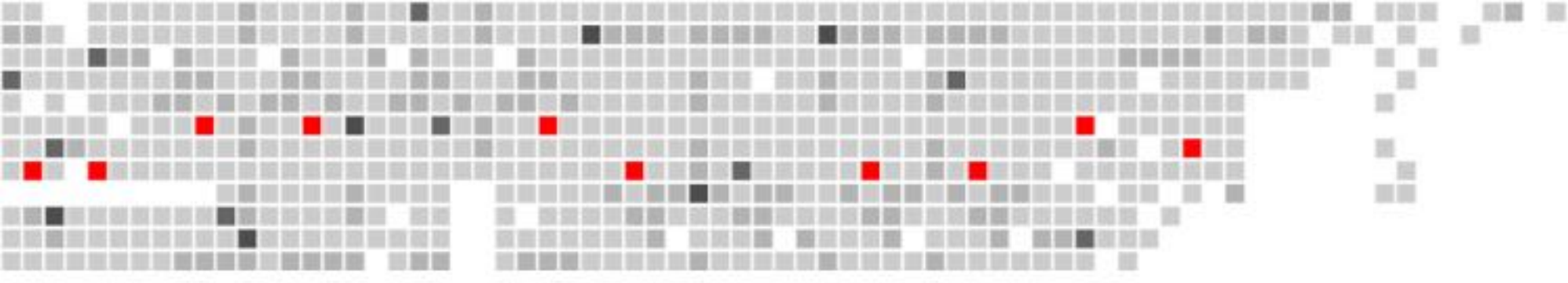# Insider's View of ClusterVisor

Kyle Sheumaker
ksheumaker@advancedclustering.com
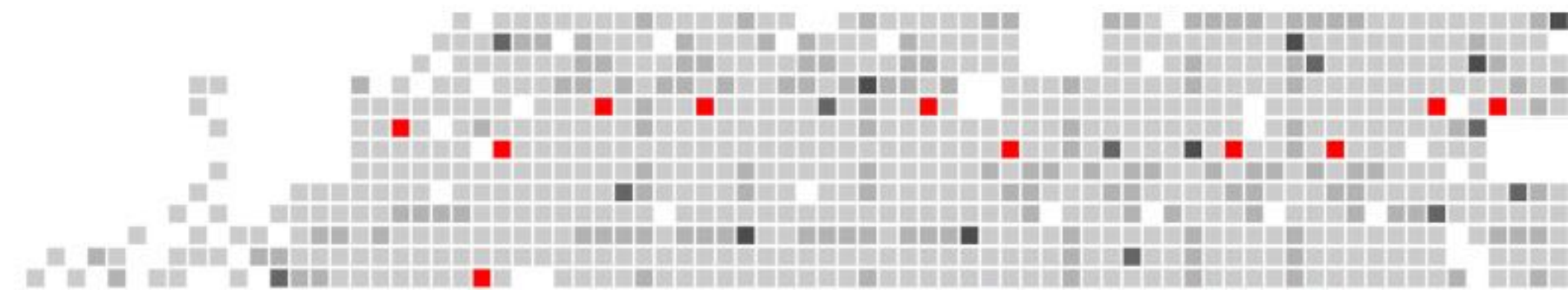Advanced Clustering Technologies

