



Metron Athene Factsheet

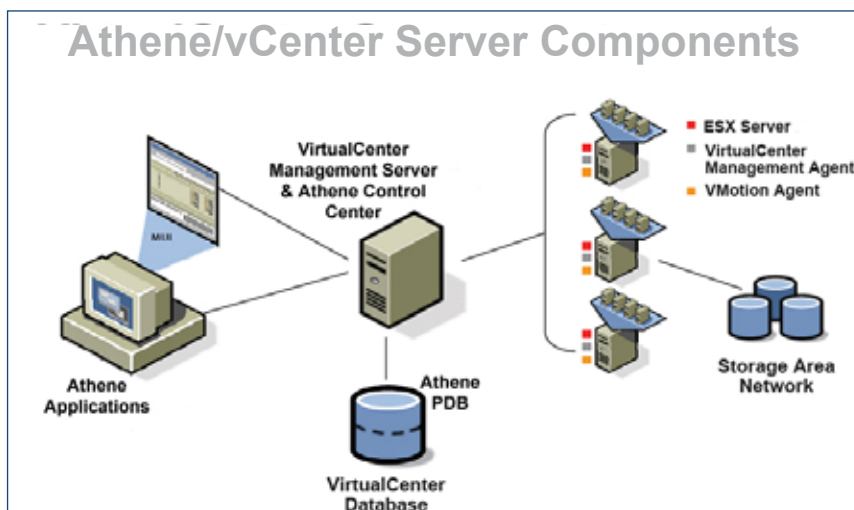
VMware Support

Virtualization

Virtualization technology promises to deliver a painless route to the nirvana of Utility Computing. VMware ESX Server is the datacenter-class Virtualization platform used by 80% of Fortune 100 companies. Metron is a VMware Technology Alliance Partner and has integrated support for VMware in the Athene Performance Management and Capacity Planning product suite.

In the IT world the introduction of new technology to solve one set of problems usually introduces another set and virtualization is no exception. Disparate and heterogeneous farms of applications servers can be consolidated to a single homogenous pile of blade servers but all the operating systems and applications that existed before the exercise still exist and require management. New dimensions are added to the performance manager's task. Even in a VMware environment high utilization levels can only be sensibly and safely achieved with mixed workload types. Good Performance Management will be the basis of successful virtualization implementations.

VMware provides for flexible and dynamic physical resource management. Athene provides the information necessary to model and plan the distribution of guest VMs in the ESX Server Farms.



Virtual Infrastructure Performance Management and Capacity Planning

Athene for VMware



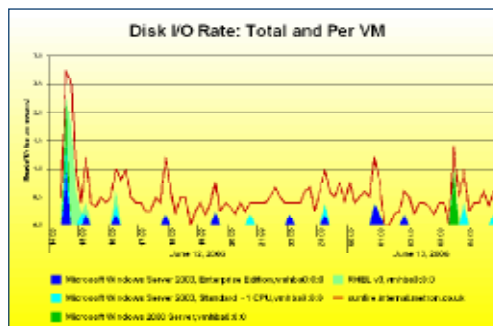
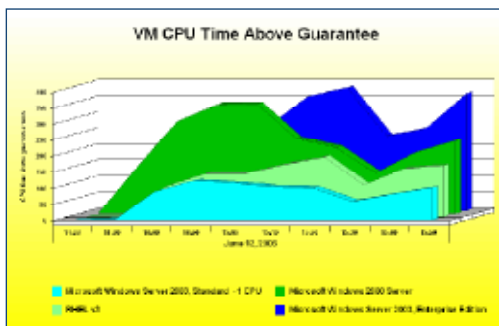
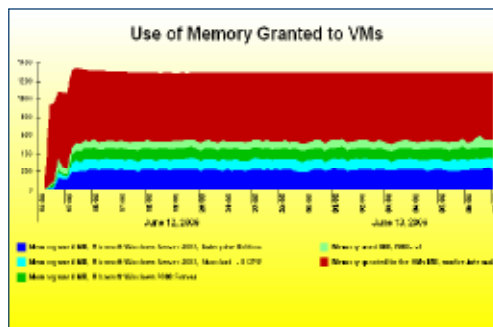
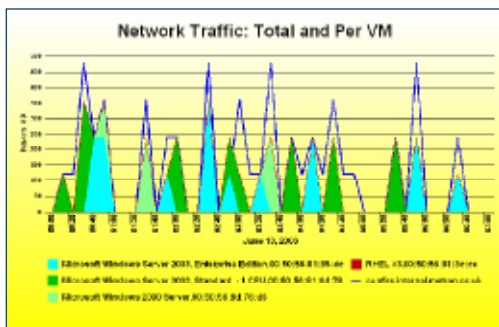
While it is possible to run performance tools, such as conventional Athene Acquire agents, from inside a guest operating system, the CPU utilization reported by such tools for applications running inside the virtual machine may not accurately reflect the actual physical CPU utilization for that application. Athene collects data from VMware via the VMware vCenter Server that manages the ESX servers. This 'agentless' technology is the recommended route for the capture of performance data and ensures complete compatibility between Athene and VMware as the technology evolves. The data captured is written into the main Athene Performance DataBase and is therefore available to all the Athene applications including Capacity Planning for VMware Hosts. Athene and the Athene PDB can be co-located on a server hosting VMware vCenter Server.

Specially engineered platform-based performance tools, such as Athene, are the most accurate way to collect and assess CPU utilization and other time-series metrics.

Athene can further capture data from each guest VM to enable standard Athene reporting and analysis on each VM if required.

- Stages of a typical virtualization/consolidation project**
- Make inventory of servers and applications
 - Collect raw performance and capacity data using Acquire
 - Identify under-utilized servers using Analyst/Automatic Reporting
 - Identify potential virtualization candidates, e.g. complementary workload profile using Analyst/Automatic Reporting incl. workload data
 - Baseline performance of under-utilized servers to assess options using Planner
 - Move actual workloads to virtual machines
 - Plan future performance based on expected workload growth using Planner
 - Lifecycle performance and capacity management using Analyst/Automatic Reporting/Planner

Athene provides integrated support for every stage of your virtualization project and all the information required to ensure continued optimized Performance Management.



Athene Benefits:

- Manage server consolidation projects and reduce hardware expenditure.
- Plan the optimum mix of VMs for a given ESX Server configuration.
- Ensure maximum use of server resources within existing SLAs.