

Educational Cloud, powered by zPRO

Powerful, Easy to Use Cloud Management
for Linux on IBM Z

Velocity Software, Inc

<https://www.velocitysoftware.com>

Agenda

- **Introduction**
- **zPRO Use Cases for Education**
 - NCAT
 - MFA Switzerland
- **zPRO Overview**

Use Case for Education #1

- **North Carolina A&T University**


- Cameron Seay, Professor
Computer Systems Technology
 - *Impact of the Cloud on IT Professionals and the IT Industry*
 - *Personal Applications of Clouds*






- **Virtualization class**


- Students given access to build, start, stop and delete their own servers
- They can logon to the 3270 console to watch the Linux OS boot up
- All “self service” and requires no special intervention

NCAT – Create Servers

 Self Service VSIVM4

Self Service
Auto Arrange
Close All
Create Servers 
Request a CMS virtual machine
Request a Minimal Linux Server
Manage Servers & Resources 
View Resources 

> zPro

Request a Minimal Linux Server 

First Name

Last Name


Email Address

Verify Email

☒ Do you wish to start server

You are about to request the generation of a Linux server.

Process Request

Request a CMS virtual machine 

First Name


Last Name

Email Address

Verify Email

You are about to request the generation of a CMS virtual machine running on DEMO.VELOCITYSOFTWARE.COM

Process Request



PROVEN PERFORMANCE 4

NCAT – Create Servers

Self Service
Auto Arrange
Close All
Create Servers
Request a CMS virtual machine
Request a Minimal Linux Server
Manage Servers & Resources
View Resources

> zPro

Request a Minimal Linux Server
First Name
James
Last Name
Vincent
Email Address
james@velocitysoftware.com
Verify Email
james@velocitysoftware.com
☒ **Do you wish to start server**
You are about to request the generation of a Linux server.

Process Request

Step 1 of cloning GOLDLXRO to NCSX0457 completed.
Assigned IP address 010.000.000.006
Step 2 Minidisk copy started, JobQueue will show the progress

Job Queue

NCSX0457 - Completed
Disk 0204 - Ended
Disk 0205 - Ended

Clear Completed Jobs

NCAT – View Resources

Self Service

Auto Arrange

Close All

Create Servers

Manage Servers & Resources

View Resources

Resource Graph

Resource Usage

Display zPro controlled IP addresses

Server Performance

> zPro

IP Address List for NC SIKATH

Search Criteria...

IP Address	Status	Date	User	Server	VSWITCH
10.000.000.006	ALLOC	11/28/17	NC SIKATH	NC SX0457	VSI10NET

NCAT – View Resources

Self Service

Auto Arrange

Close All

Create Servers

Manage Servers & Resources

View Resources

Resource Graph

Resource Usage

Display zPro controlled IP addresses

Server Performance

> zPro

Resource Usage

Search Criteria...

x


Group	User	Servers	VCPUs	VStor(MB)	DASD	MDisks	IPs	OSAs	FCPs
NCATGRP	NCATIT01	1	1	256	0	2	1	0	0
NCATGRP	ZPRONCAT	0	0	0	0	0	0	0	0
NCATGRP	totals	1	1	256	0	2	1	0	0
NCATGRP	limits	60	120	81920	unlim	unlim	unlim	unlim	unlim


NCAT – View resources


Self Service

Auto Arrange

Close All

Create Servers 

Manage Servers & Resources 

View Resources 


Resource Graph



Resource Usage


Display zPro controlled IP addresses

Server Performance

> zPro

Server Performance - NCSIKATH 

Search Criteria...  

Server	Type	Owner	Status
NCSX0457		NCSIKATH	Running

NCAT – Manage Servers & Resources

Self Service

Auto Arrange

Close All

Create Servers

Manage Servers & Resources

Change a Server's Password

Display/Modify owned servers

View Resources

> zPro

Change a Server's Password

User Id
NCSX0457 ▾

New Password

Verify password

Process Request

NCAT – Manage Servers & Resources

Self Service
Auto Arrange
Close All
Create Servers
Manage Servers & Resources
Change a Server's Password
Display/Modify owned servers
View Resources

> zPro

Server List for NCSIKATH

Search Criteria...

