

# Solving Customer Problems with Velocity Software



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6-time IBM Champion  
Sir Kurt, Angler of New Technology

Barton says; "If you can't Measure it,  
I am Just Not Interested™"



- Mainframes are old, complicated and lack skilled workers
- We're not making our TCO and Sustainability Goals
- The Mainframe lacks Visibility and Controls
- Linux support doesn't understand our problem
- SNMP, KVM, SMAPI, AI processing on z17 and more

# Solving Z Issues with Velocity

- zPRO = Easy z/VM (EZ) Hybrid Cloud Modernization, includes education and z/VM subject matter experts
- zVPS = EZ TCO and Sustainability Goals with Optimization, and provides Complete Platform with Application Visualization
- zTUNE = EZ Tuning guide while zVRM automates guest performance, for optimal system optimization
- zVRM = EZ Automated Virtual Machine Tuning

# zPRO = EZ Hybrid Cloud

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Auto Arrange | Refresh All | Minimize All | Close All

- \$Velocity
- Administration
- Create Servers
  - Build multiple Virtual Machines from one Gold Image
  - Clone a Virtual Machine
  - Clone Linux Server (Simple)
  - Clone second level z/VM 6.4
  - CMS virtual machine
  - Manage Pending Requests
  - Non-Public
  - Request Oracle Guest
  - Request z/VM 7.4 Install Base
  - RHEL 10.1 Linux
  - RHEL 9.3 Linux
  - SLES Linux with Oracle
  - SLES 15 Linux
  - SLES 16 Linux
  - Ubuntu 17.10 Linux
  - z/VM 7.3 Virtual Machine
  - z/VM 7.4 Virtual Machine (BETA)
- Gold Images
- Kubernetes
- Reports
- Scheduler
- Server Management
- View Resources
- z/VM Administration
- zPRO Users
- zVRM Management

**Resource Summary** 1 of 64 X Search Criteria ...

System	Group	User	Servers	VCPUs	Memory(MB)	DASD	DASD Storage	MDisks	MDisk Storage	IPs	OSAs	FCPs
VSIVC1	ADMIN	ADMIN	23	28	15584	13	127.17 G	82	372.65 G	22	0	0
VSIVC1	ADMIN	CHRISTY	1	1	256	0	0.00 M	5	34.39 G	2	0	0
VSIVC1	ADMIN	DAVID	2	2	5120	0	0.00 M	2	10.32 G	2	0	0
VSIVC1	ADMIN	DSADEV	0	0	0	0	0.00 M	0	0.00 M	0	0	0
VSIVC1	ADMIN	JAMES	26	34	34848	0	0.00 M	67	246.78 G	23	0	0
VSIVC1	ADMIN	JOE	1	1	256	0	0.00 M	4	27.51 G	1	0	0
VSIVC1	ADMIN	JONATHAN	2	2	512	0	0.00 M	8	55.02 G	2	0	0
VSIVC1	ADMIN	JYANG	1	2	1024	0	0.00 M	1	3.44 G	1	0	0
VSIVC1	ADMIN	KURT	0	0	0	0	0.00 M	0	0.00 M	0	0	0
VSIVC1	ADMIN	PORTADMN	0	0	0	0	0.00 M	0	0.00 M	0	0	0
VSIVC1	ADMIN	RICKB	8	9	5376	0	0.00 M	18	83.83 G	8	0	0
VSIVC1	ADMIN	RKSDEV	20	24	27648	0	0.00 M	50	287.70 G	22	0	0
VSIVC1	ADMIN	SAM	2	2	1280	0	0.00 M	5	30.95 G	2	0	0
VSIVC1	ADMIN	TYLER	0	0	0	0	0.00 M	0	0.00 M	0	0	0
VSIVC1	ADMIN	<b>totals</b>	<b>86</b>	<b>105</b>	<b>91904</b>	<b>13</b>	<b>127.17 G</b>	<b>242</b>	<b>1.13 T</b>	<b>85</b>	<b>0</b>	<b>0</b>
VSIVC1	ADMIN	<b>limits</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>	<b>unlim</b>

Run Reconciliation

Owner	Group	Expiration
CHRISTY	ADMIN	NONE
JAMES	ADMIN	NONE
JAMES	ADMIN	NONE
RKSDEV	ADMIN	NONE
DAVID	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE
ADMIN	ADMIN	NONE

<input type="checkbox"/>	GOLDRH85	RHEL 8.5 Build for Demo	192.168.6.40
<input type="checkbox"/>	GOLDRH9	RHEL 9 Build for Demo	10.1.1.40
<input type="checkbox"/>	GOLDRH9	RHEL 9 Build for Demo	10.1.1.26
<input type="checkbox"/>	GOLDRH9	RHEL 9 Build for Internal VPN	10.0.0.26
<input type="checkbox"/>	GOLDRH9	RHEL 9 Build for Internal VPN	192.168.6.30

Actions View Log Details Edit MDisks Links Chg Password View Dir Cmd Win Spool Files

