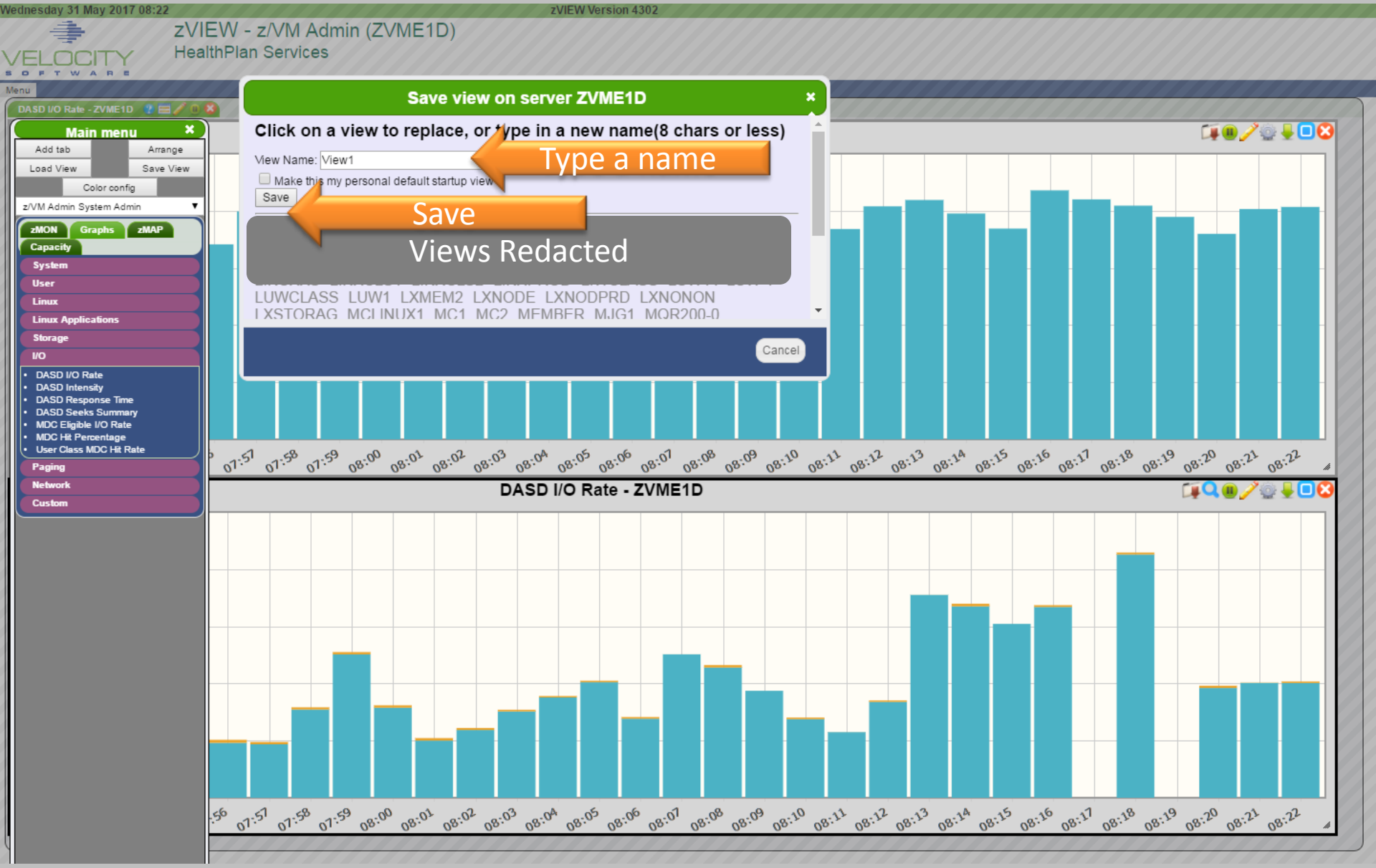
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
CPU Utilization - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
I/O
CPU Utilization - ZVME1D
0
07:51
07:52
07:53
07:54
07:55
07:56
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20

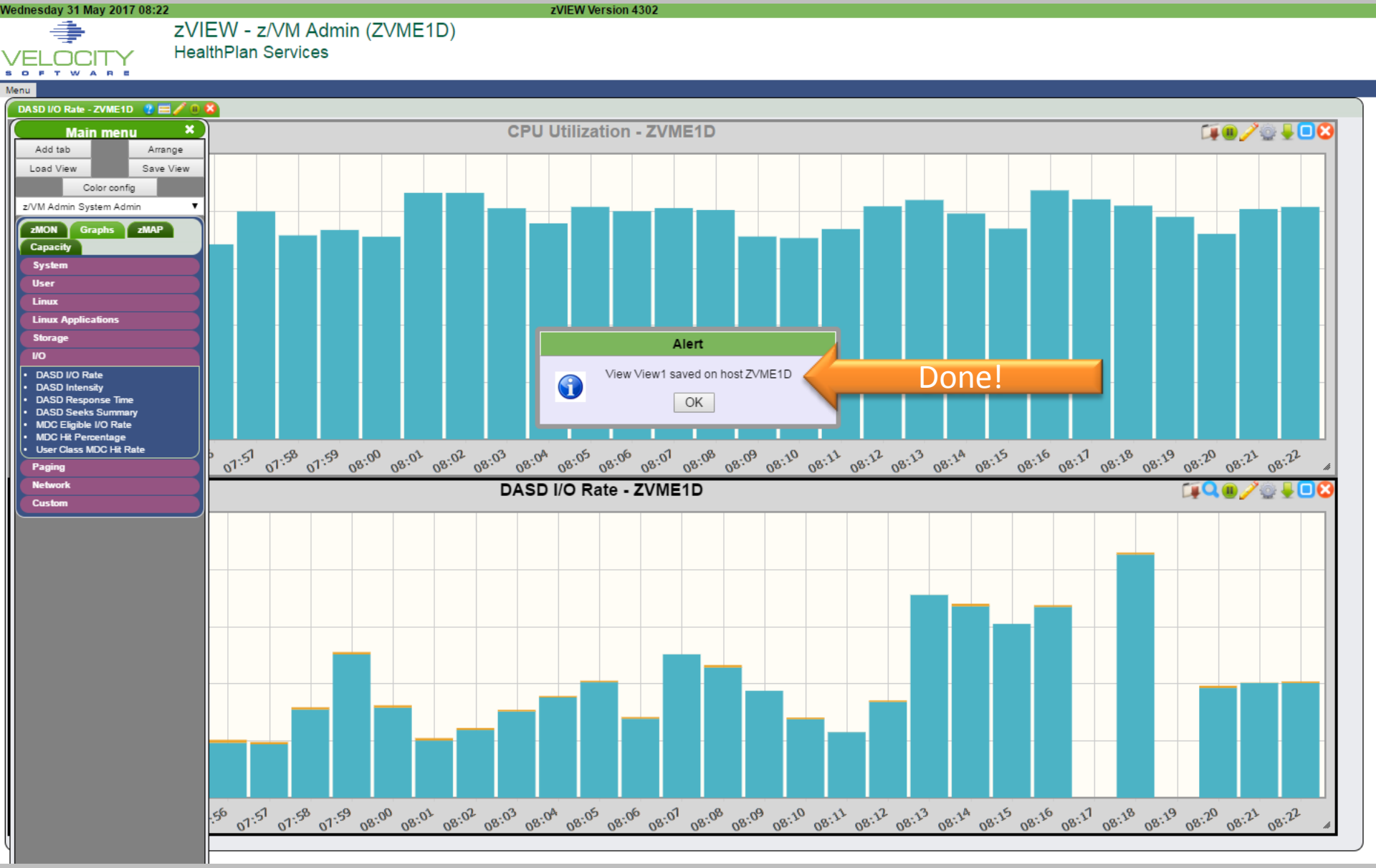

Wednesday 31 May 2017 08:20
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
I/O Rate
DASD I/O Rate - ZVME1D
0
07:51
07:52
07:53
07:54
07:55
07:56
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20

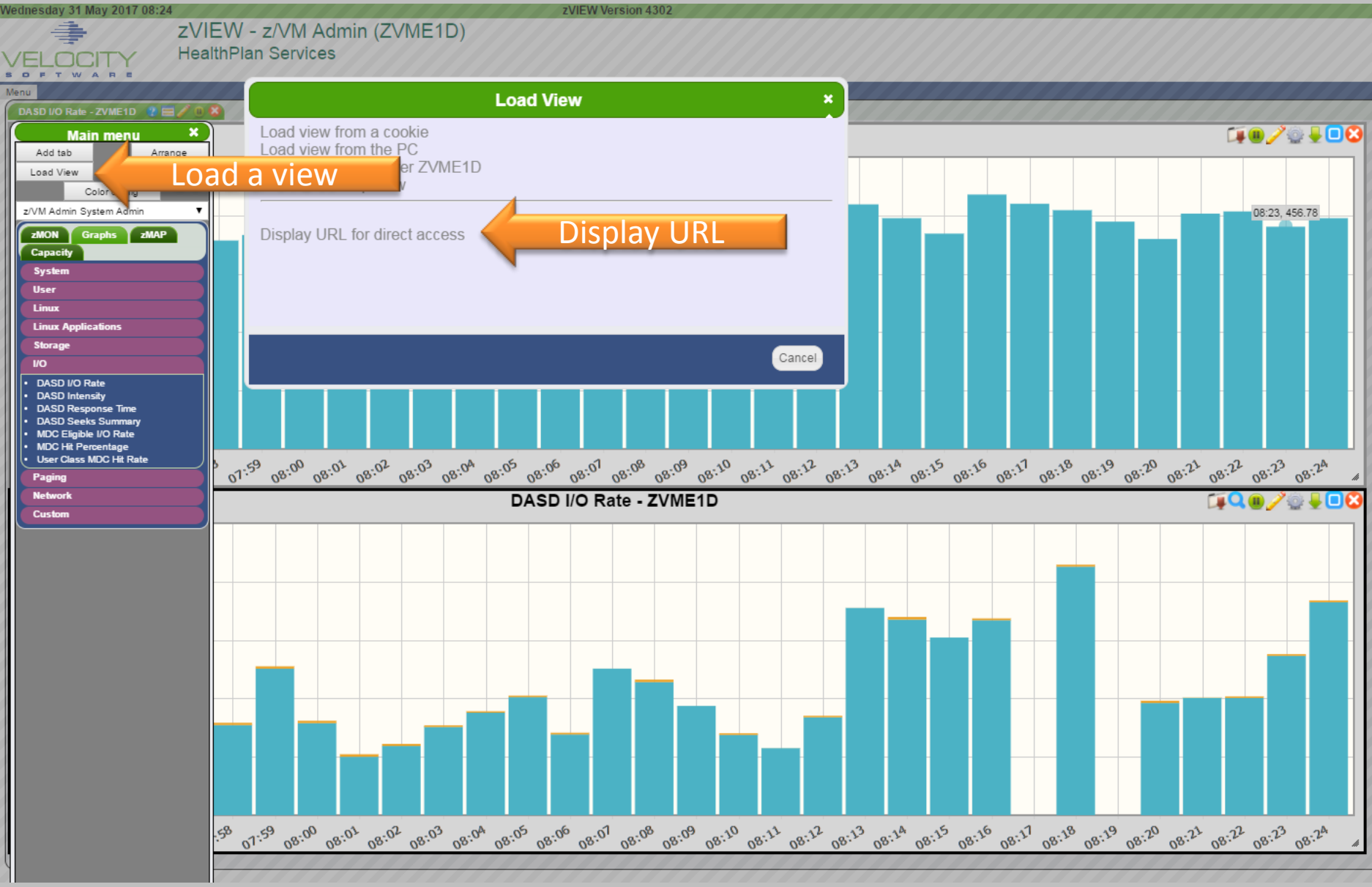

Wednesday 31 May 2017 08:20
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
Arrange
CPU Utilization - ZVME1D
08:17, 503.96
DASD I/O Rate - ZVME1D
0
07:51
07:52
07:53
07:54
07:55
07:56
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20