Sel	Server	zPRO Prov	Expiration	System	Status
<input type="checkbox"/>	NC SX0457	Yes	17/12/29-15:18:27	VSIVM4	Running

Start Stop Delete View Log Edit MDisks

Use Case for Education #2

- **Mainframe Academy in Switzerland teaching z/VM skills**
- **Will allow students access, much like NCAT**
 - They will provision 2nd level z/VM 6.4 systems
 - These systems are mostly R/O
 - Plenty of R/W disk available for testing and trying different things
 - Upon creation of the server, they receive an email
 - They can logon and 'boot' the z/VM system
 - Gives them access to the Stand Alone Loader
 - OPERATOR, AUTOLOG1 (etc) are available to modify

MAS – Create a z/VM Guest

> zPro

Request a z/VM 6.4 virtual machine ✕

First Name

Last Name

Email Address

Verify Email

You are about to request the generation of a z/VM 6.4 virtual machine running on DEMO.VELOCITYSOFTWARE.COM

zPRO Overview

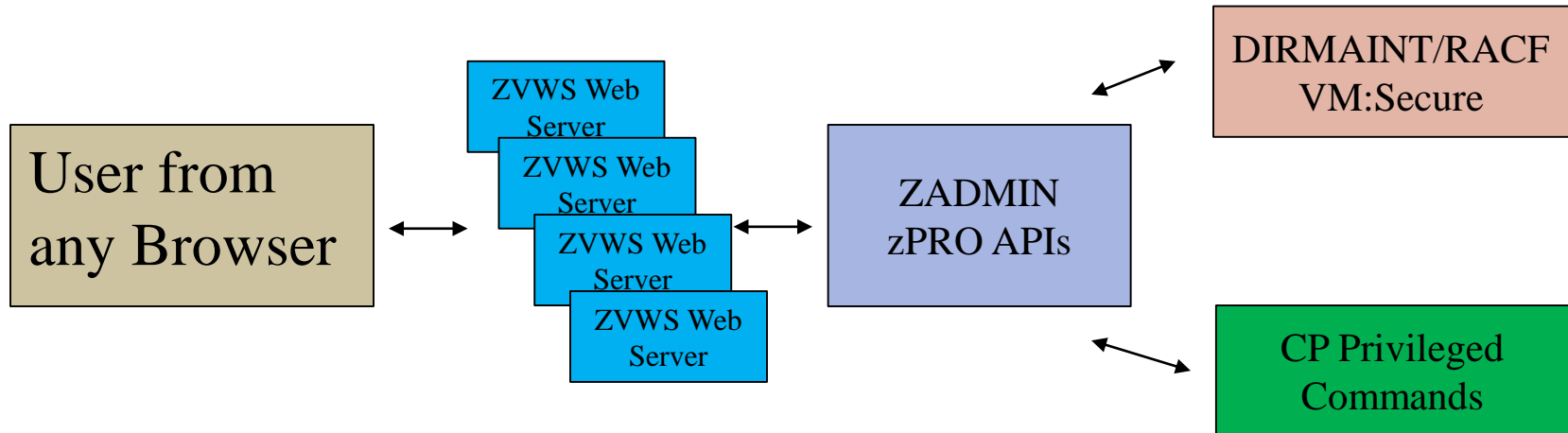
**I'm often asked,
“How does zPRO work?”**

zPRO Overview

My response is always:

“Quite WELL, thank you!”

zPRO Overview



zPRO Overview

- **zPRO API Library**

- Browser-based end-user interface
 - All common browsers supported
- Utilizes the zVWS *native* z/VM web server
 - No changes required in web server to support zPRO
- Installs in about 10 minutes (or LESS!)
- Supports common directory/security management
 - DIRMAINT with or without RACF
 - VM:Secure
 - LDAP (for non-VM authentication)

zPRO Overview

- **z/VM Cloud Server Management**

- Define (Clone), modify, start, stop, delete servers
 - Linux w/Oracle, Websphere, etc – any z/VM defined server
- Manage server expirations
 - Useful for LAB, test or proof-of-concept servers
- Selective resource controls and quota management
- SSI / LGR (live guest relocation) support
- Enterprise view of servers
 - View and manage servers on other nodes even if not in an SSI cluster
 - zTCP and zMON required