SINCE 1988

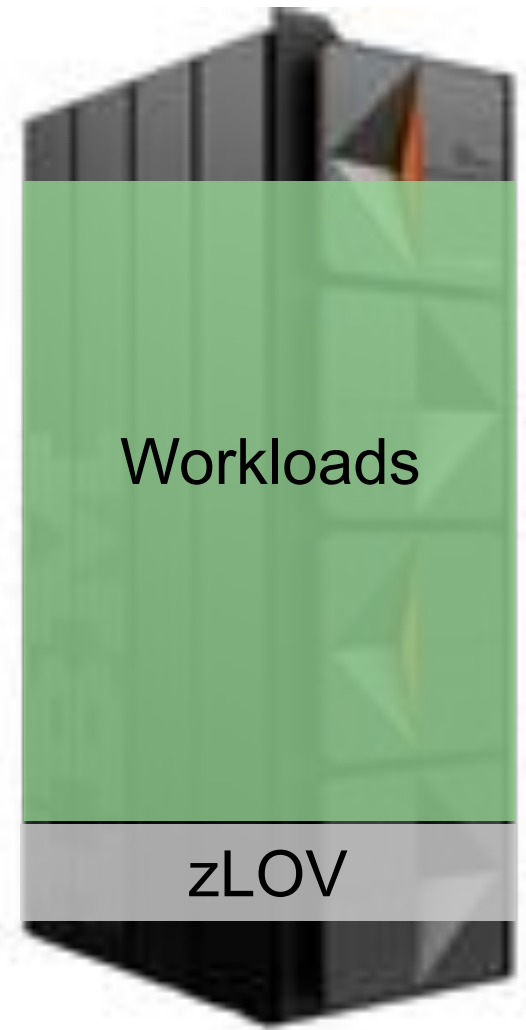
**VELOCITY**

SOFTWARE

VELOCITY SOFTWARE

PROVEN PERFORMANCE

4



- Install the Linux on Velocity (zLOV) Suite of products, zVPS, zTUNE, zPRO and zVRM
- Use zPRO for a modern z/VM hybrid cloud experience, clone Linux and standalone z/VM systems
- Use zVPS for efficient z/VM, Linux, KVM, OpenShift, OpenShift Virtualization, applications, VSE **and z/OS** performance monitoring, visualization, alerting and more
- Use zTUNE for recommended system with guest actions
- Use zVRM for automated guest tuning when eligible
- Maximize your IFL's for the real workloads that drive the most business value possible out of your IBM Z systems!

# TCO's Are Based On Optimized Consolidation

- IBM Z and LinuxONE allows you to over-commit resources for workloads
- Making all of them meet your SLA's requires work with constant feedback loops
- Implementing non-functional requirements requires attention!
- EZ Hybrid Cloud makes it easy





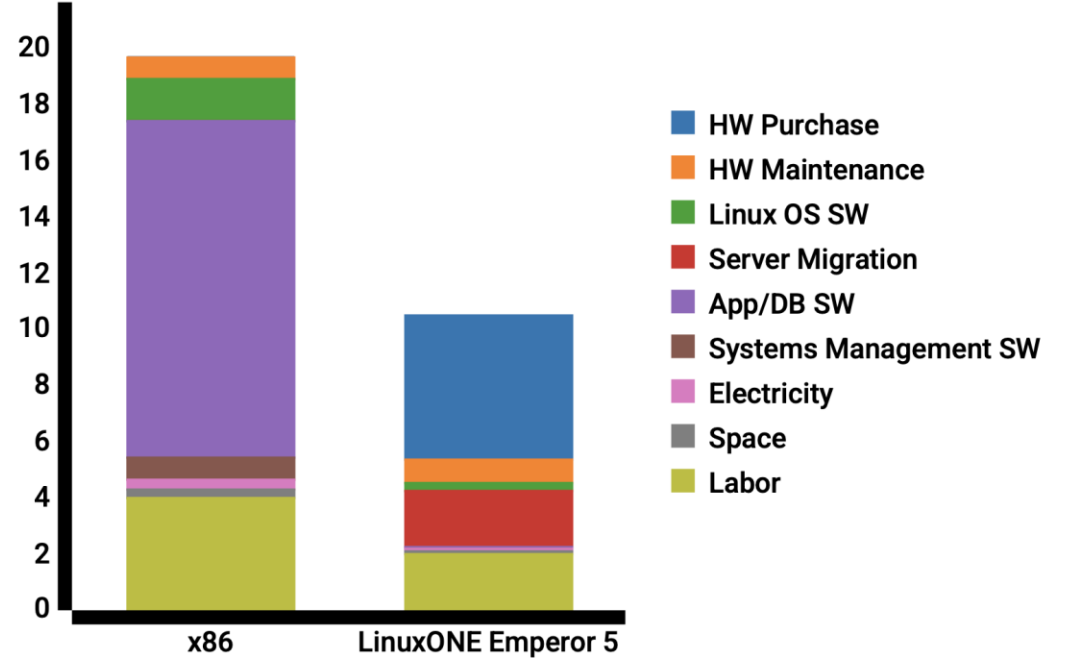
Your x86 server inputs

Servers	Type of servers	Workload	Processors per server	Cores per x86 server	# of physical production servers	# of physical non-production servers <sup>1</sup>	Total DR servers <sup>2</sup>	Total DR cores <sup>2</sup>	Total x86 servers	Total x86 cores
3 years old	Blade	opendb	1	8	100	100	0	0	200	1600