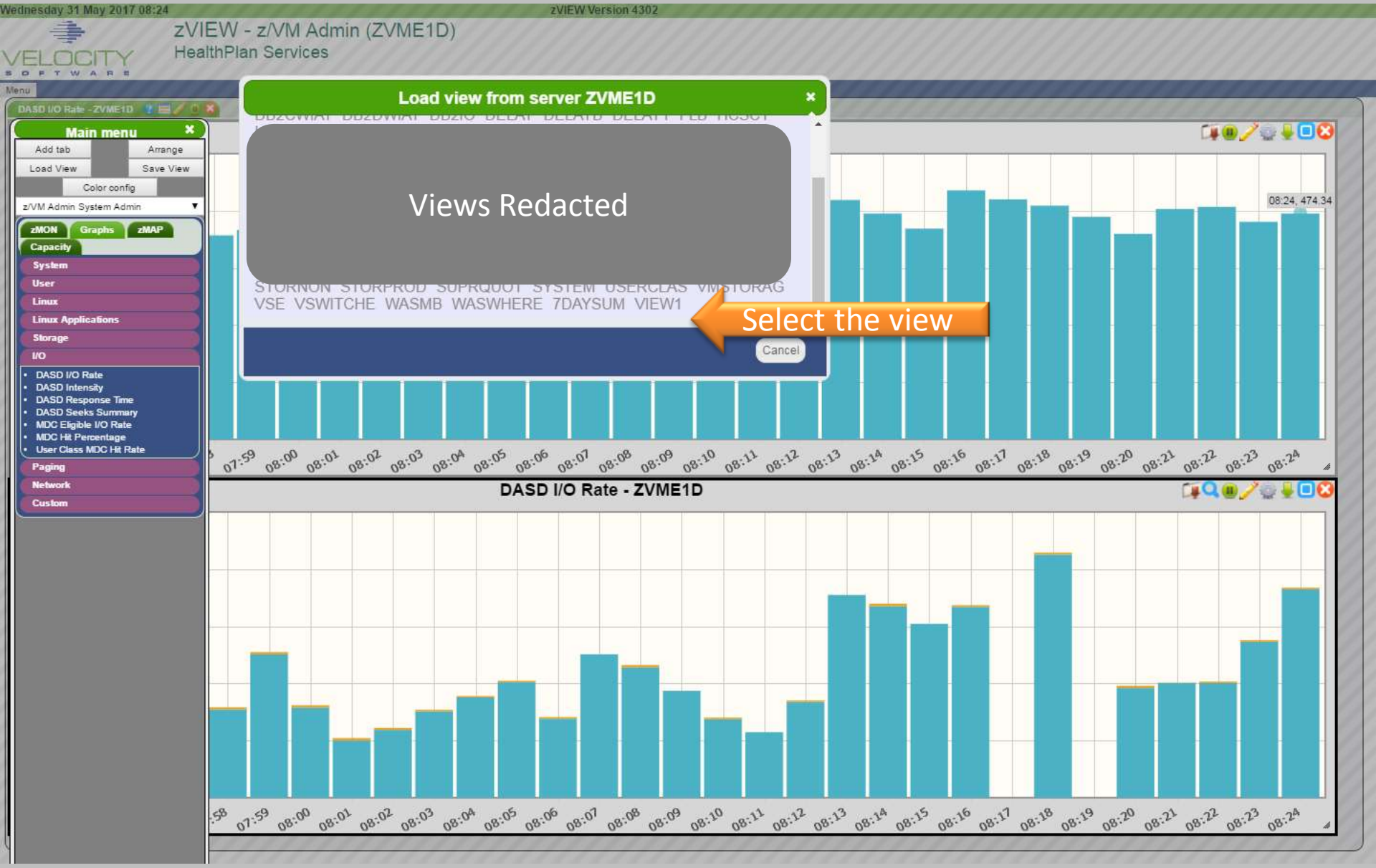

Wednesday 31 May 2017 08:21
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin
HealthPlan Services
Menu
Save View
Save View
Save view as a cookie
Save view on the PC
Save view on server ZVME1D
Save current view as personal startup default
Remove startup view
Cancel
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
08:21, 483.57
DASD I/O Rate - ZVME1D

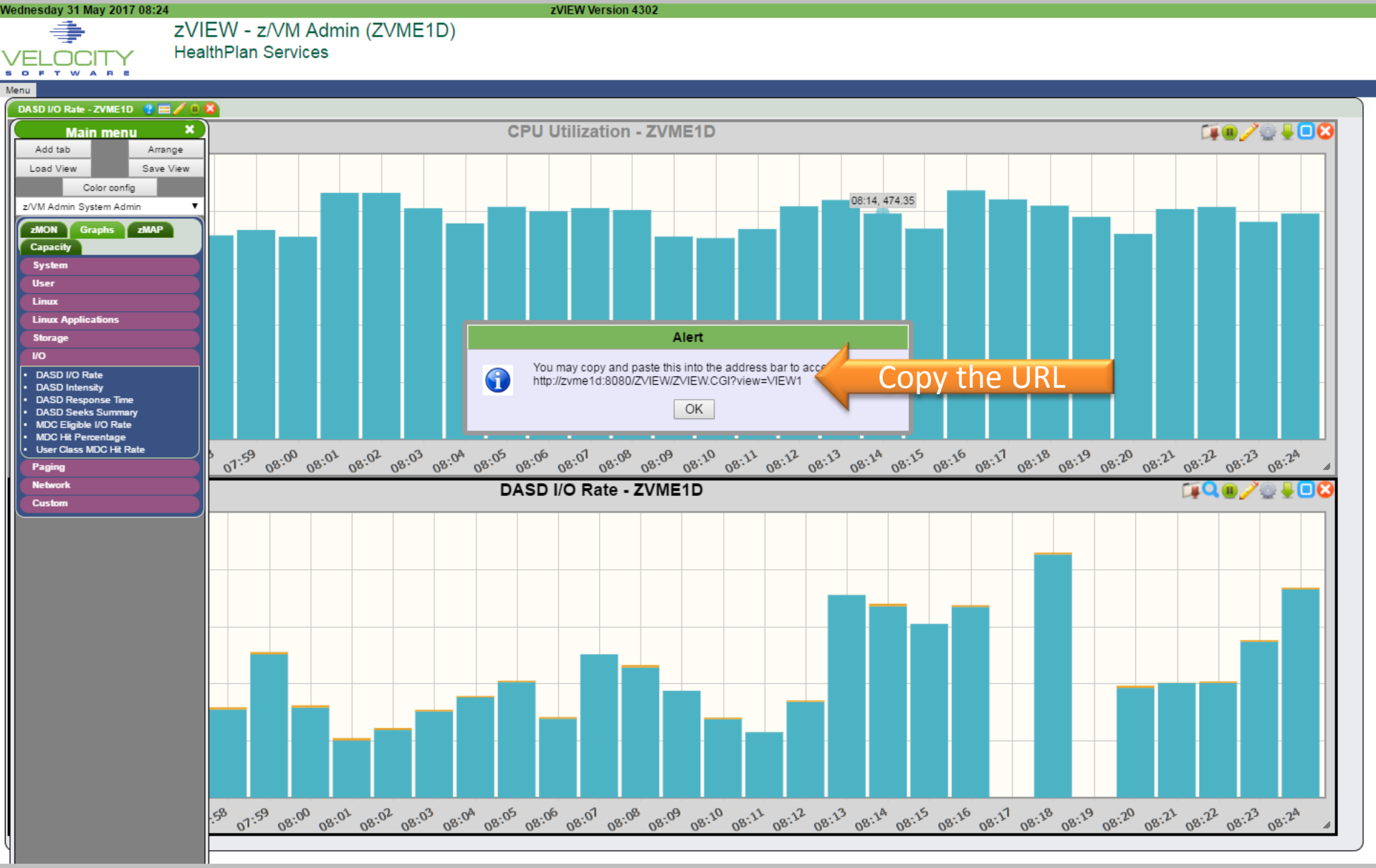

Wednesday 31 May 2017 08:22
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
Save view on server ZVME1D
Click on a view to replace, or type in a new name(8 chars or less)
View Name:
Type a name
Make this my personal default startup view
Save
Views Redacted
LUWCLASS LUW1 LXMEM2 LXNODE LXNODPRD LXNONON
LXSTORAG MCLINUX1 MC1 MC2 MEMBER MJG1 MQR200-0
Cancel
DASD I/O Rate - ZVME1D
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20
08:21
08:22


Wednesday 31 May 2017 08:22
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
Save view on server ZVME1D
Click on a view to replace, or type in a new name(8 chars or less)
View Name: View1
Make this my personal default startup view
Save
Type a name
Save
Views Redacted
LUWCLASS LUW1 LXMEM2 LXNODE LXNODPRD LXNONON
LXSTORAG MCLINUX1 MC1 MC2 MEMBER MJG1 MQR200-0
Cancel
DASD I/O Rate - ZVME1D
07:57
07:58
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20
08:21
08:22


Wednesday 31 May 2017 08:22
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
CPU Utilization - ZVME1D
Alert
View View1 saved on host ZVME1D
OK
Done!
DASD I/O Rate - ZVME1D


Wednesday 31 May 2017 08:24
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Load a view
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
Load View
Load view from a cookie
Load view from the PC
Display URL for direct access
Display URL
Cancel
08:23, 456.78
DASD I/O Rate - ZVME1D


Wednesday 31 May 2017 08:24
zVIEW Version 4302
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Load view from server ZVME1D
Views Redacted
VSE VSWITCHE WASMB WASWHERE 7DAYSUM VIEW1
Select the view
Cancel
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
08:24, 474.34
DASD I/O Rate - ZVME1D


Wednesday 31 May 2017 08:24
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
DASD I/O Rate - ZVME1D
Main menu
Add tab
Arrange
Load View
Save View
Color config
z/VM Admin System Admin
zMON
Graphs
zMAP
Capacity
System
User
Linux
Linux Applications
Storage
I/O
DASD I/O Rate
DASD Intensity
DASD Response Time
DASD Seeks Summary
MDC Eligible I/O Rate
MDC Hit Percentage
User Class MDC Hit Rate
Paging
Network
Custom
CPU Utilization - ZVME1D
08:14, 474.35
Alert
You may copy and paste this into the address bar to acc
http://zvme1d:8080/ZVIEW/ZVIEW.CGI?view=VIEW1
OK
Copy the URL
DASD I/O Rate - ZVME1D
07:59
08:00
08:01
08:02
08:03
08:04
08:05
08:06
08:07
08:08
08:09
08:10
08:11
08:12
08:13
08:14
08:15
08:16
08:17
08:18
08:19
08:20
08:21
08:22
08:23
08:24


Alert
You may copy and paste this into the address bar to access directly
http://zvme1d:8080/ZVIEW/ZVIEW.CGI?view=VIEW1
OK
Easy!!

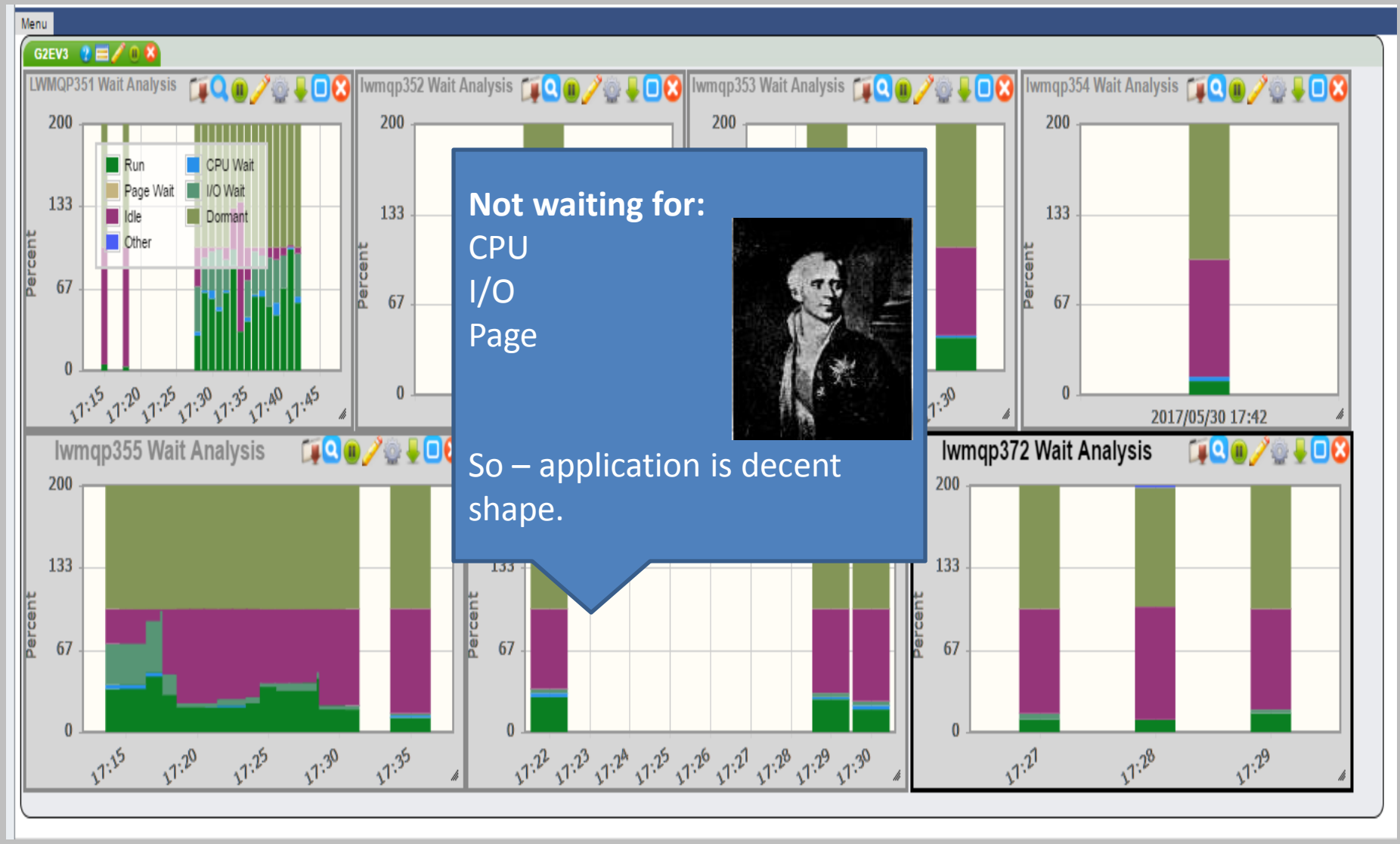
Now I get a call from Paul

Paul - WAS

"Mike, I need a display that shows the Delay Analysis in the G2E-V3 application."

Paul does not care about DB2

Paul does not care about CPU or IFLs



http://zvmr1b:8080/ZVIEW/ZVIEW.CGI?view=G2EV3&menu=closed

Six months later….

"Hey Mike, what <u>was the name</u> of that display that shows the Wait States for the G2E-V3 production application."

