

# VMUG User/con

Indianapolis

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# vRealize Operations

- Intro
- Features
- Architecture
- End Point Operations
- Live Demo

# vROPs – Tame the VM

- Let's keep it interactive
  - I'm not the expert, you also have valuable input
  - Ask questions! The only dumb question is one that is never asked.
  - What are your experiences with vROPs?
- 
- Tweet the session - #INDYVMUG @SirGeekness @MyVMUG @INDYVMUG

# About me

- Originally from Baltimore, MD
- Lived in CA, WI, KY
- Currently live in Carmel, IN
- Have had a home lab since mid 1990s
- Geek my entire life
- Doing IT work since 1991
- Have had a love/hate relationship with VMware since 2005
- VCP-DCV, VCP-NV

# vROPs Features

- Single pane of glass visibility to infrastructure and workload
- Metric and Event correlation
- Identify performance issues
- Troubleshoot
- Capacity management and planning
- Additional Management Packs
  - <https://marketplace.vmware.com>
    - Some here are free and some paid
  - Blue Medora provides quality management packs
    - <https://bluemedora.com/>

# Why deploy the End Point Operations agent?

- Gain greater end to end visibility from your environment to show management and executives if specific KPIs are within limits.
- Create custom dashboards that tell the story of how business critical OS and applications are performing.
- Create more informative reports that provide predictive metrics based on future load, capacity needs, migration to HCI, migration to various cloud environments.
- VMware tools only tells part of the OS story, EPOPs tells the rest!

# Additional Metrics and Properties

- Linux - 512 additional metrics and properties
- Windows - 440 additional metrics and properties
- Additional OS support
  - AIX
  - HP-UX
  - Solaris
- Overhead on OS will vary with the amount of metrics enabled
- Less than 5% is typical

# Additional Metrics and Properties

## Windows

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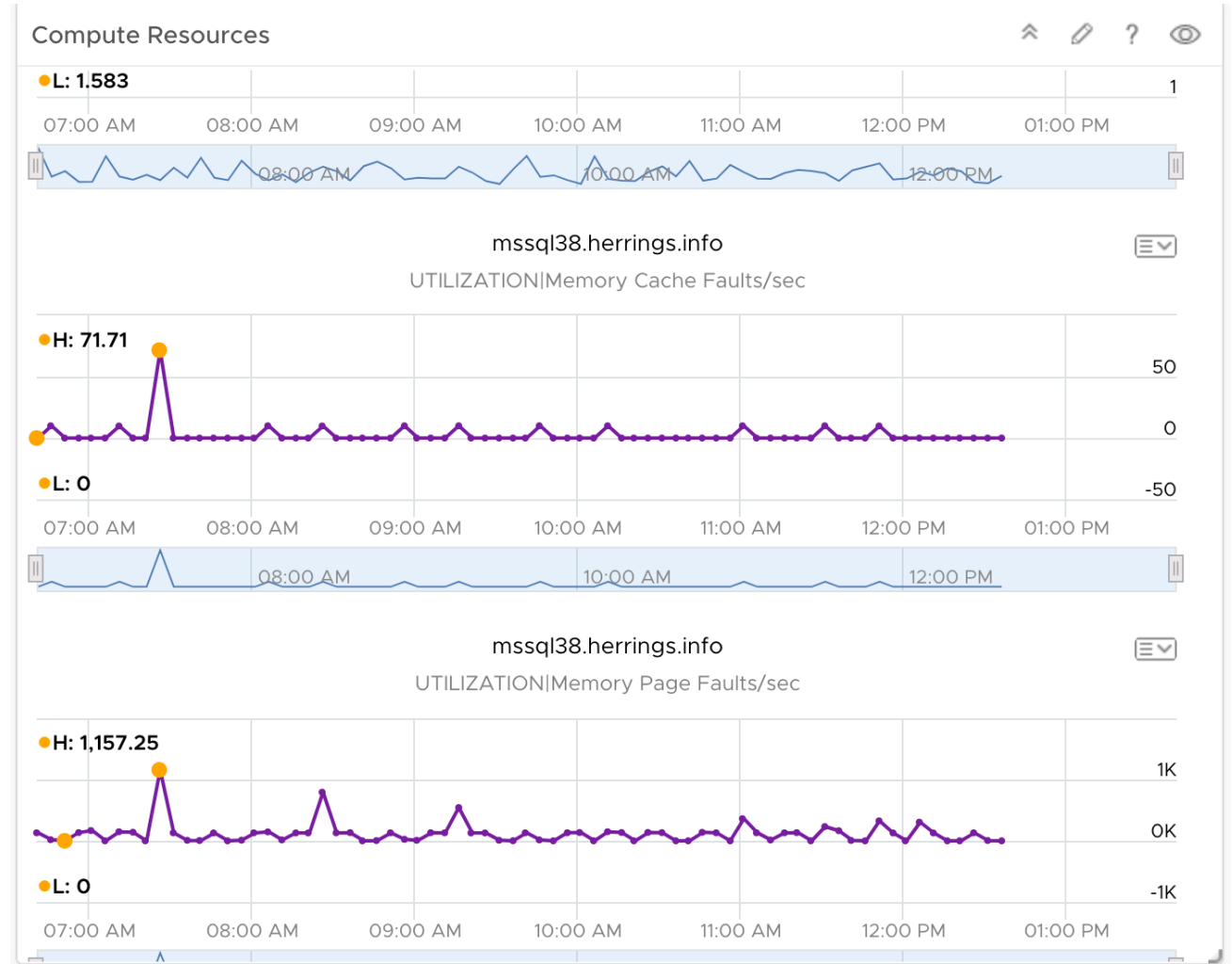
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# EP Ops