IBM® LinuxONE or Linux on Z alternative

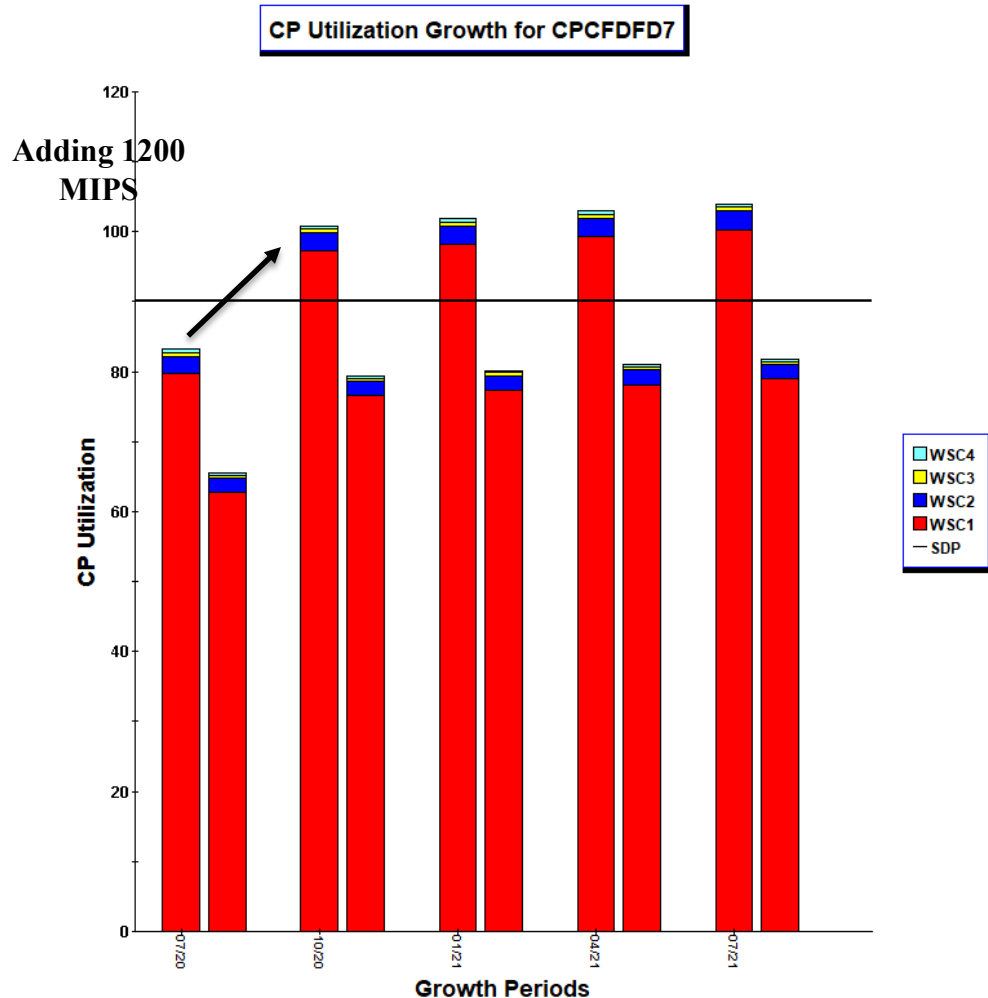
IBM® LinuxONE or Linux on Z model	Type of servers	Workload	# of IBM® LinuxONE or Linux on Z servers	# of IBM® LinuxONE or Linux on Z production cores	# of IBM® LinuxONE or Linux on Z non-production cores <sup>1</sup>	Total DR servers <sup>2</sup>	Total DR cores <sup>2</sup>	Total IBM® LinuxONE or Linux on Z servers	Total IBM® LinuxONE or Linux on Z cores <sup>3</sup>
LinuxONE Emperor 5 or z17 ME1	19-inch frame	opendb	1	54	40	0	0	1	94

Accumulated Cost Comparison by Cost Category



<https://www.ibm.com/resources/z-linuxone-tco-co2e-calculator>

# CP3000, Capacity Planning Output with Growth



This graph shows the projected utilization of CP engines for each period built from the sum of the partition growth requirements. The average annual growth rate is 25%.

For each date in the projection there are 2 bars. The first bar is the base system. Subsequent bars are the alternate processors. The workload utilization is scaled by the relative partition ITRR.