Really? You Forgot?

http://zvmr1b:8080/ZVIEW/ZVIEW.CGI?view=G2EV3&menu=closed


Hey Mike, Please make me a display for _____
Here is your URL _____
Hey Mike, I forgot the URL for _____

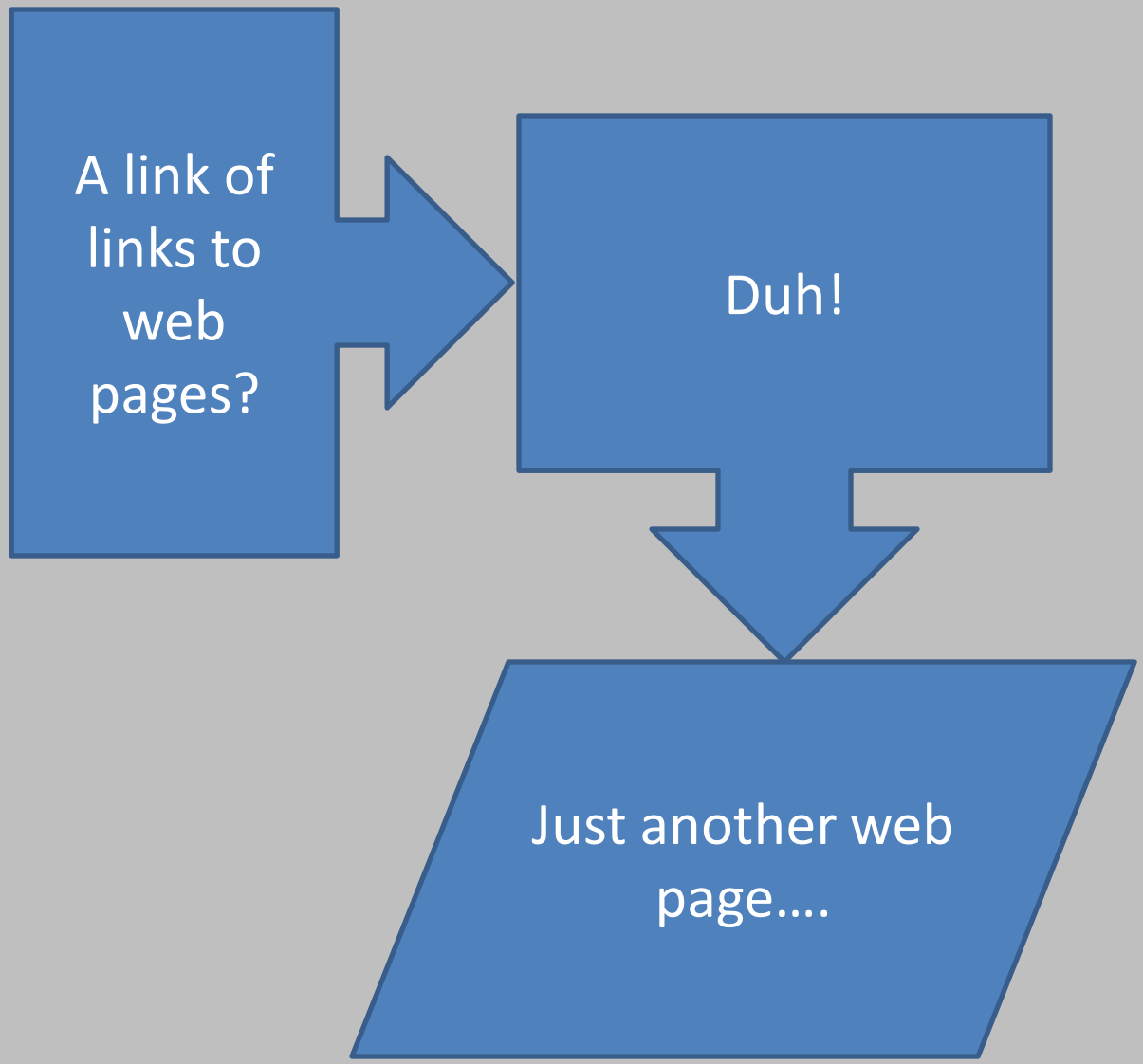
There has to be a better way….

Categorize the links

Add more links in the future

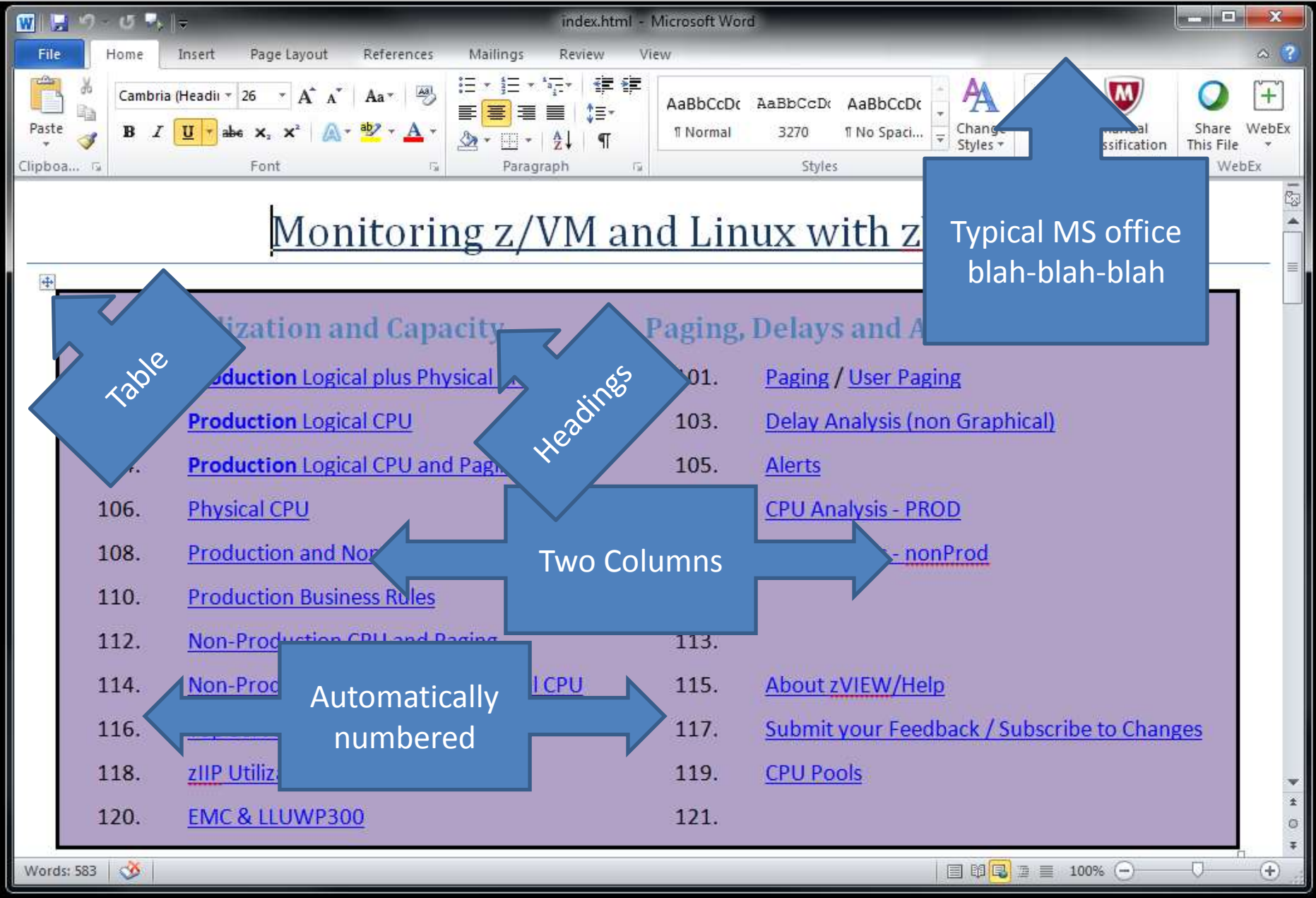
Put all the links in one place

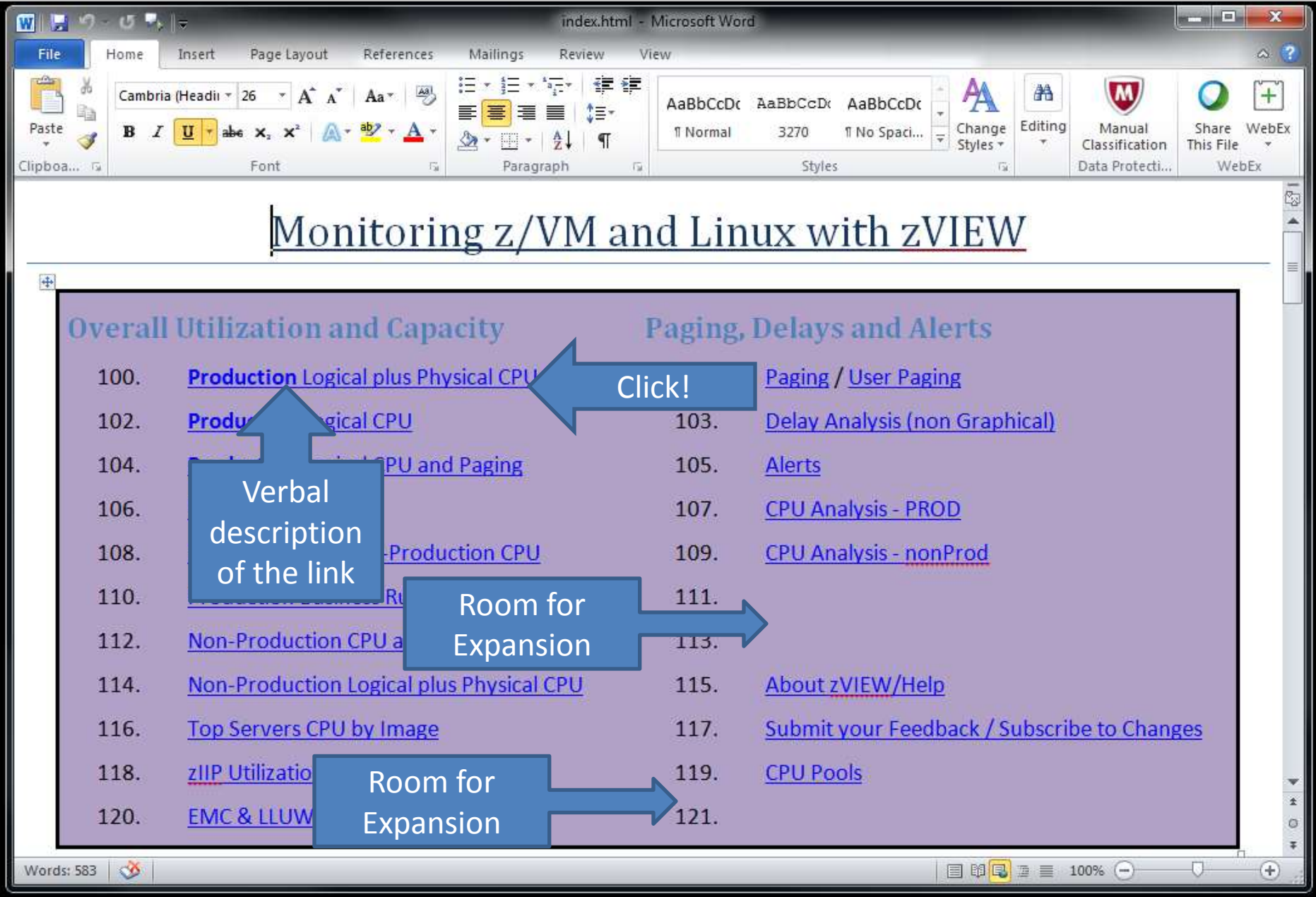

Link of
Links!!!!


A link of links to web pages?
Duh!
Just another web page….