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- What is ClusterVisor

- Features and benefits

- Architecture

- Live demo

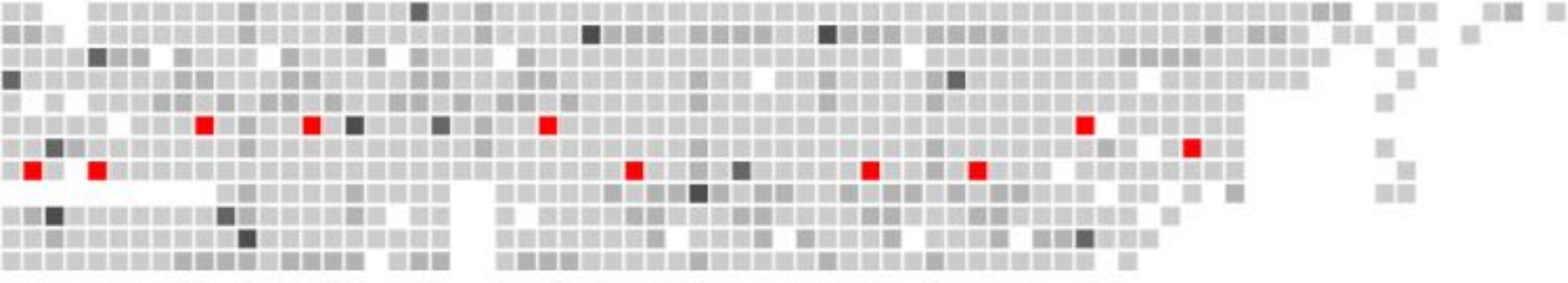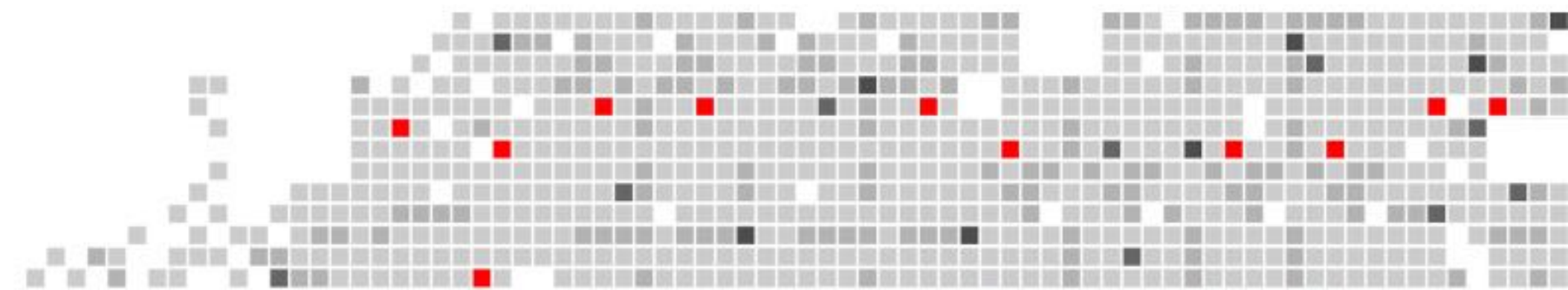- ClusterVisor is our full-featured cluster management software

- It provides easy to use interface to manage, monitor, and maintain your cluster

- Fully extensible through our plugin architecture

- Easy to use - with full-featured web and command line interfaces

- Coordinated updates - changes are automatically propagated and implemented through the cluster

- Customizable dashboards - so you can see the status of your system at a glance

- Monitoring and statistics - automatic collection of system metrics and ability to create custom alerts and actions

- User / Group management - built-in LDAP server to provide unified account and authentication

- Cloning - Image creation and replication to nodes

- And more…

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clustervisor

cv-serverd

- Runs on head or mgmt node

- Provides main backend api to other ClusterVisor components

- Orchestrates network booting of compute nodes

- Interfaces to MongoDB to store configuration, and InfluxDB to store node metrics

cv-clientd

- Runs on all nodes on the cluster

- Collects metrics on the system (cpu, memory, temperature, networking, RAID, etc)

- Receives updates from cv-serverd to system configuration and implements those changes