Bar	Model	#CP	Relative ITRR
1	3906-608	8.0	1.0
2	8561-610	10.0	1.27

**No breakout of the running workloads**

SUMMIT 2020 TRAINING - zCP3000 CP Overview

File Edit View Action Help Analysis

CPCDFD7

- WSC1
- WSC2
- WSC3
- WSC4
- WSC5
- WSC6
- WSC7
- WSC8

Add Workload

In Interval: 10/20

Annual Growth Rate: 0%

Enter the MIPS to be added for each Processor Pool

GCP 1200 MIPS

zIP 600 MIPS

Next Cancel

Place Added Workload

Enter Added Workload Name: GOLD

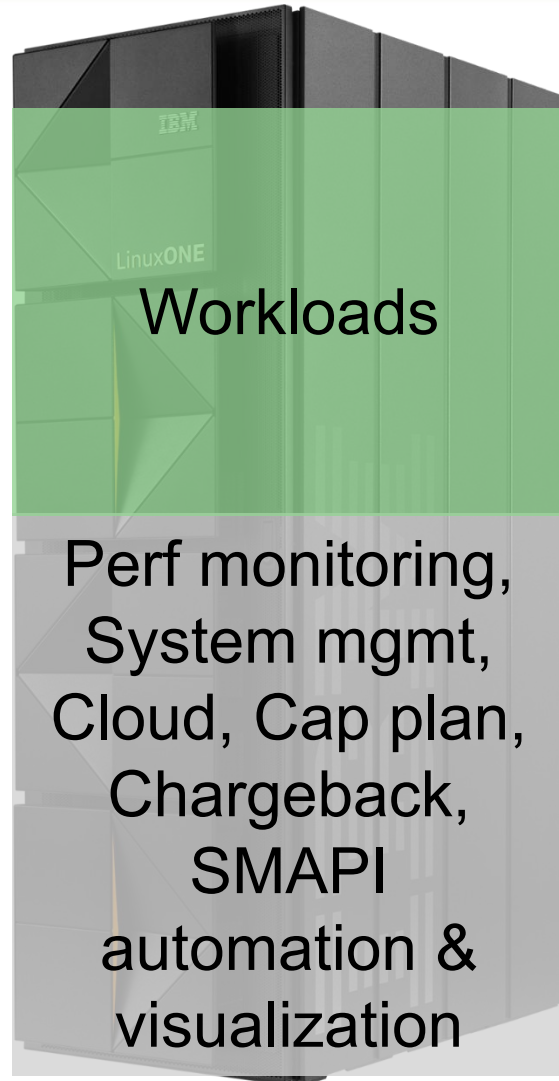
CPC: CPCDFD7

Existing Partition: WSC1

New Partition:

Finish Cancel

# EZ Hybrid Allows for More Workloads

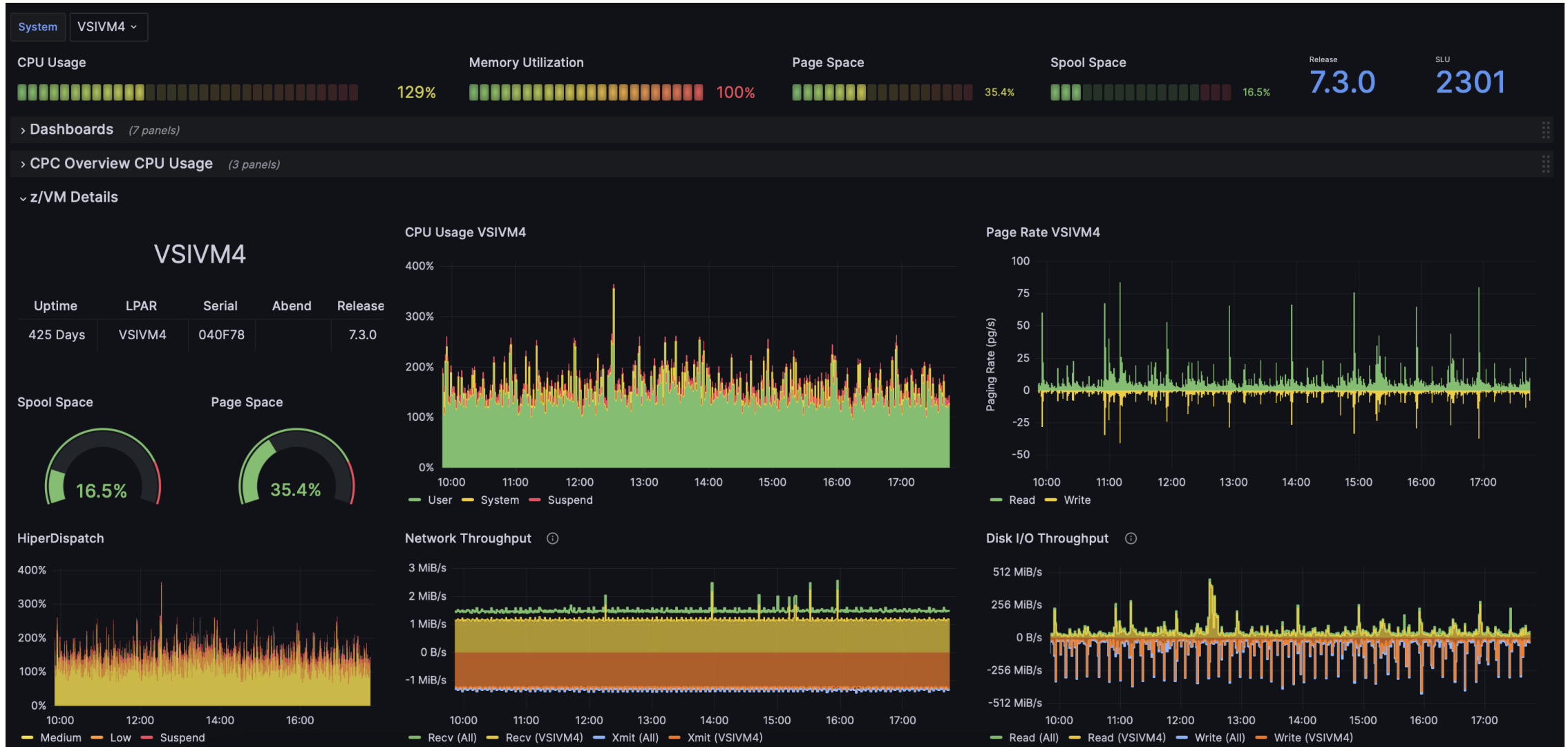


- Linux on Velocity (zLOV) consumes less than 1% of a processor. Other total solutions require up to 3 processors just to start with.
- zLOV requires no additional Linux, JAVA, databases or SMAPI to run.
- zLOV memory is measured in MB over the GB required by others.
- Velocity's Linux MIB is measured in KB compared to up to 1/2 a GB!
- This same lightweight footprint can even process all your z/OS records with zOSMON

And Velocity will PUMP data to any other platform or service required!

