

eCAD

THE PROBLEM

In a typical eCAD grid environment, clusters participate in a variety of workloads deployed in a multitude of sizes. Delivering consistent storage performance in an eCAD environment is always a challenge, because the large size of deployment makes managing complex. Also, in eCAD environments, the difference between average load and peak loads on storage servers, makes it difficult for administrators to follow and respond to, with regard to ensuring consistent performance.

Administrators of eCAD environments grapple with the lack of insight and understanding about data movements, inside their eCAD environment and how these are impacting efficiency and productivity.

Without such a point of view, it is difficult to optimize the eCAD data environment for better data movement or for a more efficient handling and servicing of workloads.

Today, users use difficult to maintain scripts to achieve this. However, this is not adequate to the solution to the problem.

THE SOLUTION

PerfAccel gave administrators of eCADs, for the first time, a micro and macro level reporting of all IO in the eCAD. Administrators can identify hot data that is frequently accessed as well as understand the behavior of applications, with regard to using of this data.

Armed with this visibility and knowledge, administrators can now use PerfAccel to cache most frequently used data and also fine tune their caching rules, so that the frequently accessed files can be held inside the cache and made easily available to the application. PerfAccel enables administrators move data into the appropriate cluster in a just-in-time fashion or fine tune their cache rules, such that data is closer to the CPUs, reducing significantly the delay time users experience, waiting for the CPU.

This not only reduces IO latency but also greatly reduces network traffic and storage IOPS which are offloaded to the cache.

PerfAccel dramatically improves storage performance within their network, and quite simply too!. With PerfAccel, there is no need to setup synchronization jobs between source code servers and grid nodes. Users can compile data on the NFS share while data is automatically refreshed on the compute node. Managing the data might seem complex – but with PerfAccel, managing data across a grid of thousands of nodes and storage devices has never been easier. As an application, OS, and storage agnostic technology, PerfAccel works within the eCAD environment in complete anonymity, causing zero disruption to existing jobs. From acceleration in EDA applications to grid level scalability, PerfAccel delivers powerful IO management infrastructure to the eCAD community in an easy-to-use system that deploys in minutes.

DATA CENTERS

THE PROBLEM

Virtual data centers are complex. There are many devices of different kinds (physical and virtual) which inter-operate, but not quite efficiently. Efficiency is a challenge with the new data center.

One example is backup to disk. Companies invest significant capital expense in backup hardware, including backup servers, disk storage, oftentimes in both the primary data center and the remote disaster recovery site. When there is no backup running, the CPU and memory are underutilized across these many specialized systems and devices.

With many applications vying for data, there is inevitably a slow- down in data delivery speed, due to network traffic. High storage latency also contributes to this slow down. Application IO performances start to dip. Administrators of data centers are left to wonder what can be done to reverse this trend.

The main challenge before administrators in VM environments is the lack of availability of intelligence on data in their systems. Without knowing what is happening to the data, what the bottlenecks are, where the slow downs are happening, managing the data or the performance of the system, is a challenge.

THE SOLUTION

PerfAccel was designed with virtualization in mind to provide granular intelligence for faster VM reboots and application IO performance while decreasing storage network traffic and application slowdowns due to high storage latency.

Ideal for XEN, KVM, and VMware virtual environments, PerfAccel helps admins identify what data is managed by the cache and what data can be offloaded to less performance critical storage.

From webhosting to large scale cloud infrastructure, admins can decrease the cost of storage while significantly increasing IO performance within minutes of deploying PerfAccel to their virtual environment.

Try

Register for a free trial of PerfAccel software to see how data intelligence can Dramatically improve the visibility, control and acceleration of your data network.

FREE TRIAL

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