EMC Partner Overview

Partnership enables users to maximize storage performance and uptime

WorkloadWisdom Overview

WorkloadWisdom empowers storage experts with the insight needed to optimize the performance and cost of networked storage. Our workload modeling software and load generators for file/block/object storage enable real-world modeling of application workloads to validate the performance characteristics of EMC storage products and accelerate deployments.

Partnership Overview

By integrating WorkloadWisdom validation processes with EMC storage solutions, end-user organizations can more efficiently acquire new storage infrastructure based on actual performance requirements.

WorkloadWisdom's technology allows storage architects and storage engineers to emulate their specific application workloads including their I/O profiles that contain both data and metadata, before it is deployed into production.

The EMC Technology Partner Program enables WorkloadWisdom to help more enterprises correctly rightsize their EMC storage infrastructure and align it with actual application requirements. It will also prove the superior performance of EMC storage over competitive storage systems or simply prove that the proposed EMC configurations can truly handle the customer's workload – removing any fears about EMC purchases.

Case Study

A leading US-based insurance carrier used WorkloadWisdom to validate the performance of the proposed EMC Isilon storage solution in a pre-production environment as a requirement before the purchase of EMC storage.

> "*By integrating WorkloadWisdom with EMC solutions, IT organizations can efficiently acquire and size their storage infrastructure based on actual performance requirements.*"
>
> **Kalen Kimm**
> VICE PRESIDENT, CHANNELS
> WORKLOADWISDOM

According to its implementation partner, AdvizeX, the insurance company wanted to make sure its Isilon storage deployment went smoothly without disruption of service to its end users. With a unique production environment, it was imperative to emulate their application workloads in WorkloadWisdom before going live. By doing so, the insurance carrier was able to detect application bottlenecks and drive performance numbers that far exceeded expectations. The normal testing cycle was reduced from 60 days to just less than two weeks.

EMC / WorkloadWisdom Technology Benefits

The WorkloadWisdom product suite is optimized to work with EMC's VNX®, VNXe®, Isilon®, etc. products. The integration of the WorkloadWisdom generators with EMC Storage solutions enables users to accelerate the deployment of new services and applications, while maximizing performance and uptime.

The combined WorkloadWisdom and EMC solution should be used as part of an enterprise's infrastructure performance validation lifecycle process. At each step in the infrastructure's lifecycle, performance validation should be used to produce reliable, accurate decision-making information. For example, proposed changes to infrastructure should be first validated before rolled into production.

WorkloadWisdom Solution Overview

WorkloadWisdom's solution combines an intuitive workload modeling and performance validation application (software) with a high-powered load generator (hardware) capable of generating massive loads that can drive storage systems past their maximum capabilities:

- **WorkloadWisdom**
  The software suite provides detailed analysis of existing application workloads including a full command mix distribution and uses a Web-based GUI to create workload scenarios that can be tested on the new workload generators.

- **WorkloadWisdom Workload Generators**
  The hardware generators are used to generate traffic based on workload models and access patterns that have been configured by the software. The generators are purpose-built devices with a software and hardware architecture that has been specifically engineered to cost-effectively generate massive traffic loads that can test the performance and scalability limits of any storage subsystem. The Ethernet based generators support up to eight 1Gb Ethernet ports or eight 10Gb Ethernet ports that can generate traffic for NFS, CIFS, SMB, iSCSI, HTTP, CDMI, or OpenStack Swift workloads. The Fibre Channel based generator (FC Series), currently supports up to eight 4/8/16 Gbs Fibre Channel ports. All generators include WorkloadWisdom.
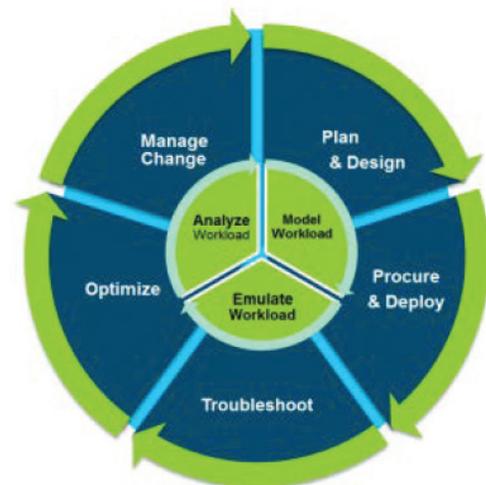

Figure 1: WorkloadWisdom performance validation for the entire storage infrastructure lifecycle.

Figure 2: The solution includes WorkloadWisdom modeling software combined with a 2U generator.