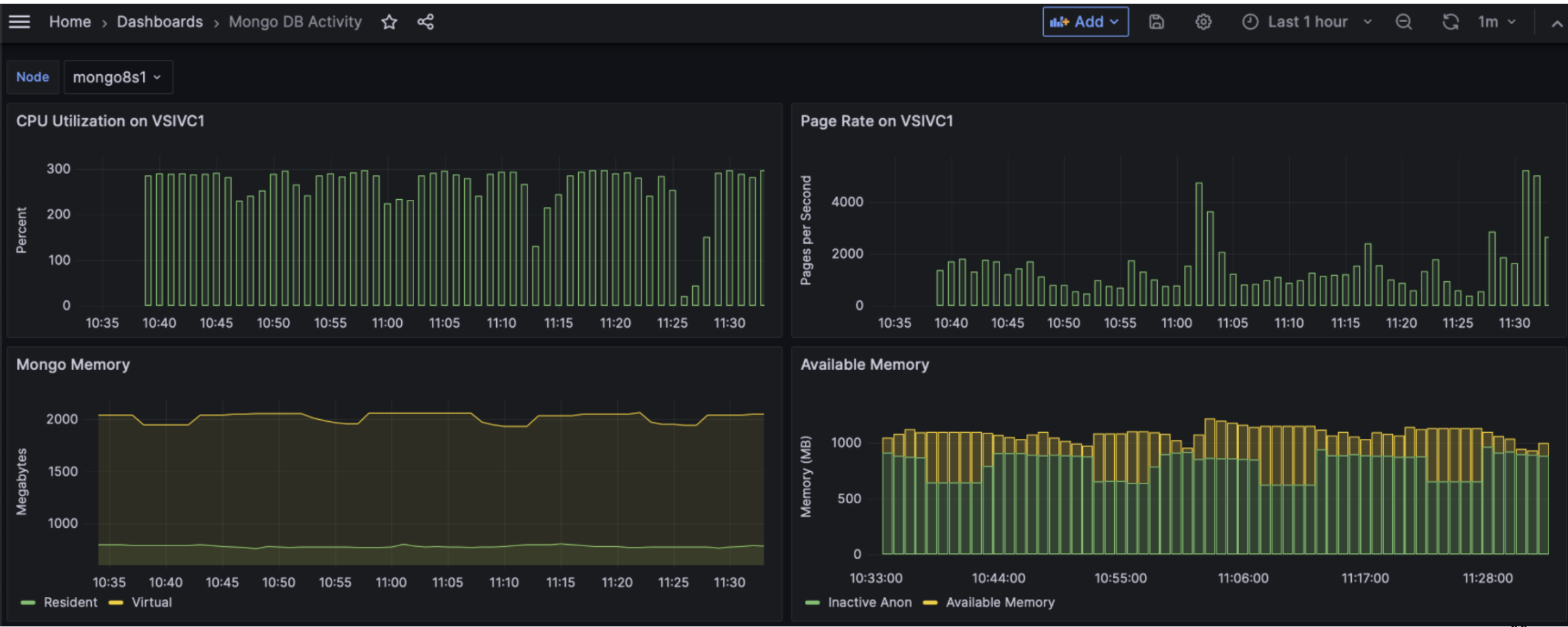


# Grafana data – z/VM CPU Utilization and Paging

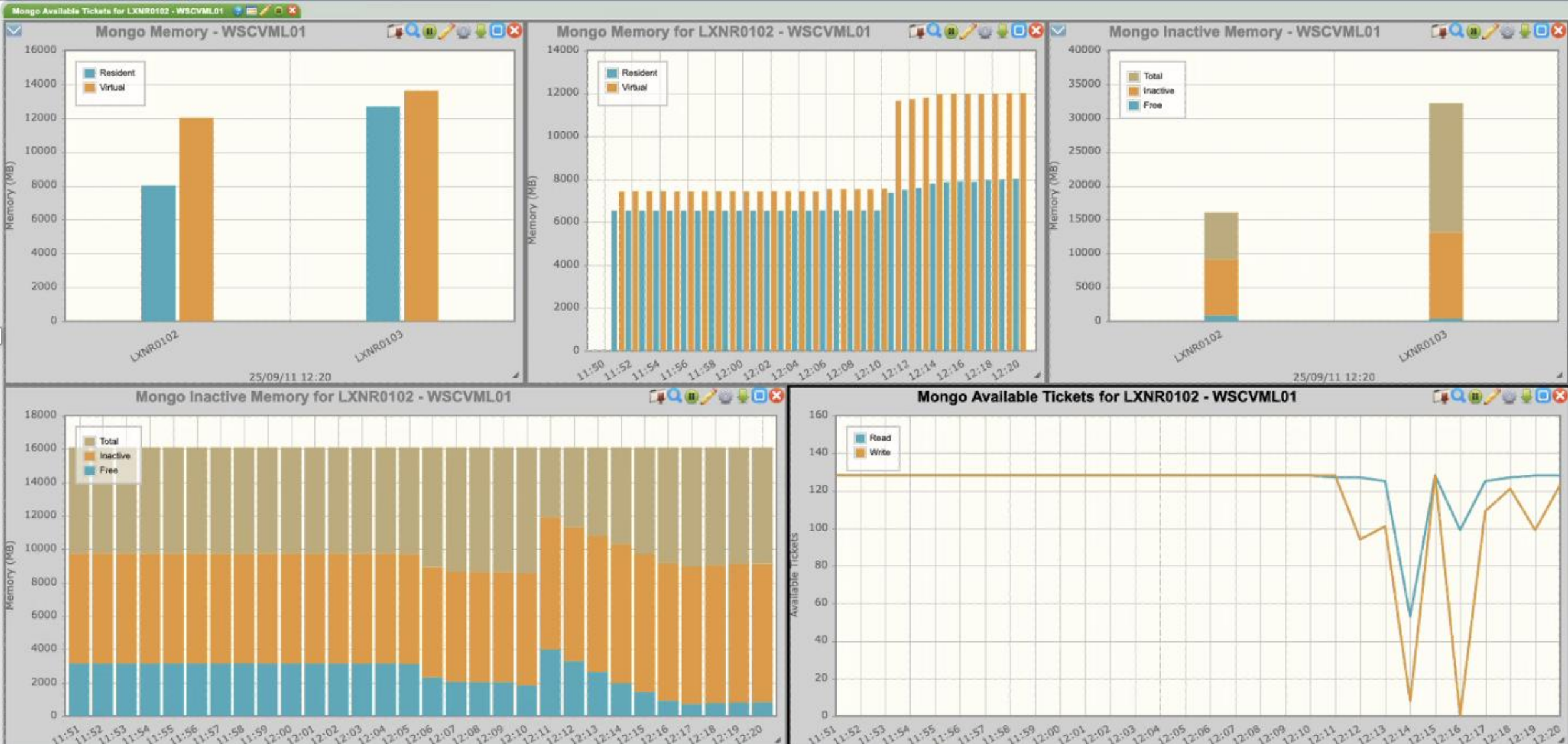




# Combined with data from MongoDB



# Velocity's zVIEW is Click to Drill Down





Tyler Rossi from Velocity Software has been presenting material on the work he has started.

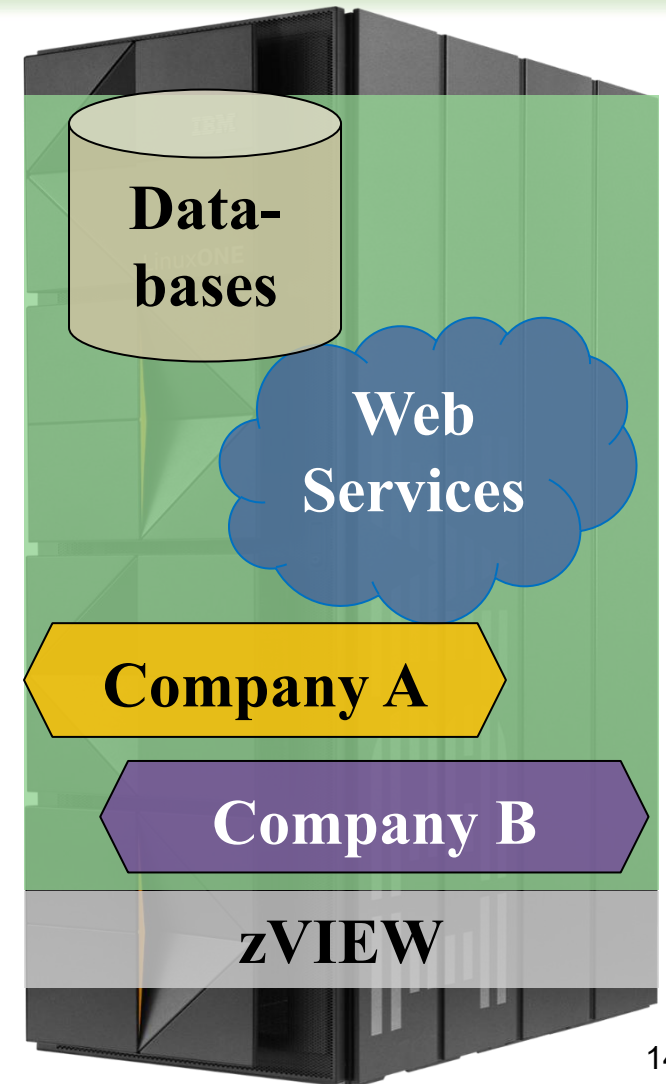
[z17 and z/VM 740 Power Metrics](#)

[z17 Channel Performance Analysis from the New Guy](#)

Velocity Software is continuing to work with our z17 customers and IBM to provide information that allows for capacity planning with a complete understanding of utilization before any bottlenecks become a problem.

# zVIEW - Enhanced Data Access Controls

- Velocity Software's zVIEW now includes managed security access controls like zPRO and zPORTAL already have
  - A system admin might have access to everything
  - The database, web services and mobile teams can be granted access to just the servers they own and control
  - Individual servers, to different sets of servers from within any groups can be viewed
- And for hosted services, company A and B can be separated logically from viewing, even while operating in the same LPAR!