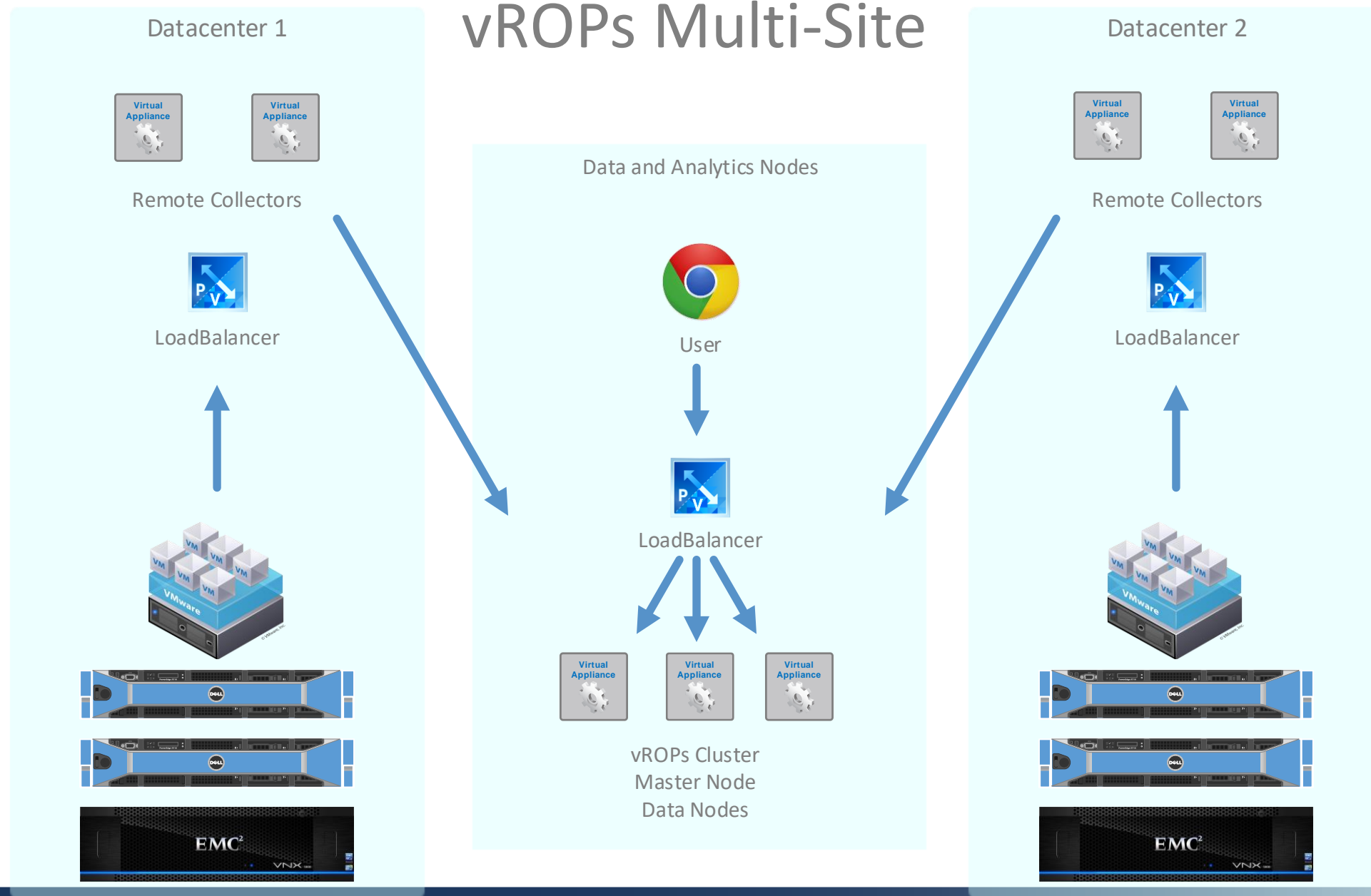
- Provide metrics and other information from individual VMs
- Correlate and create dashboards with other infrastructure items
- Identify issues from multiple points in the infrastructure



# Architecture

- Multiple nodes provide redundancy and load distribution
- LB architecture for client access as well as agent connectivity
- Does not include an ILB like Log Insight
- NSX Edge is supported as well as other common LBs
- In cluster configurations a SAN certificate is needed because multiple hostnames will make up the cluster.
- Add Remote Collectors if gathering metrics from a remote site or use them locally to reduce the load of the Analytics nodes.
- Remote Collectors can be load balanced as well.