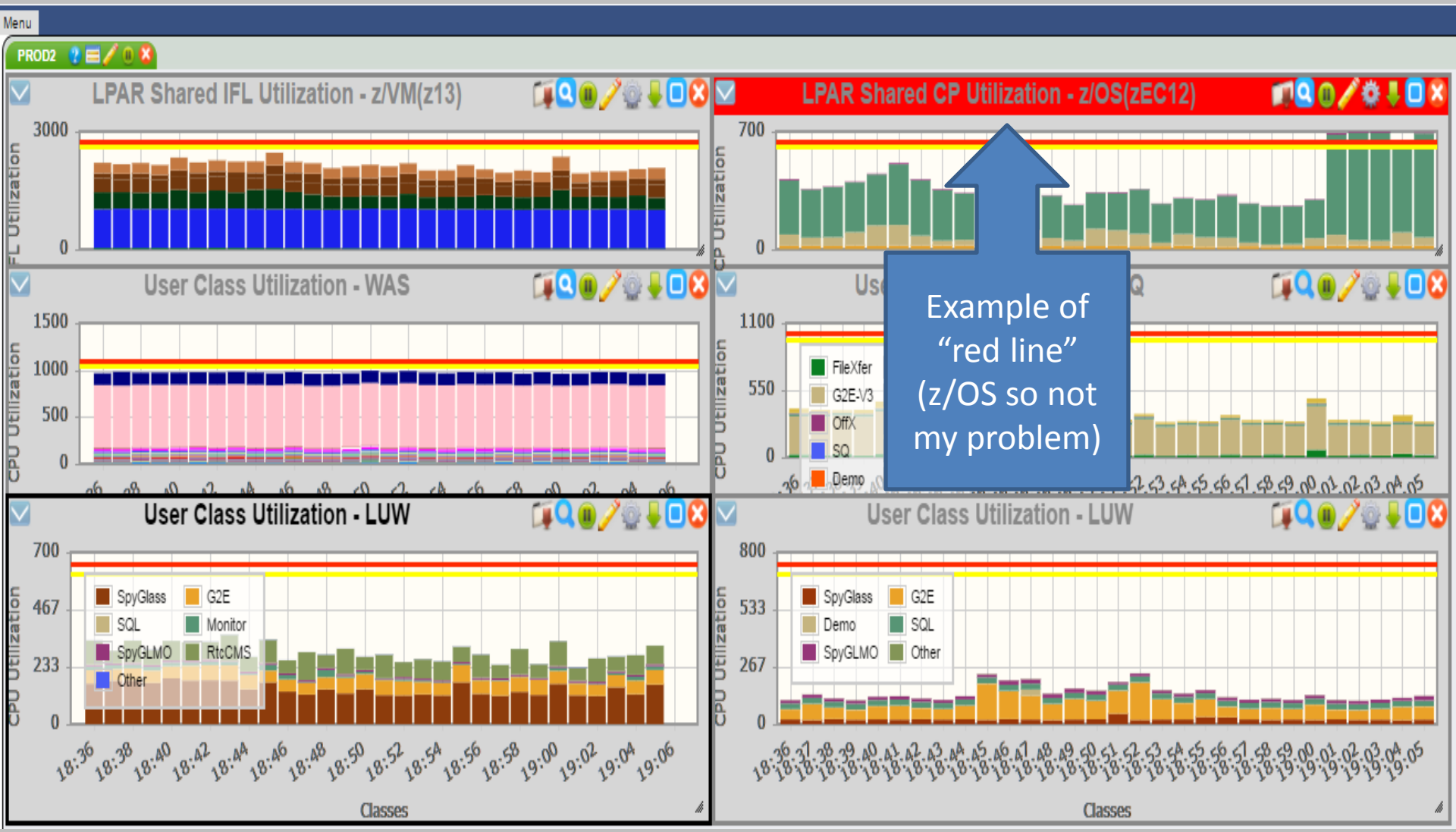
Get to work, keep it simple

Make a Web Page:
Do what you know

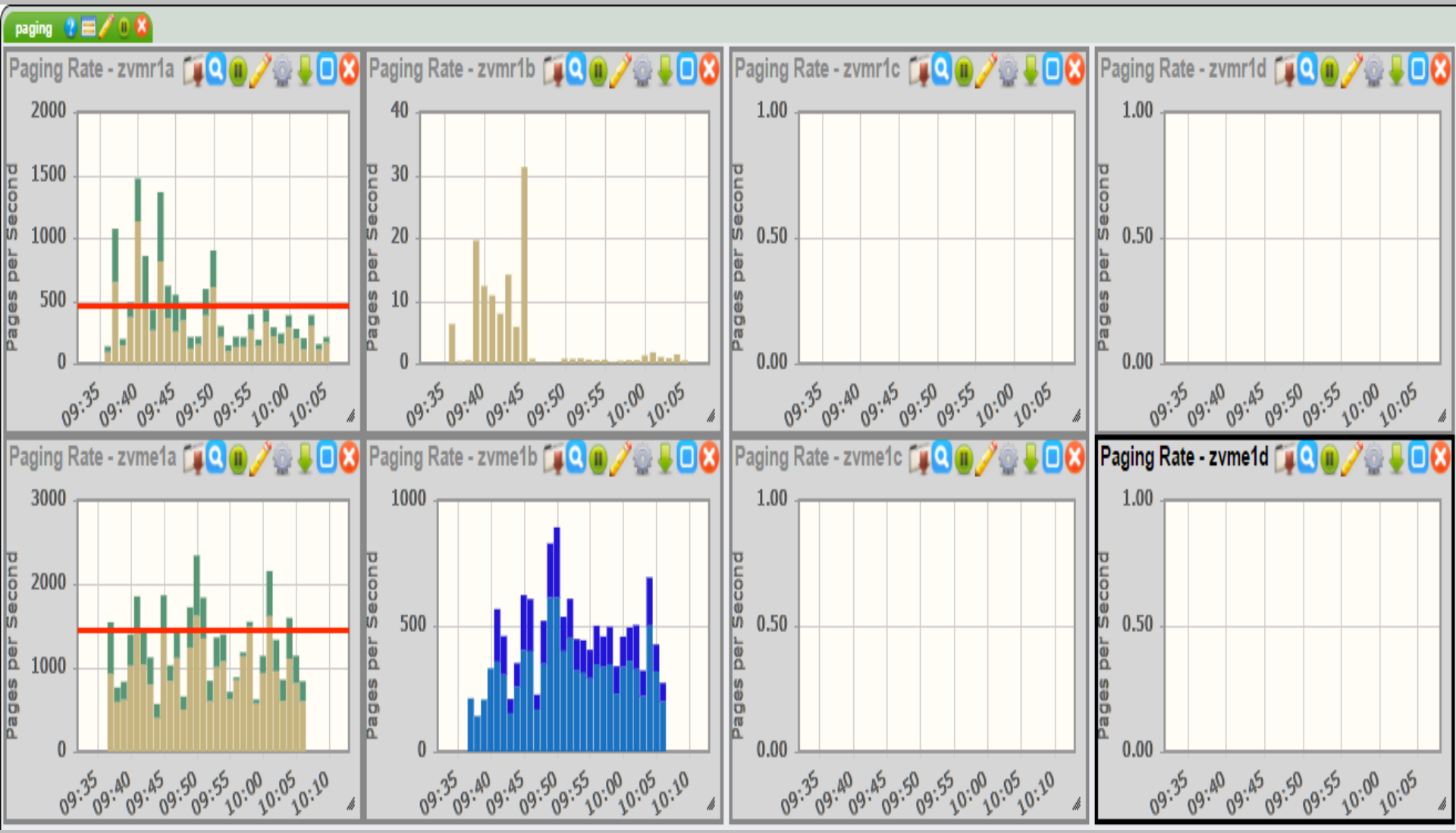

index.html - Microsoft Word
File
Home
Insert
Page Layout
References
Mailings
Review
View
Paste
Font
Paragraph
Styles
Share This File
WebEx
Monitoring z/VM and Linux with z
Typical MS office blah-blah-blah
Table
Headings
Two Columns
Automatically numbered
Production Logical plus Physical
Production Logical CPU
Production Logical CPU and Pag
Physical CPU
Production and Nor
Production Business Rules
Non-Production CPU and Paging
Non-Prod
zIIP Utiliz
EMC & LLUWP300
101. Paging / User Paging
103. Delay Analysis (non Graphical)
105. Alerts
CPU Analysis - PROD
- nonProd
113.
115. About zVIEW/Help
117. Submit your Feedback / Subscribe to Changes
119. CPU Pools
121.
Words: 583
100%


index.html - Microsoft Word
File
Home
Insert
Page Layout
References
Mailings
Review
View
Monitoring z/VM and Linux with zVIEW
Overall Utilization and Capacity
Paging, Delays and Alerts
100. Production Logical plus Physical CPU
Paging / User Paging
103. Delay Analysis (non Graphical)
105. Alerts
107. CPU Analysis - PROD
109. CPU Analysis - nonProd
111.
113.
114. Non-Production Logical plus Physical CPU
115. About zVIEW/Help
116. Top Servers CPU by Image
117. Submit your Feedback / Subscribe to Changes
119. CPU Pools
121.
Click!
Verbal description of the link
Room for Expansion
Room for Expansion
Words: 583
100%

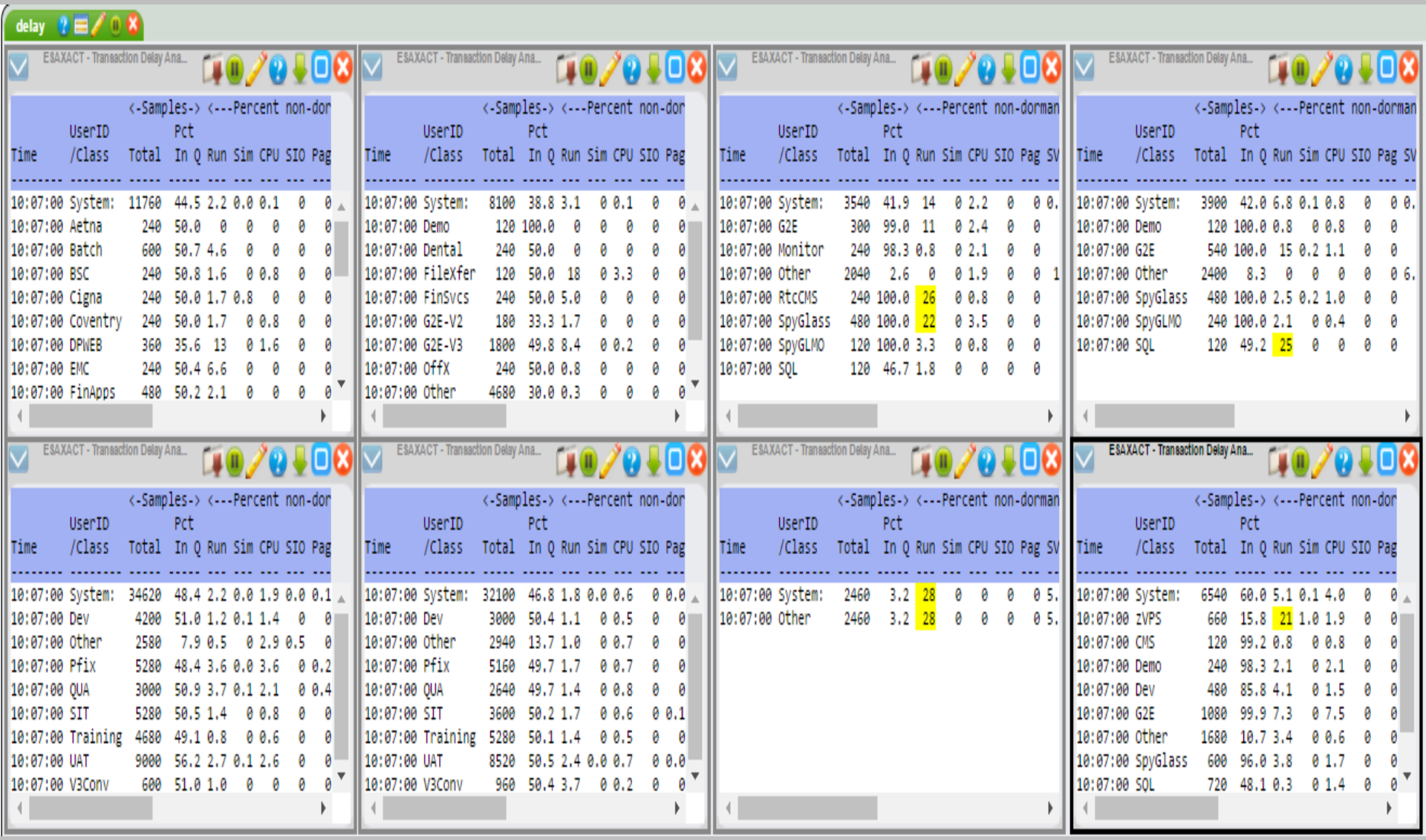
100. Production Logical plus Physical CPU



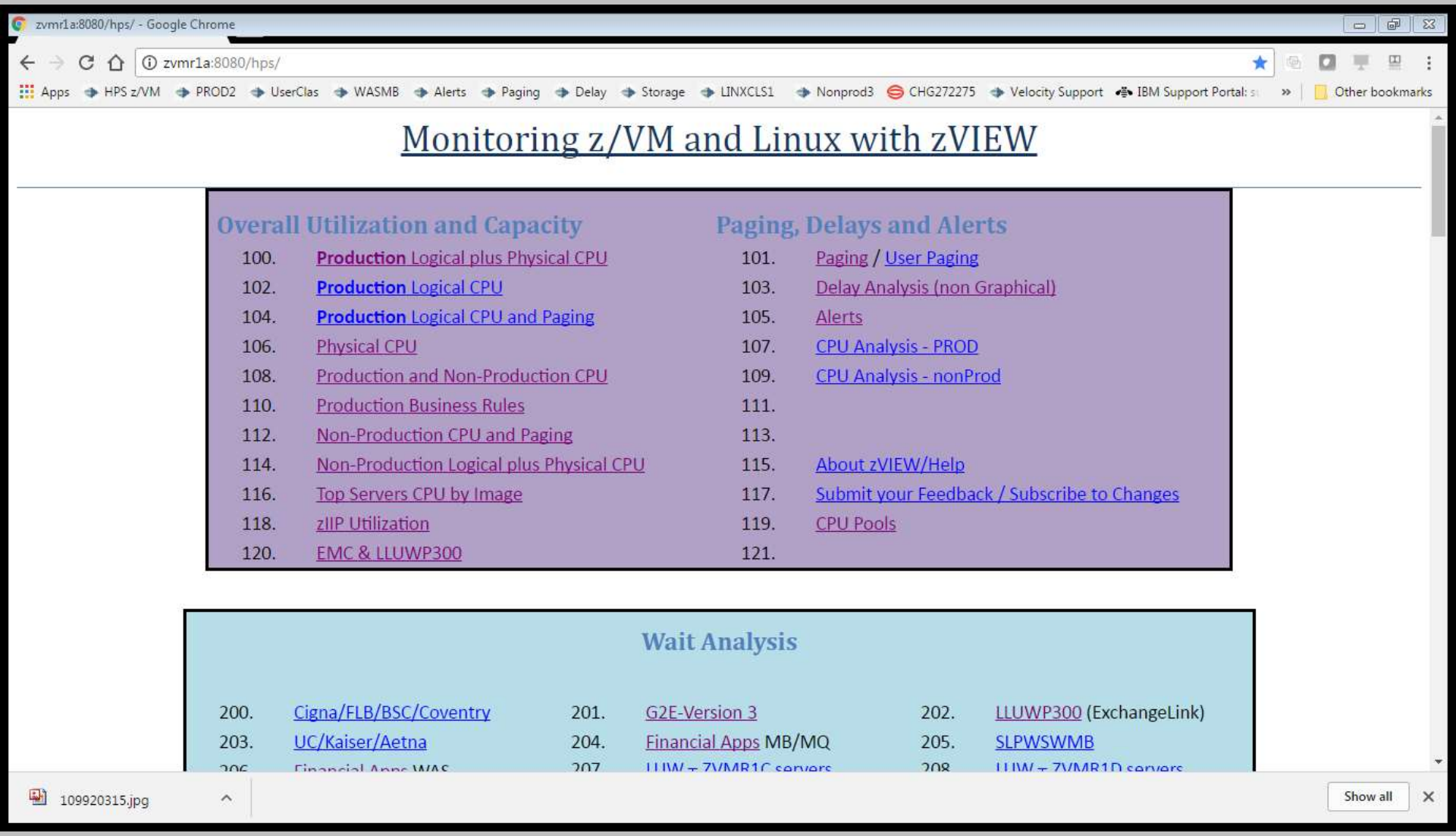
101. Paging


paging
Paging Rate - zvmr1a
Paging Rate - zvmr1b
Paging Rate - zvmr1c
Paging Rate - zvmr1d
Paging Rate - zvme1a
Paging Rate - zvme1b
Paging Rate - zvme1c
Paging Rate - zvme1d
Pages per Second
09:35
09:40
09:45
09:50
09:55
10:00
10:05
10:10