# Understanding KVM and Containers On LinuxONE

KVM and Containers are not magic

Velocity's zVPS makes makes understanding them easy on Z

SNMP required when not using z/VM

KVM uses CPU and memory too, and requires more management to run on Z

Each container is managed by a “container manager”

- “Virtual” processes inside container are mapped to “real” processes
- File systems are remapped
- Container “limited to what it can see”



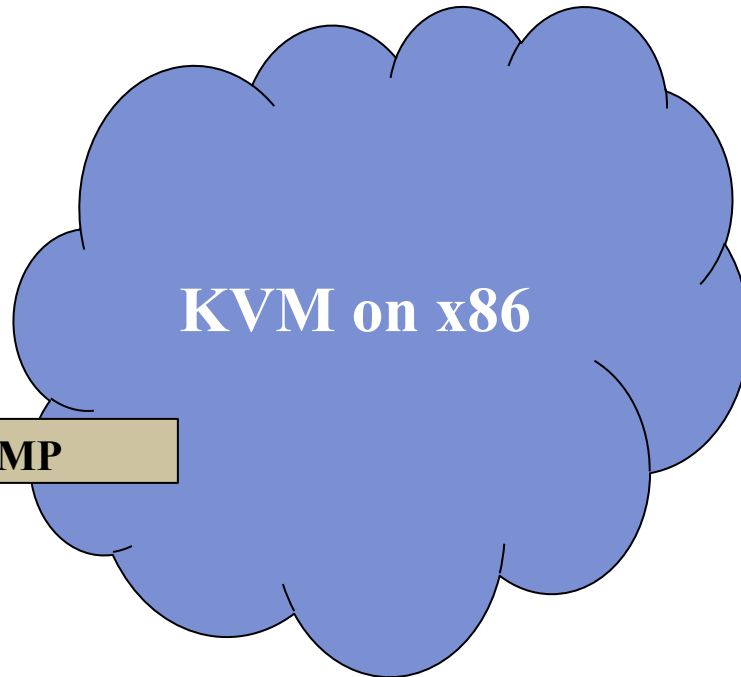
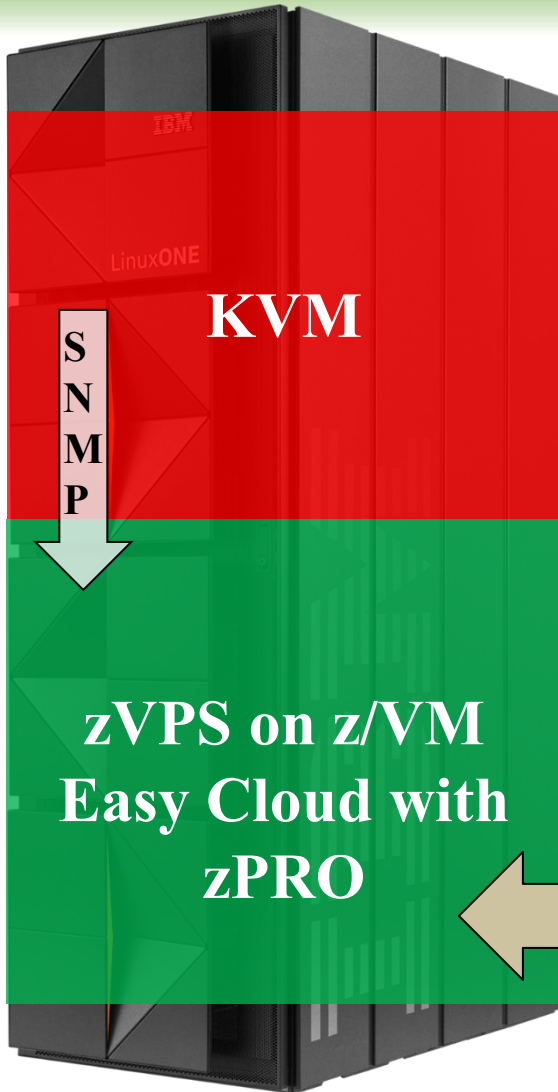
# How To Manage KVM with Velocity Software

**Run certified workloads  
like Oracle on z/VM  
Use zPRO to make it  
easy (EZ)**

Install at least Velocity Software's Performance Suite (zVPS) on z/VM.

