Insider’s View of ClusterVisor

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Advanced Clustering Technologies
• 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…
**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
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
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:

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