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clustervisor
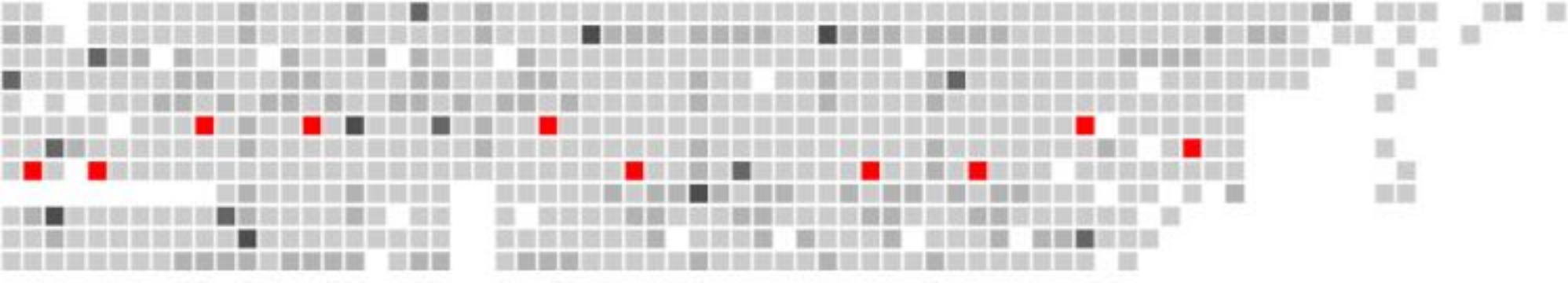
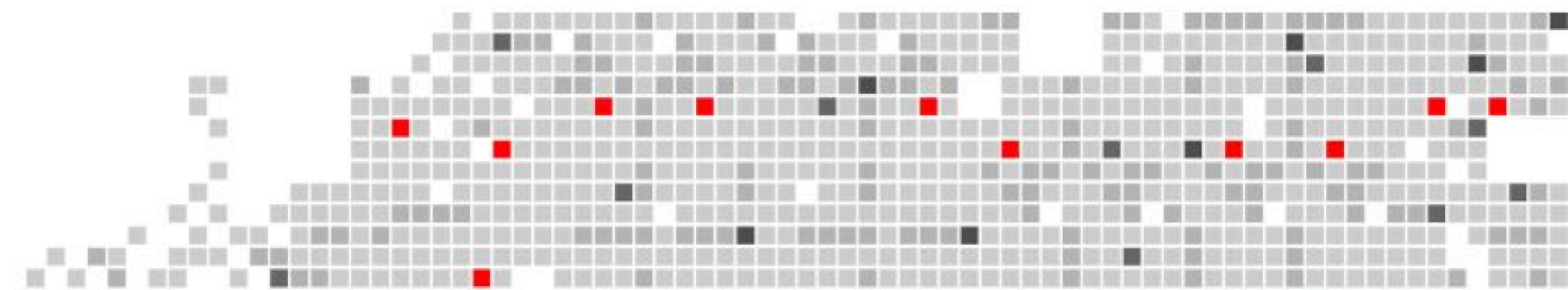advanced clustering technologies, inc.

Web interface

- Runs as a module to cockpit - open source web-based server management software that comes pre-installed on many Linux distros

- Cockpit provides a secure tested system for management of Linux servers that CV can plugin to

- Can run on any host inside the cluster (normally head/mgmt node)

Command line

- Unified command line interface to all tools to help manage and use the cluster

- Examples:

  - cv-conf - configure the cluster

  - cv-exec - run commands across nodes
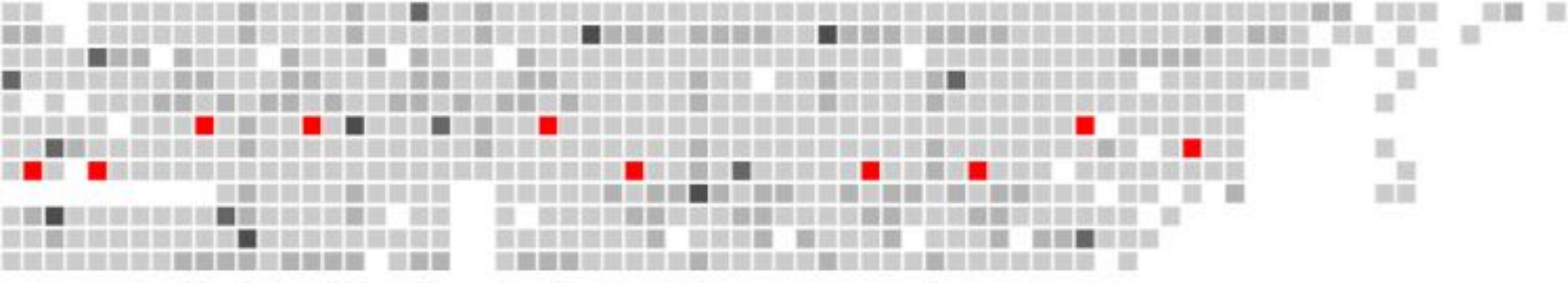
  - cv-stats - query node metrics

  - Many more

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Demo

- Supports Enterprise Linux 8 operating systems (CentOS, RedHat) - other OS being evaluated

- Included for free with purchase of a cluster from Advanced Clustering, no ongoing license costs

- Under active development with new features like slurm accounting and job analysis coming soon

More info at:

https://www.advancedclustering.com/products/software/cluster-visor/

Or contact us at:

info@advancedclustering.com