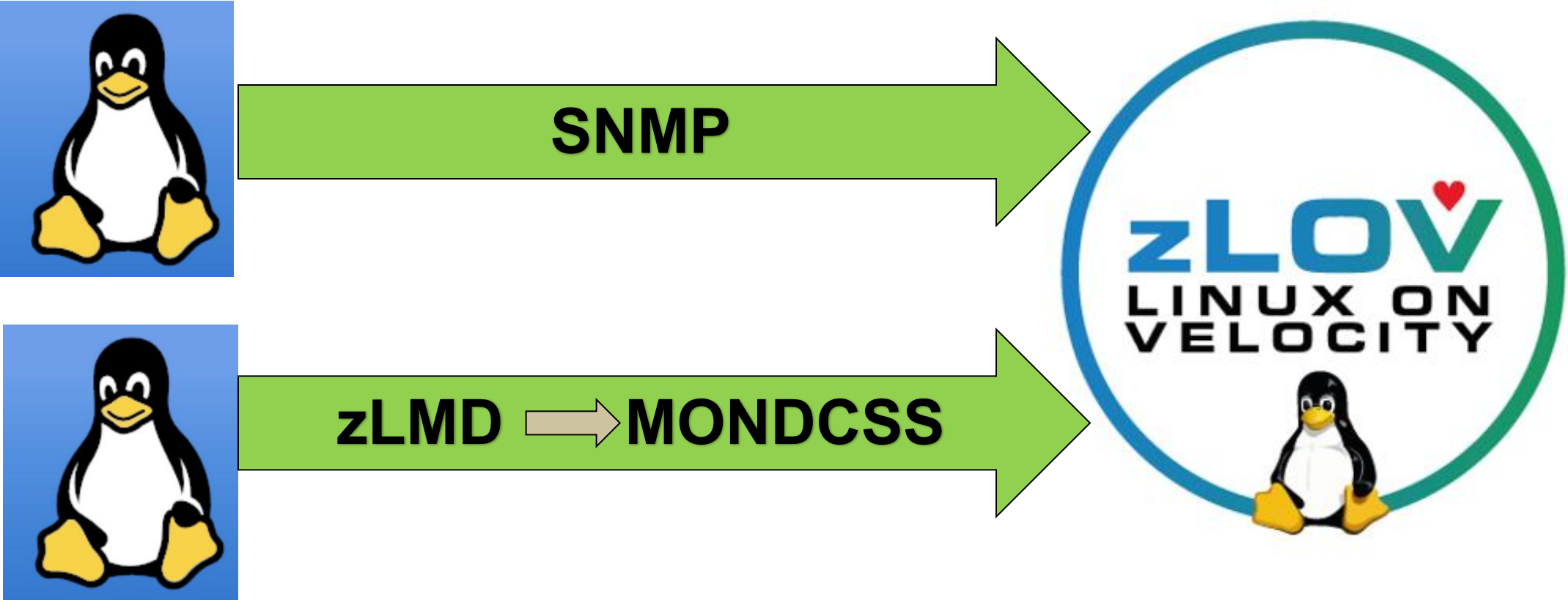
Install Velocity Software's MIB for KVM, and the Linux or OpenShift systems of interest.

Obtain meaningful metrics from IBM Z and LinuxONE, combined with KVM performance data running from any other platform.



Hello IBM Z Linux Monitor Data (zLMD)

- Velocity Software's new alternative to SNMP for z/VM workloads



# How Velocity Software Creates Value

- Velocity Software's product suite is easy to deploy, and manage
- Velocity Software makes managing your zHybrid clouds easy (EZ)
- Velocity Software runs with extreme efficiency
- Velocity Software's EZ Hybrid Cloud helps;
  - Make sustainability and TCO goals possible for IBM Z and LinuxONE by optimizing workloads
  - Make platform/application visualization EZ and simple
- Velocity's customer-based partnership with IBM COE in POK can be requested to help resolve application and hardware issues as needed, or showcase services
- Velocity Software works with educators, provides classes/training and works directly with IBM as needed or required

## Exciting News!!

### Velocity Software is now your place for z/VM education!

- Instructor-led classes being recorded for Self-Study
- Upcoming Instructor-led Class:
  - July 8-10 2026 – Modules 1, 2 and 3 (from our education page)

Ask about it here at the workshop!

See our website – [VelocitySoftware.com/Educate/Training](https://VelocitySoftware.com/Educate/Training)

Send an email to – [education@velocitysoftware.com](mailto:education@velocitysoftware.com)

# Next Steps and Upcoming Events

Let us know how we can help modernize your hybrid cloud and create greater efficiencies with your IBM Z and LinuxONE investments by scheduling a POC

The VM Workshop 2026 at Virginia Commonwealth University, June 10 - 12;  
[VM Workshop](#)

Sessions submitted for [IBM's TechXchange 2026](#) conference in Atlanta GA,  
Oct 26 – 29<sup>th</sup>

And stay tuned for more events like zCouncils, global VM workshop roadshows and exciting new partnerships!

# Velocity Software's zLOV Stack Makes z/VM Easy (EZ)

## zVPS

### PERFORMANCE SUITE

THE WORLD'S LEADING PERFORMANCE MANAGEMENT SOLUTION FOR Z/VM WITH LINUX AND/OR VSE. NEWLY ADDED SUPPORT FOR Z/OS PLUS NO-CHARGE MONITORING FOR X86 LINUX AND WINDOWS.



## zPRO

### CLOUD MANAGEMENT

SOLUTION FOR MODERNIZING THE Z/VM PLATFORM, ADDING ON-PREM CLOUD SUPPORT WITH WEB-BASED CONTROLS FOR Z/VM SYSTEM MANAGEMENT PLUS LPAR CLONING AND ANSIBLE PLAYBOOKS USING VELOCITY'S HIGHLY AVAILABLE SMAPI-FREE API'S.



**zLOV**  
LINUX ON  
VELOCITY



## zTUNE

### SUPPORT SUBSCRIPTION

VELOCITY SOFTWARE'S ELITE PERFORMANCE SUPPORT SERVICE THAT CREATES AUTOMATED DAILY REPORTS WITH RECOMMENDED ACTIONS



## zVRM

### RESOURCE MANAGER

REAL-TIME MANAGEMENT FACILITY FOR Z/VM WITH LINUX THAT AUTOMATES SYSTEM SETTINGS USING KNOWLEDGE-BASED INTELLIGENCE TO TUNE WORKLOAD REQUIREMENTS AND OPTIMIZE OVERALL SYSTEM PERFORMANCE.