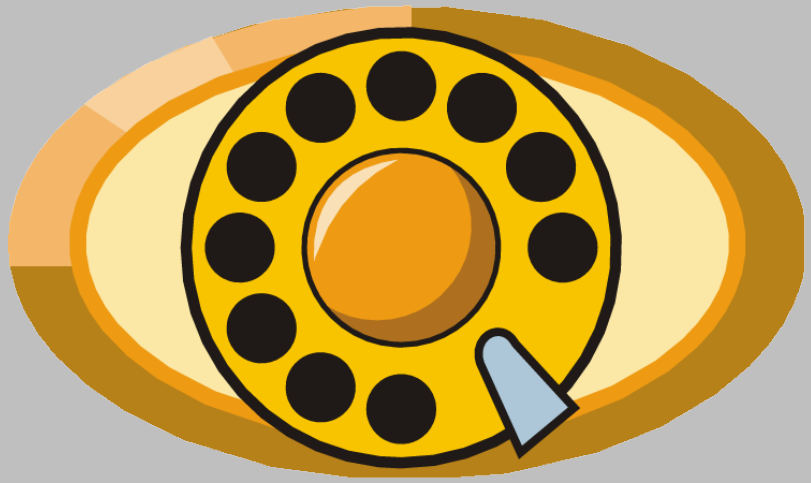
103. Non-graphical Wait States



http://zvmr1a:8080/hps/

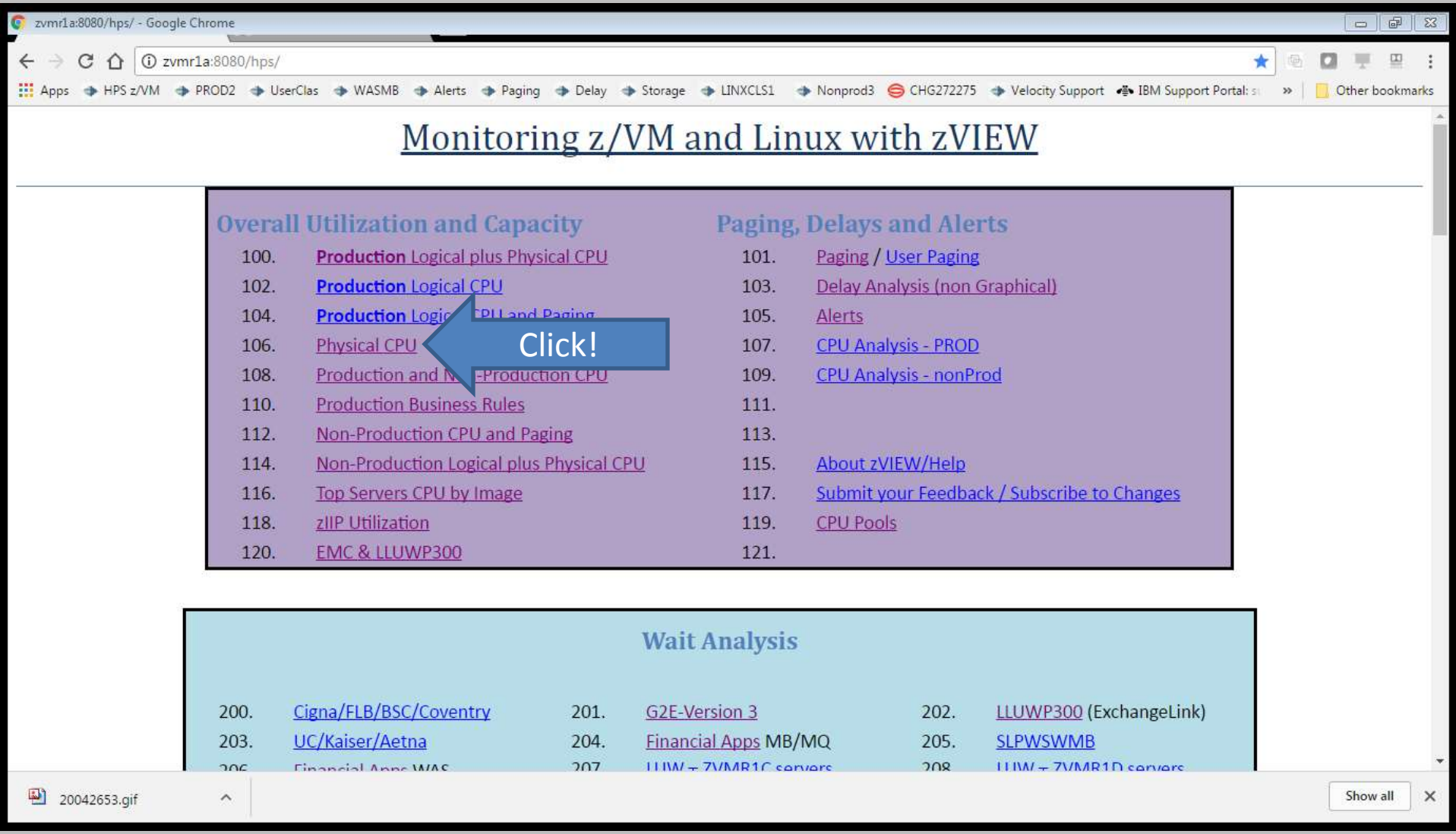


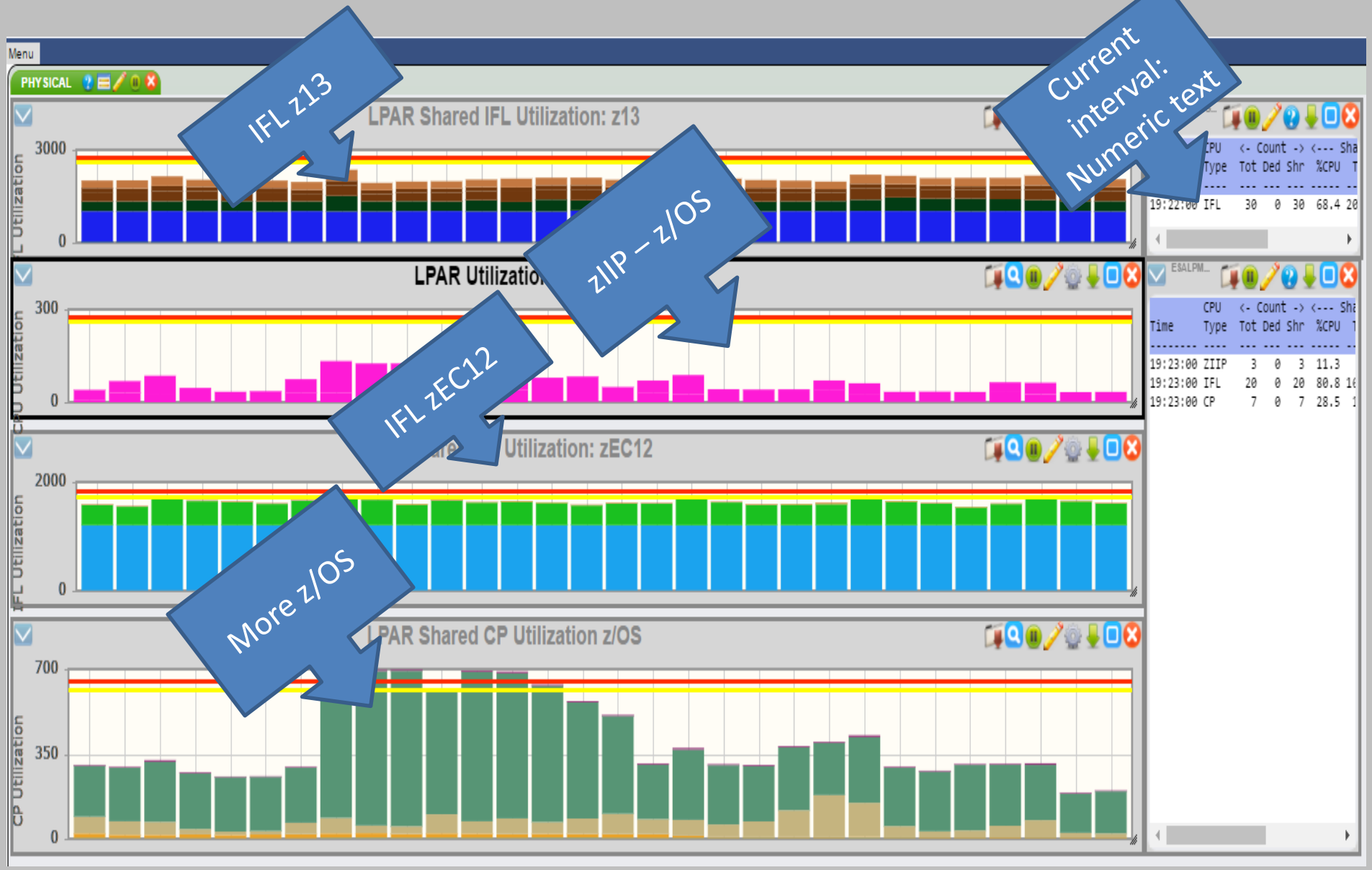
Why did I number the links?



Hey Mike, how do I see Physical CPU Utilization?

Go to the Link of Links and clock on #106


zvmr1a:8080/hps/ - Google Chrome
zvmr1a:8080/hps/
Apps
HPS z/VM
PROD2
UserClas
WASMB
Alerts
Paging
Delay
Storage
LINXCLS1
Nonprod3
CHG272275
Velocity Support
IBM Support Portal:
Other bookmarks
Monitoring z/VM and Linux with zVIEW
Overall Utilization and Capacity
100. Production Logical plus Physical CPU
102. Production Logical CPU
104. Production Logic CPU and Paging
106. Physical CPU
108. Production and N -Production CPU
110. Production Business Rules
112. Non-Production CPU and Paging
114. Non-Production Logical plus Physical CPU
116. Top Servers CPU by Image
118. zIIP Utilization
120. EMC & LLUWP300
Click!
Paging, Delays and Alerts
101. Paging / User Paging
103. Delay Analysis (non Graphical)
105. Alerts
107. CPU Analysis - PROD
109. CPU Analysis - nonProd
111.
113.
115. About zVIEW/Help
117. Submit your Feedback / Subscribe to Changes
119. CPU Pools
121.
Wait Analysis
200. Cigna/FLB/BSC/Coventry
201. G2E-Version 3
202. LLUWP300 (ExchangeLink)
203. UC/Kaiser/Aetna
204. Financial Apps MB/MQ
205. SLPWSWMB
20042653.gif
Show all


Menu
PHYSICAL
IFL z13
LPAR Shared IFL Utilization: z13
3000
0
Current interval: Numeric text
CPU Type <- Count -> Tot Ded Shr <--- %CPU
19:22:00 IFL 30 0 30 68.4
zIIP – z/OS
LPAR Utilizatio
300
0
Time CPU Type <- Count -> Tot Ded Shr <--- %CPU
19:23:00 ZIIP 3 0 3 11.3
19:23:00 IFL 20 0 20 80.8
19:23:00 CP 7 0 7 28.5
IFL zEC12
Utilization: zEC12
2000
0
More z/OS
LPAR Shared CP Utilization z/OS
700
350
0
CP Utilization

Section 100 - overview

Monitoring z/VM and Linux with zVIEW

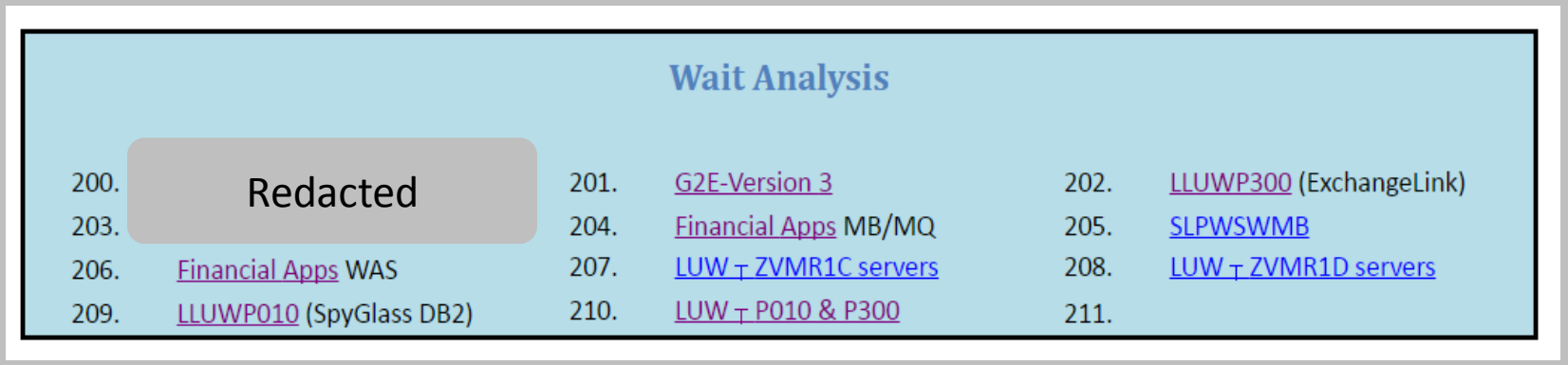
Overall Utilization and Capacity

100.	**Production** Logical plus Physical CPU
102.	**Production** Logical CPU
104.	**Production** Logical CPU and Paging
106.	Physical CPU
108.	Production and Non-Production CPU
110.	Production Business Rules
112.	Non-Production CPU and Paging
114.	Non-Production Logical plus Physical CPU
116.	Top Servers CPU by Image
118.	zIIP Utilization
120.	EMC & LLUWP300

Paging, Delays and Alerts

101.	Paging / User Paging
103.	Delay Analysis (non Graphical)
105.	Alerts
107.	CPU Analysis - PROD
109.	CPU Analysis - nonProd
111.	
113.	
115.	About zVIEW/Help
117.	Submit your Feedback / Subscribe to Changes
119.	CPU Pools
121.	