- **Extensible**

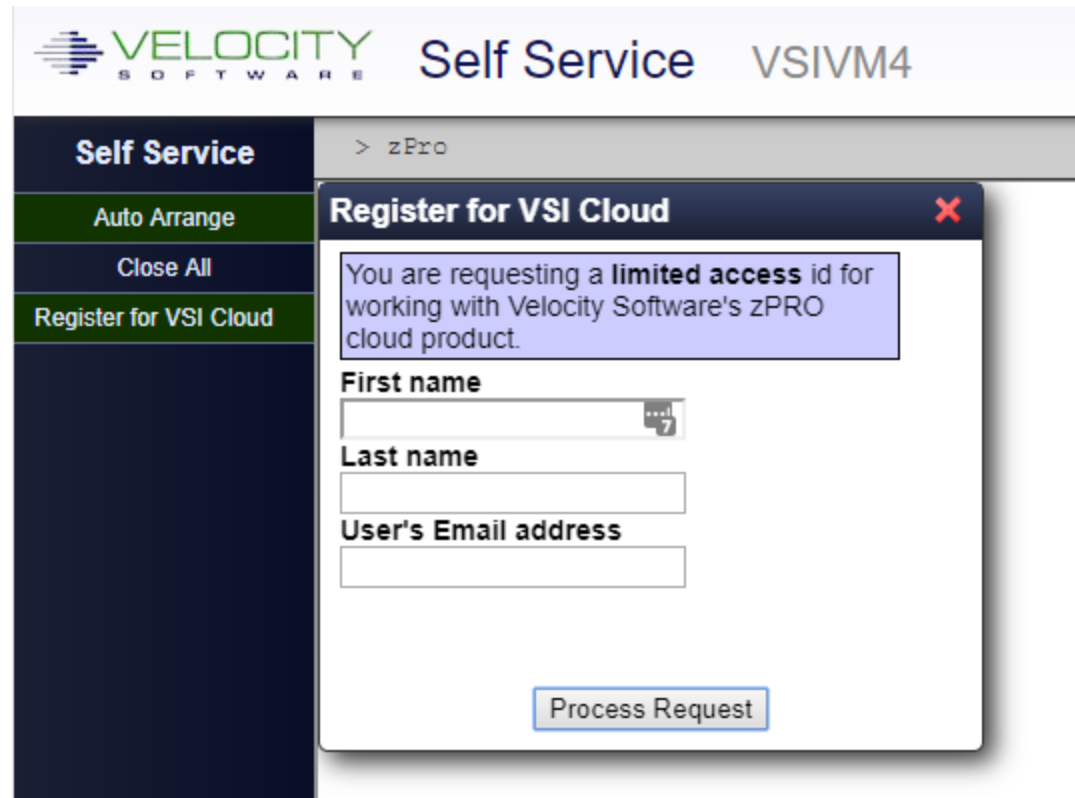
- Can define and “plug in” site-defined services

zPRO Overview

- **Define access to non-Sysprog users/groups**
 - No special z/VM authority required for users/groups
 - Define resource boundaries for groups and users
 - Each group and user can use the same resource pools, or specific pools
 - Users manage their own resources and servers
 - Can clone and manage their own servers how and when ever they need
 - No z/VM system knowledge needed
- **Reduces time**
 - z/VM System Programmer's freed up to manage other things
- **Empowers others**
 - Unix/Linux admins, Application groups and more

zPRO demo site

- To register:
<https://demo.velocitysoftware.com/zprov2/>
 - Userid: demozpro
 - Password: demodemo
- Register, then email sent with login info



The screenshot displays the Velocity Software Self Service interface. The top navigation bar includes the Velocity Software logo, the text 'Self Service', and the user identifier 'VSIVM4'. A sidebar on the left contains links: 'Self Service', 'Auto Arrange', 'Close All', and 'Register for VSI Cloud'. The main content area shows a breadcrumb trail '> zPro' and a modal window titled 'Register for VSI Cloud'. This modal contains a message: 'You are requesting a **limited access** id for working with Velocity Software's zPRO cloud product.' Below this message are input fields for 'First name', 'Last name', and 'User's Email address'. A 'Process Request' button is located at the bottom of the modal.

VELOCITY SOFTWARE Self Service VSIVM4

> zPro

Register for VSI Cloud

You are requesting a **limited access** id for working with Velocity Software's zPRO cloud product.

First name

Last name

User's Email address

Process Request

zPRO Summary

To *(mostly)* quote a fellow z/VM Systems Programmer:

“zPRO takes the suck factor of my job way down”

-- Mike G.

Questions / Comments?

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