# vROPs Multi-Site

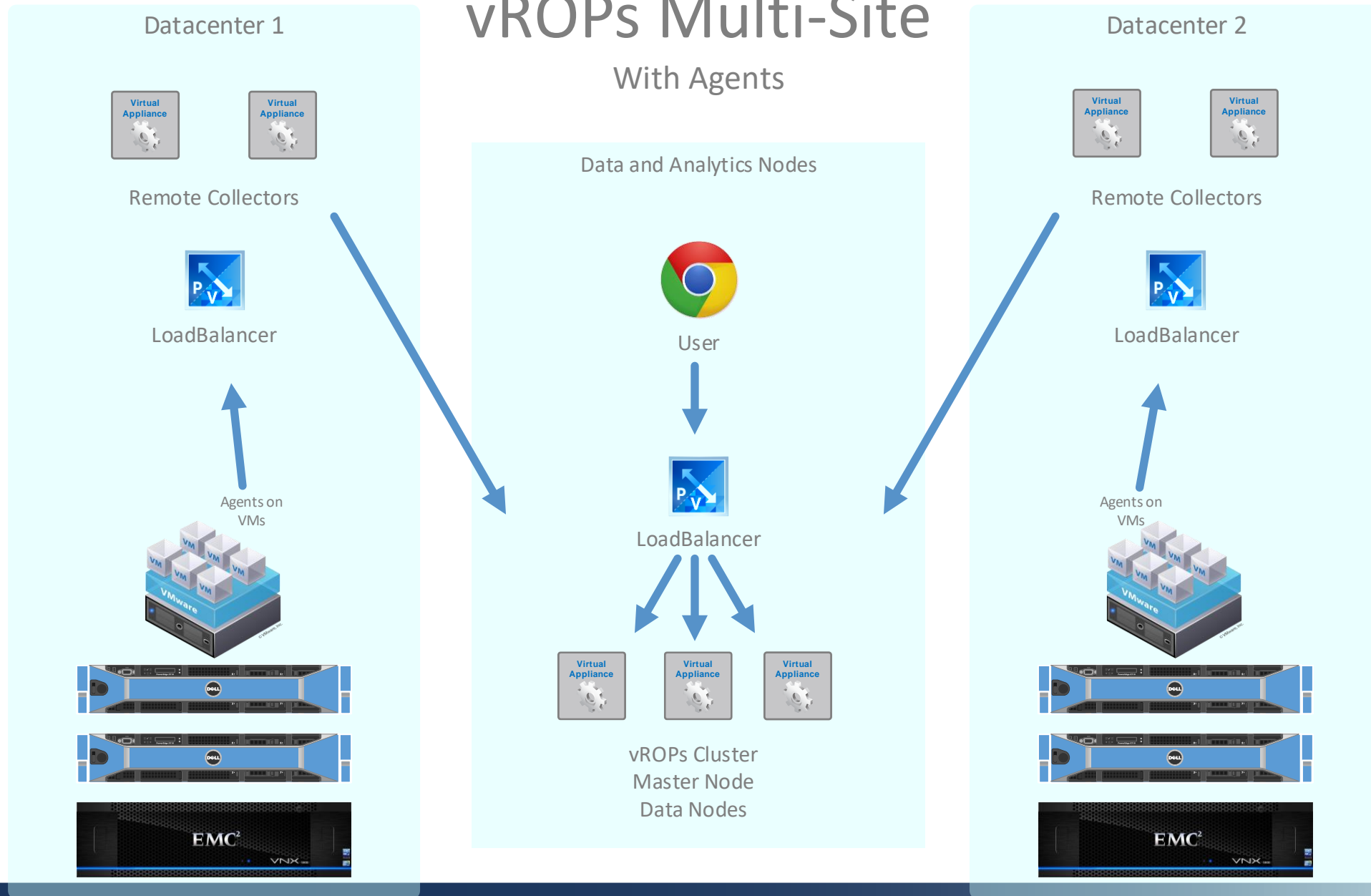


# End Point Operations

- Agents provide additional metrics from within the operating system.
- A small set of metrics is enabled in the default policy. Additional metrics can be enabled through creating a new policy or modifying the one in use.
- Useful in providing metrics to troubleshoot performance issues within the OS.
  - MS SQL Server
  - JVM Application Servers
  - Other applications where memory utilization may not be visible through VMware Tools

# vROPs Multi-Site

## With Agents



# EP Ops Installation

- Copy Thumbprint from the Admin vROPs console
- Create an EPOps service account within vROPs
- Locate the appropriate agent installer
  - Windows and Linux packages with Java included
- Run the installer and provide the following
  - vROPs Load Balancer or DNS alias hostname
  - Thumbprint
  - Service account
  - Finish install
- Verify new EP Ops host within vROPs Administration

# Live Demo

# To reach me

- Craig Herring
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- @SirGeekness
- <https://blog.virtualbean.org/>
- Content available at:
  - <https://github.com/crageherring/vROPsDashboards>
- Fun fact
  - Carmel has 102 Roundabouts
  - HomeLab is a full rack of gear