Section 200 – Wait Analysis



Section 300 – Middleware and LUW

Production Middleware and Applications			
300.	CPU By Class	301.	Memory Allocation
302.	Exchange Link V3 (WAS, MB, MQ, LUW)	303.	

Production DB2 LUW			
304.	Servers by Class	305.	ZVMR1C ┬ I/O Rate and Wait
306.	I/O Rate, intensity and response time	307.	ZVMR1D ┬ I/O Rate and Wait
308.	Linux Server Class CPU	309.	List LUW Servers by image
310.	LLUWP010 (SpyGlass DB2)	311.	LLUWP013 (RT & CMS)

Section 400 – Linux displays

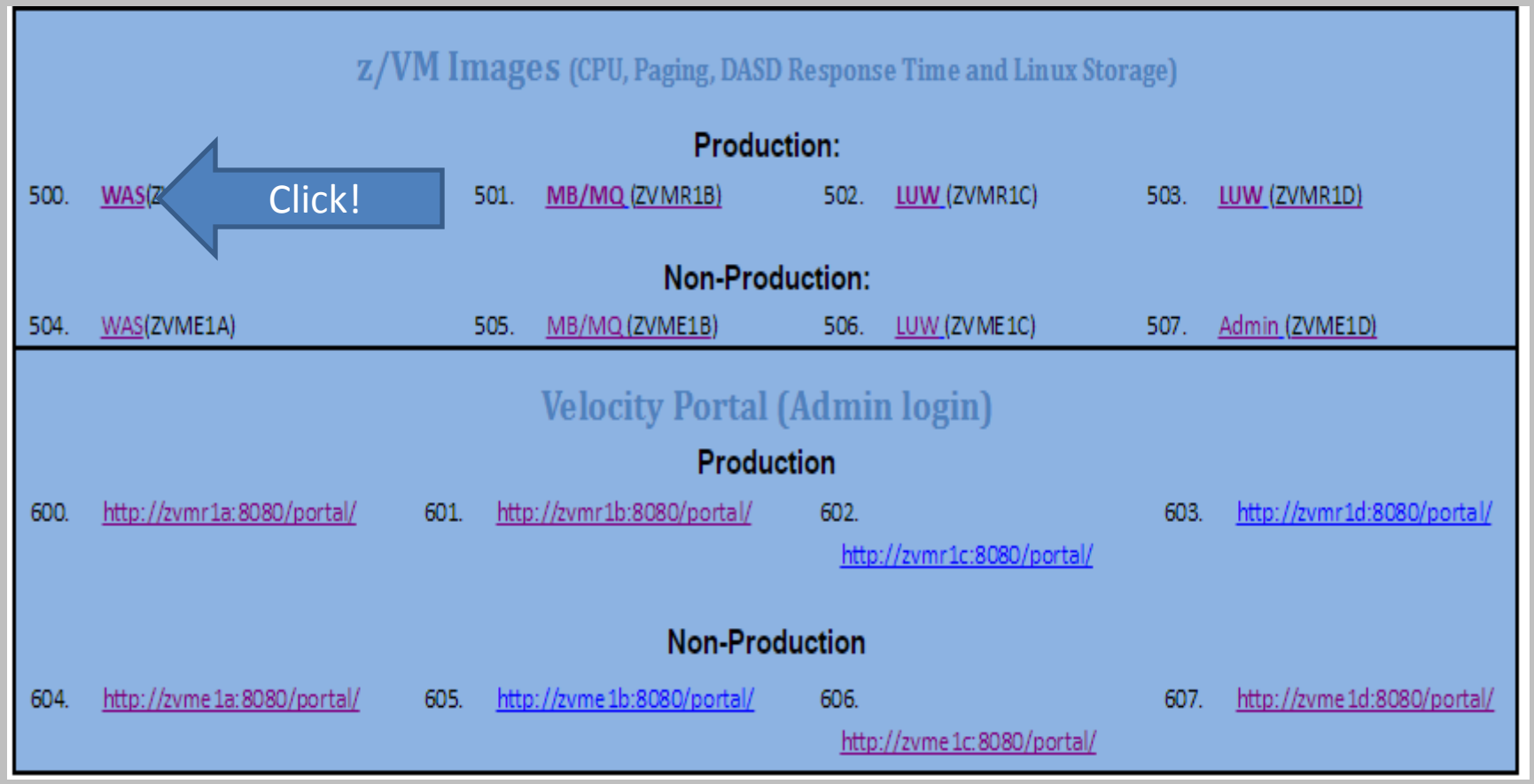
Linux Production

400. CPU Utilization by Class
401. Linux Memory
402. Linux System Statistics
403. FTP server (LFTEP001)
404. Collaborative Memory Manager (CMM)
405. Swap Utilization
406. Memory Analysis (text)
407.
408. ZEND
409.
410. All Classes CPU
411. Outbound CPU (text)
412. SQL CPU
413. Member CPU
414. SLP CPU
415. Binder CPU
416. Internal, Legacy and Cross-carrier
417.
418. Redacted
419. Redacted
420.
421.
422. Name-map for other servers
423.

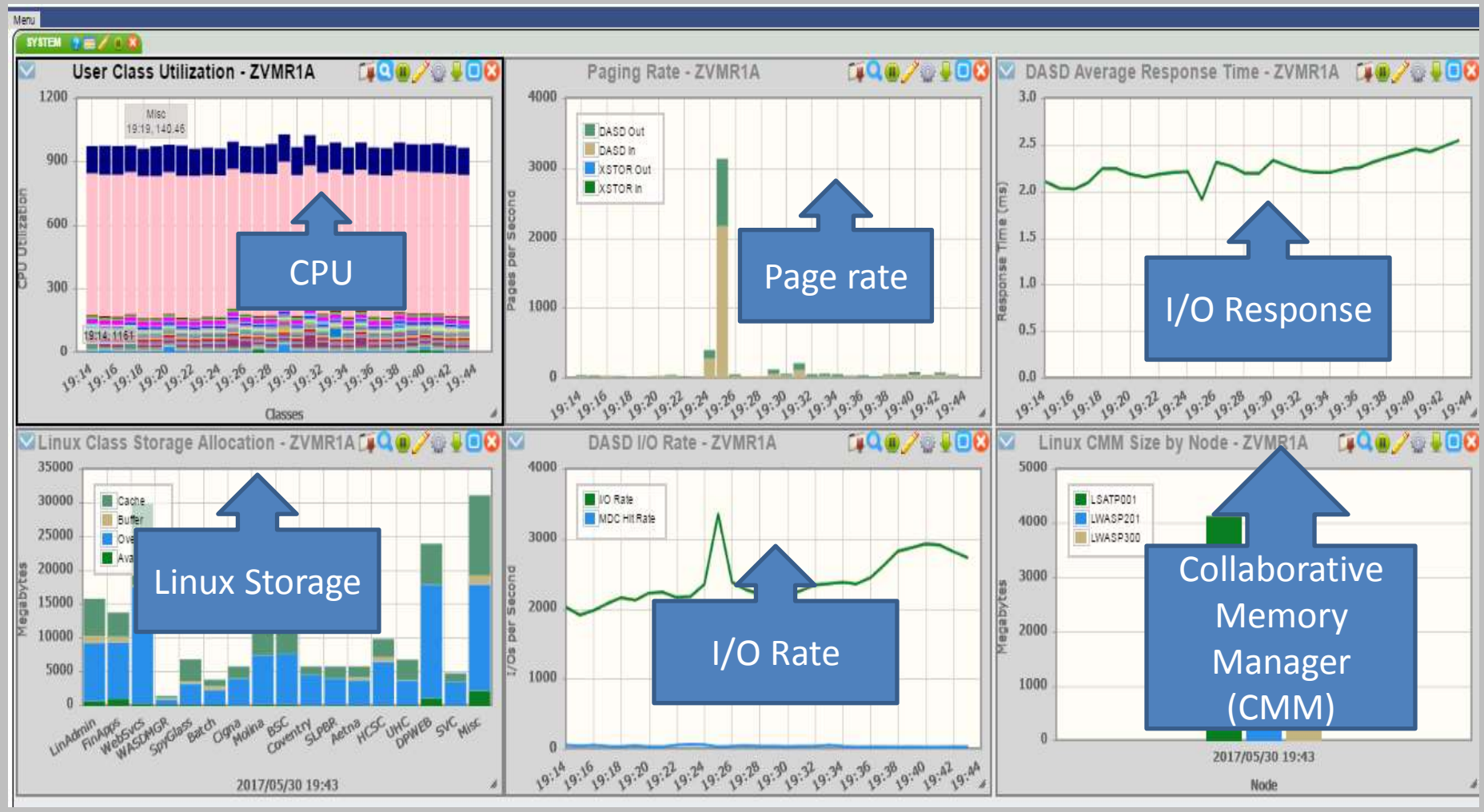
Linux Non-production

450. Wait Analysis (Graph)
451. CPU Utilization by Class
452. Wait Analysis (Text)
453. Collaborative Memory Manager (CMM)
454. Percent Used (Text)
455. Linux Memory (Text)
456. Linux System Statistics
457. Systems A, B and C only
458. PFIX on z13
459. Which WAS servers are Where
460. Redacted
461. WAS ד STEAL (and other stuff)
462.
463.

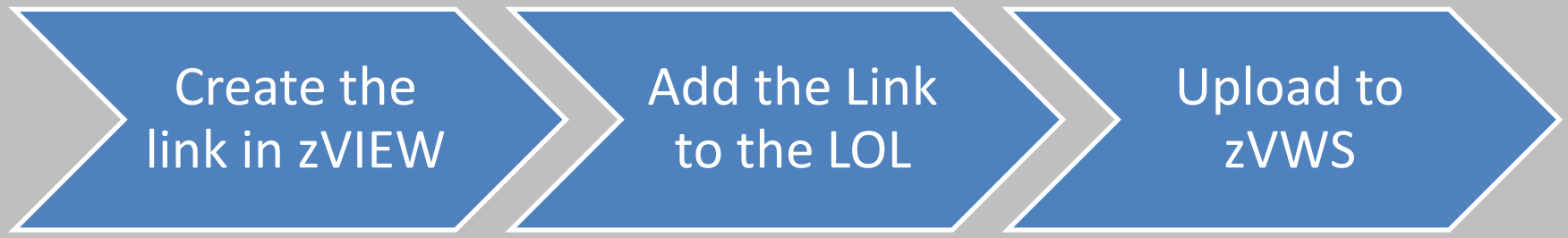
Sections 500-600 – Deep Dive and Admin



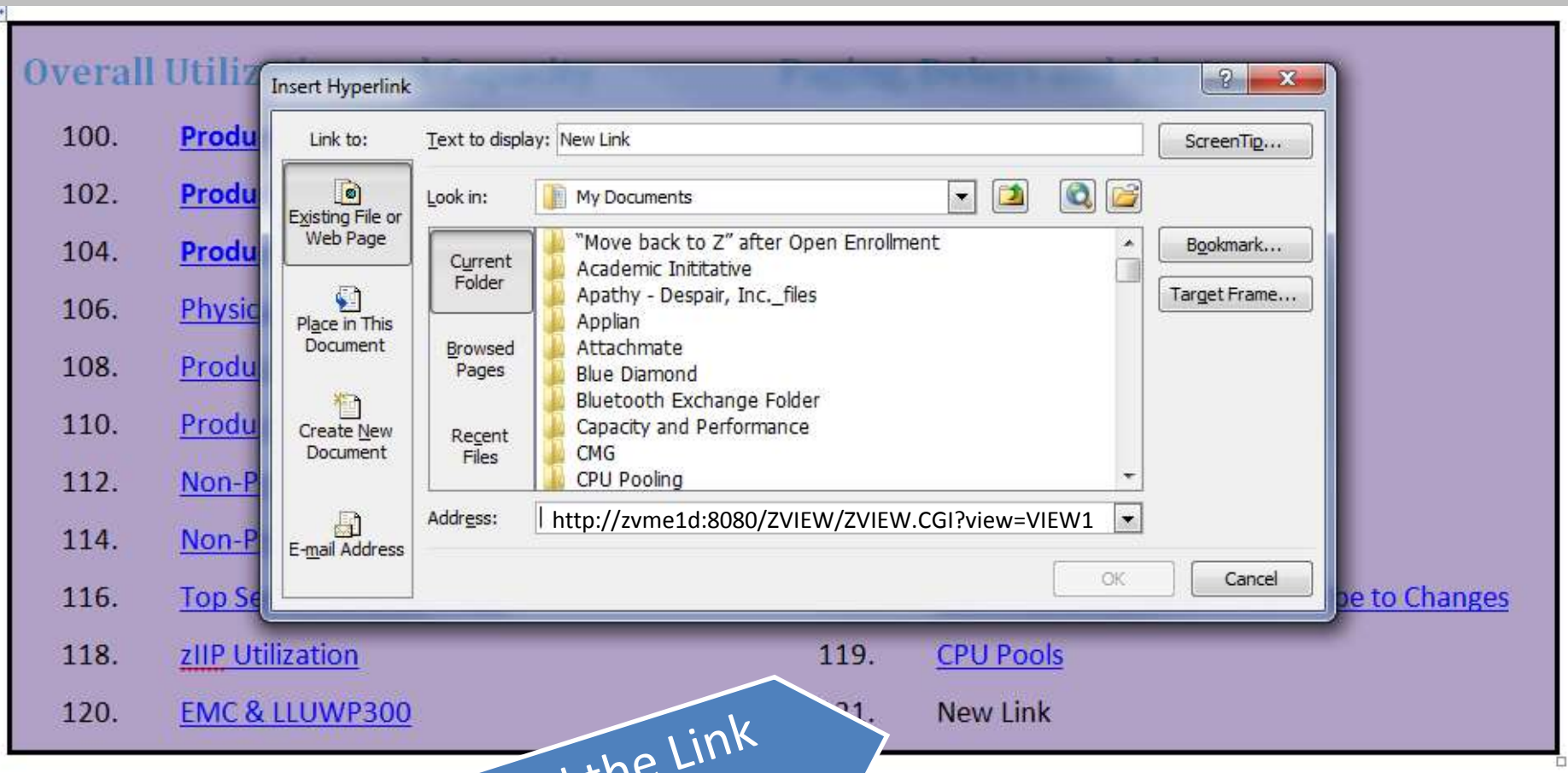
Focus on one z/VM image – And whatever is running there



Adding a link to the LOL




Alert
You may copy and paste this into the address bar to access directly
http://zvme1d:8080/ZVIEW/ZVIEW.CGI?view=VIEW1
OK
Create the link in zVIEW
Copy into clipboard



Add the Link to the LOL

Overall Utilization and Capacity

100.	**Production** Logical plus Physical CPU
102.	**Production** Logical CPU
104.	**Production** Logical CPU and Paging
106.	Physical CPU
108.	Production and Non-Production CPU
110.	Production Business Rules
112.	Non-Production CPU and Paging
114.	Non-Production Logical plus Physical CPU
116.	Top Servers CPU by Image
118.	zIIP Utilization
120.	EMC & LLUWP300

Paging, Delays and Alerts

101.	Paging / User Paging
103.	Delay Analysis (non Graphical)
105.	Alerts
107.	CPU Analysis - PROD
109.	CPU Analysis - nonProd
111.	
113.	
115.	About zVIEW/Help
117.	Submit your Feedback / Subscribe to Changes
119.	CPU Pools
	New Link

Mike, what about non-production workload?

Monitoring z/VM and Linux with zVIEW

Overall Utilization and Capacity

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104. **Production** Logical CPU and Paging
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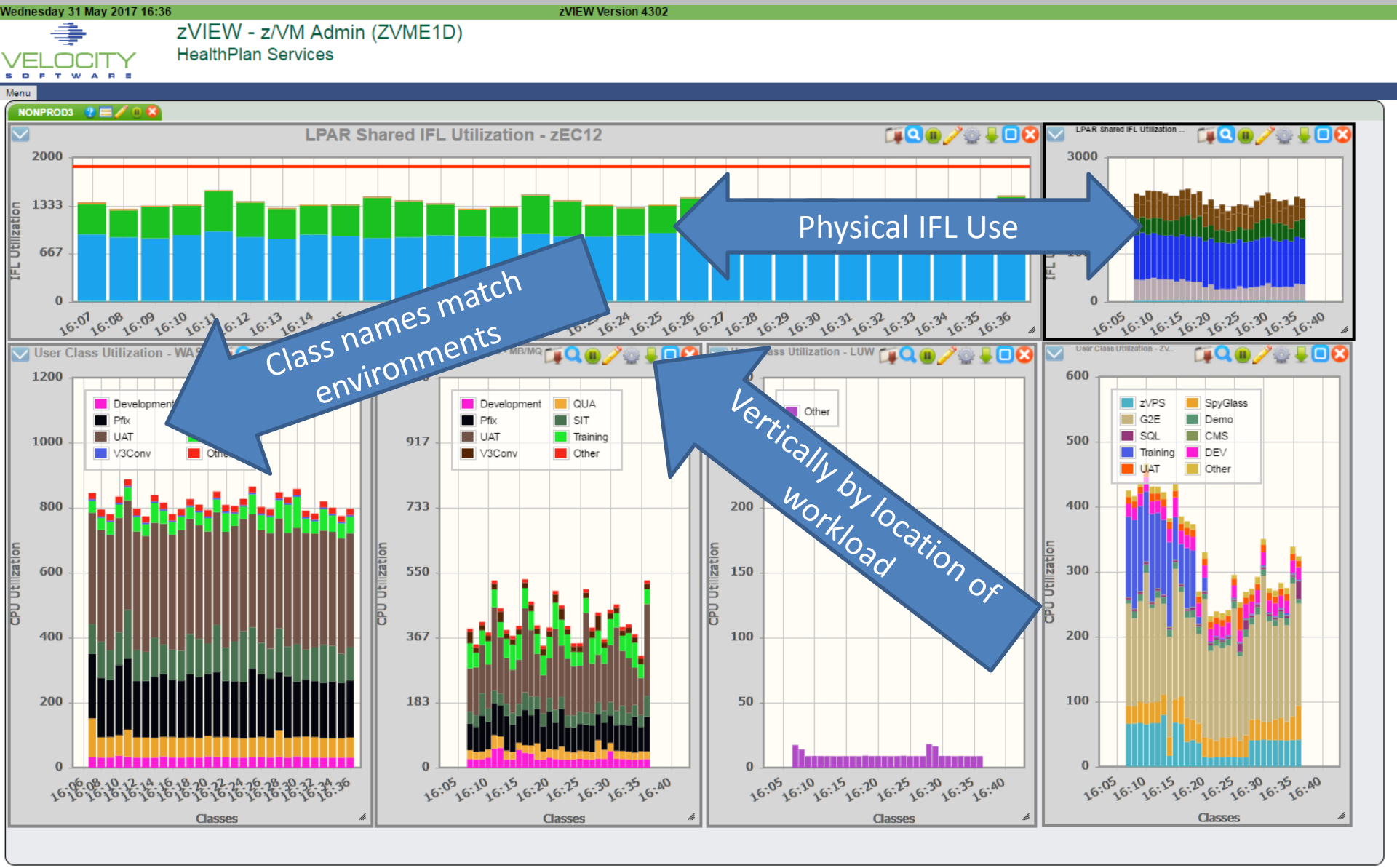
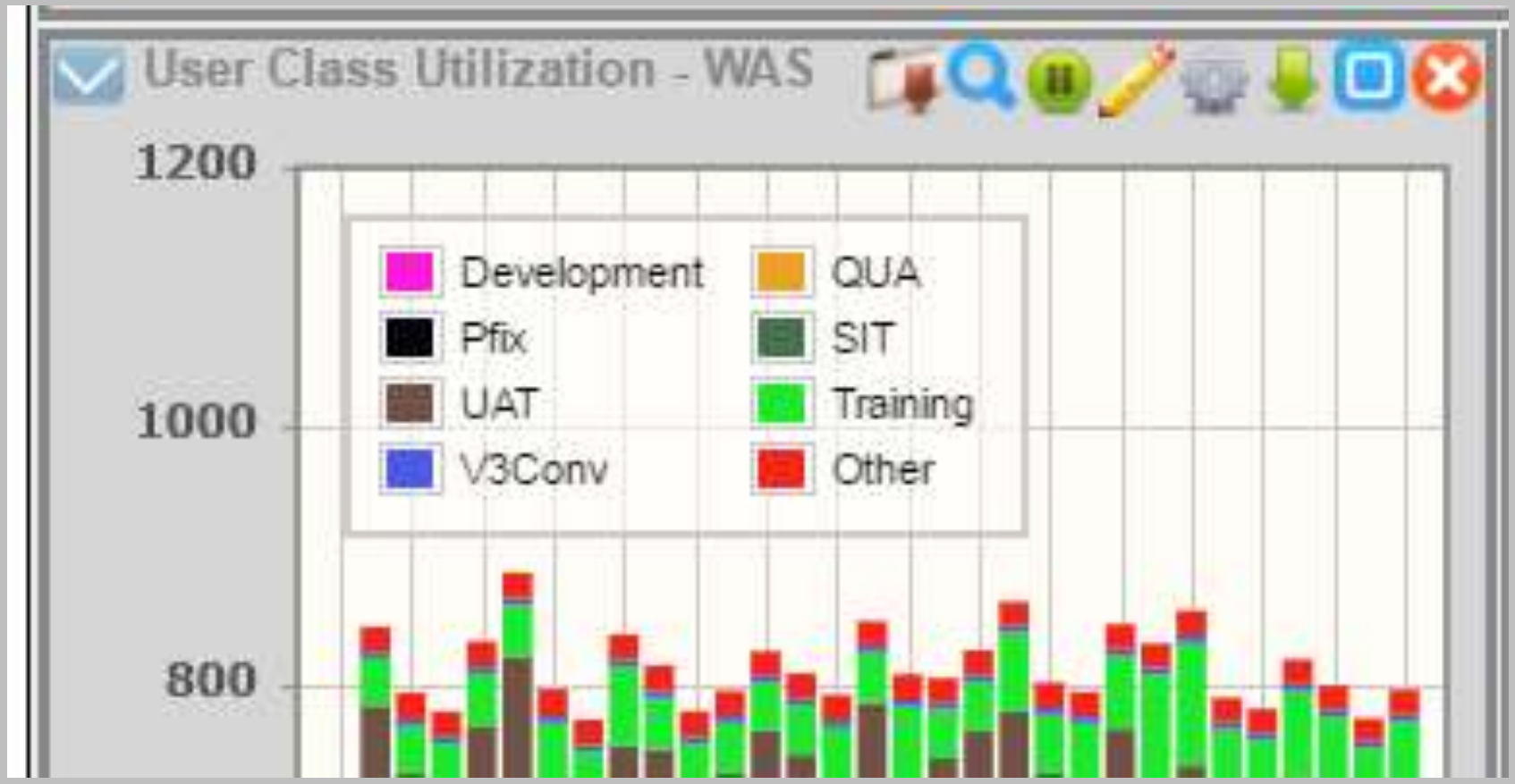
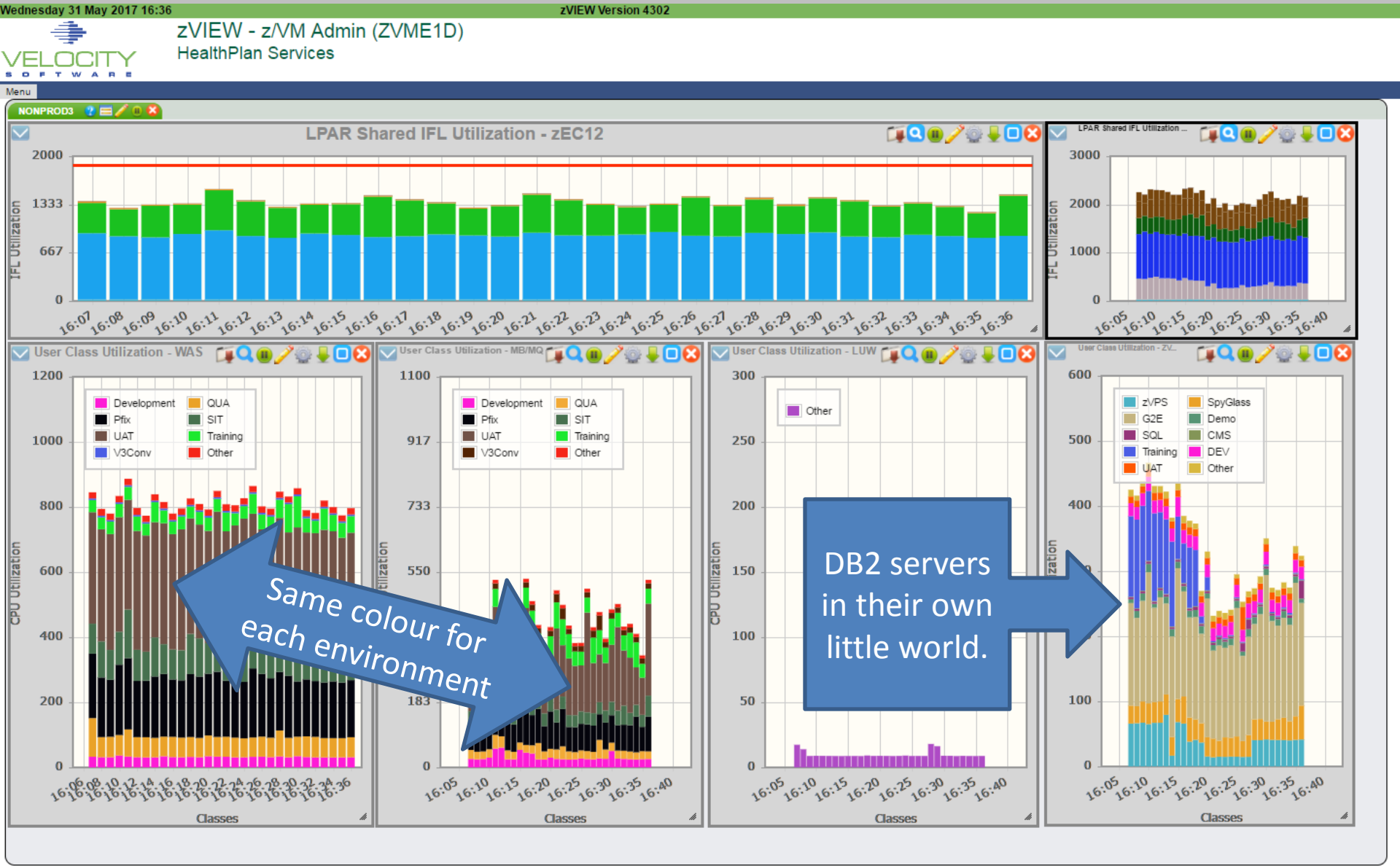

Wednesday 31 May 2017 16:36
zVIEW Version 4302
VELOCITY SOFTWARE
zVIEW - z/VM Admin (ZVME1D)
HealthPlan Services
Menu
NONPROD3
LPAR Shared IFL Utilization - zEC12
IFL Utilization
Physical IFL Use
Class names match environments
Vertically by location of workload
User Class Utilization - WAS
Development
Pfix
UAT
V3Conv
Other
QUA
SIT
Training
CPU Utilization
Classes
zVPS
SpyGlass
G2E
Demo
SQL
CMS
DEV

Non producton Classes

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LPAR Shared IFL Utilization ...
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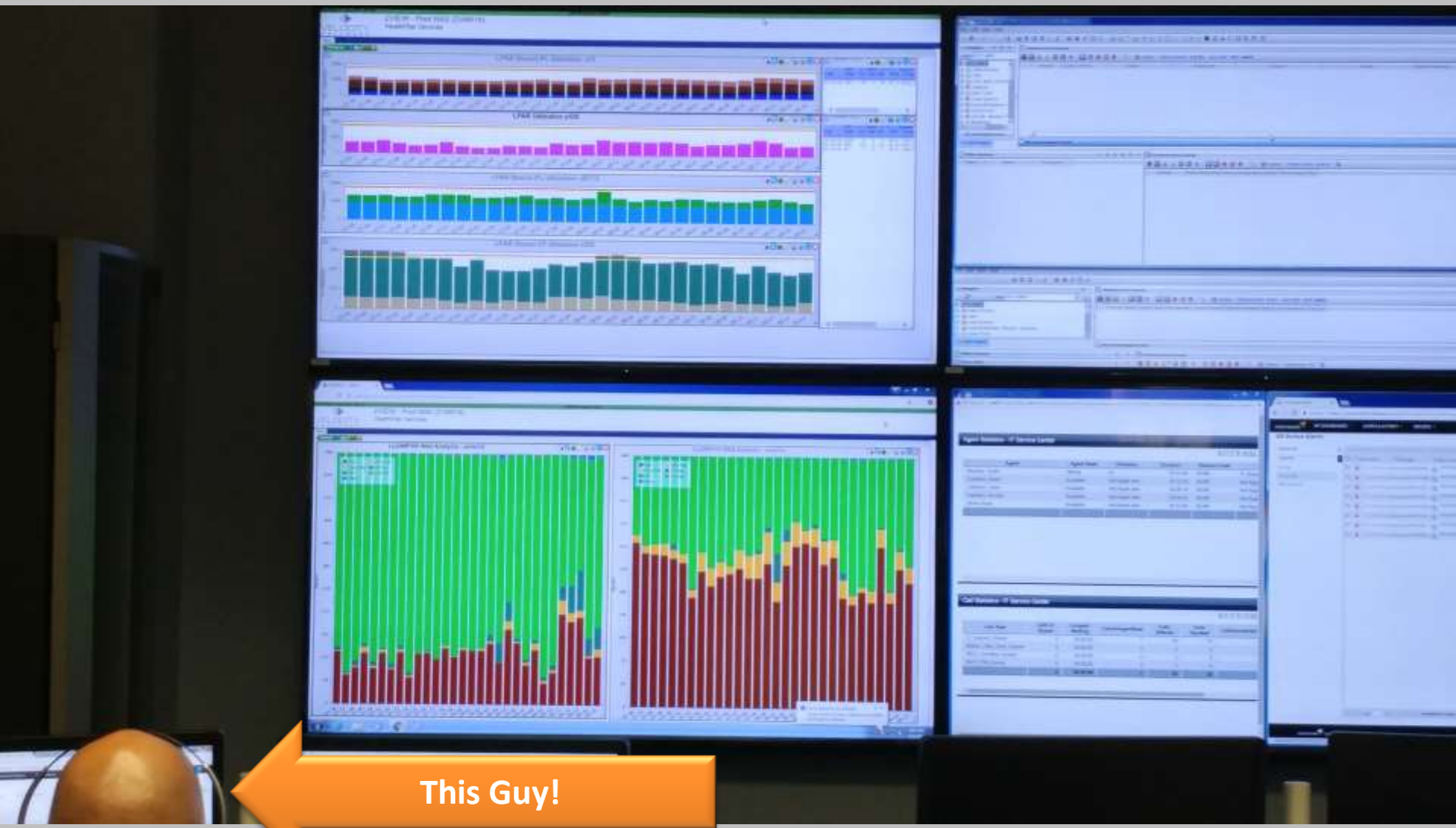
User Class Utilization - MB/MQ
User Class Utilization - LUW
User Class Utilization - ZV...
CPU Utilization
Development
Pfix
UAT
V3Conv
QUA
SIT
Training
Other
Classes
Other
zVPS
G2E
SQL
Training
UAT
SpyGlass
Demo
CMS
DEV
Other
Same colour for each environment
DB2 servers in their own little world.

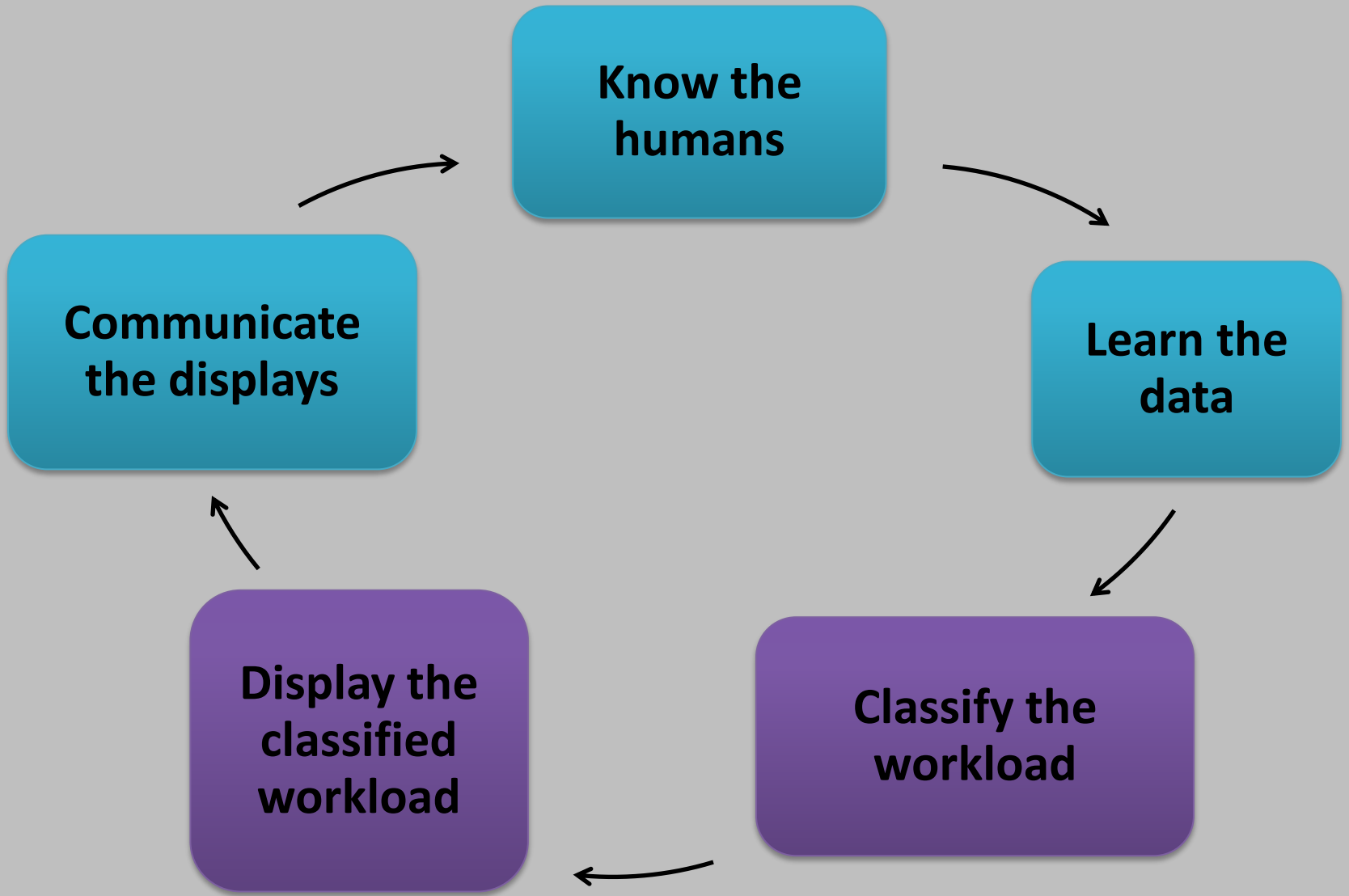
Who uses this stuff?

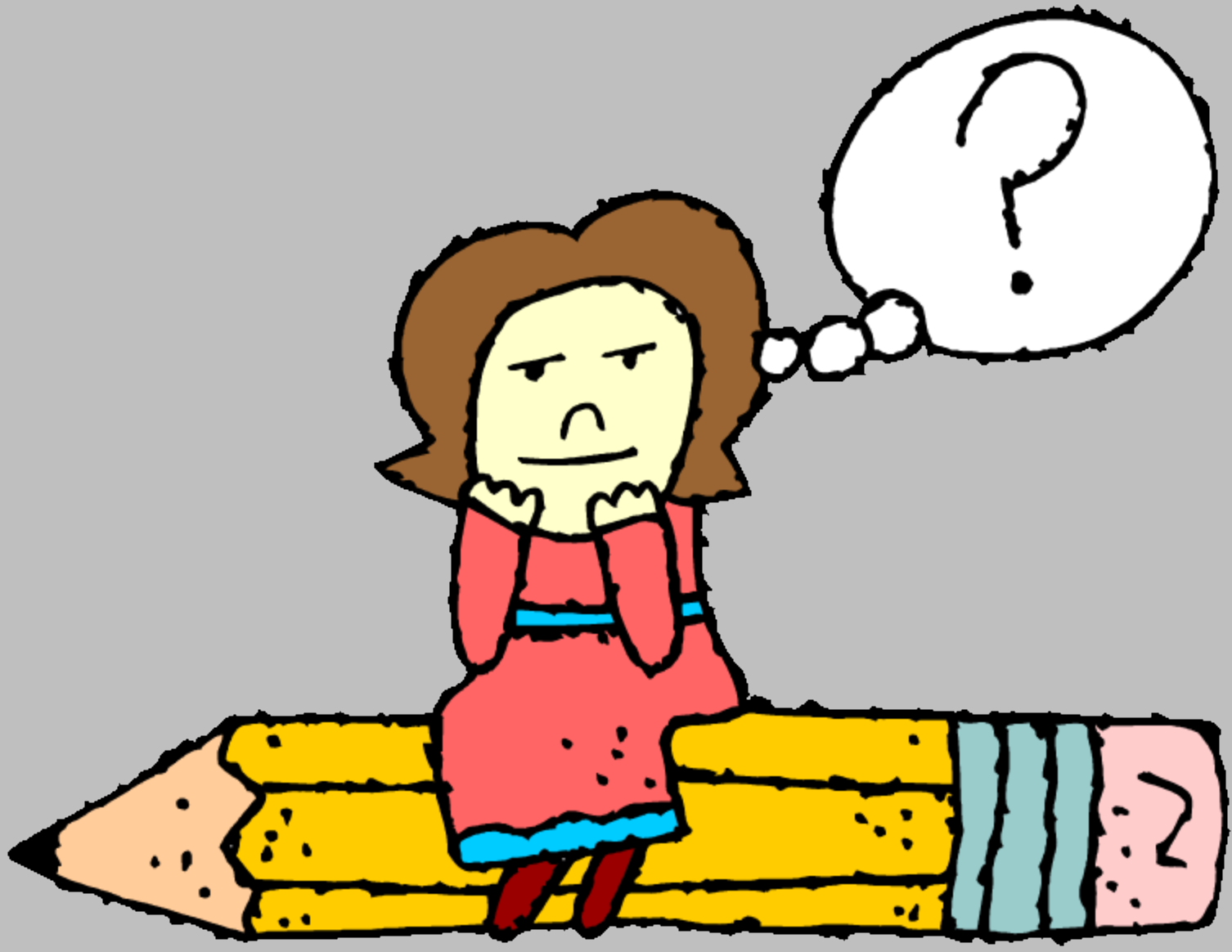
“Mission Control”



“Mission Control”

Pulling it all together





“Anyone who isn't confused really doesn't understand the situation.”

Edward R. Murrow

Good day
and
good luck