



Increased IT infrastructure effectiveness by 80% with Microsoft System Center Operations Manager for a Fortune 100 firm



The Customer

This Fortune 100 firm is one of the world's largest distributors of mobile phones, supporting the global wireless telecommunications and data industry by providing quickly deployable, flexible and cost effective solutions. They have their presence in 170 countries and are serving about 200,000 customers

The Challenge

Our customer's IT systems are geographically distributed over a large area and they often faced a series of downtime on some of the mission-critical applications. Managing and maintaining the IT Infrastructure availability was considered to be the biggest challenge and then they decided to have a cost effective enterprise level monitoring tool to overcome key challenges as mentioned below:

- Controlling IT infrastructure in a single pane
- Integrated dashboard view
- Granular monitoring level on wide range of MS products
- Extended support flexibility on Non-MS products
- Assistance during capacity planning & pattern trending
- Flexible customization
- Accuracy in identifying incidents & events
- Integrated knowledge base

The Solution

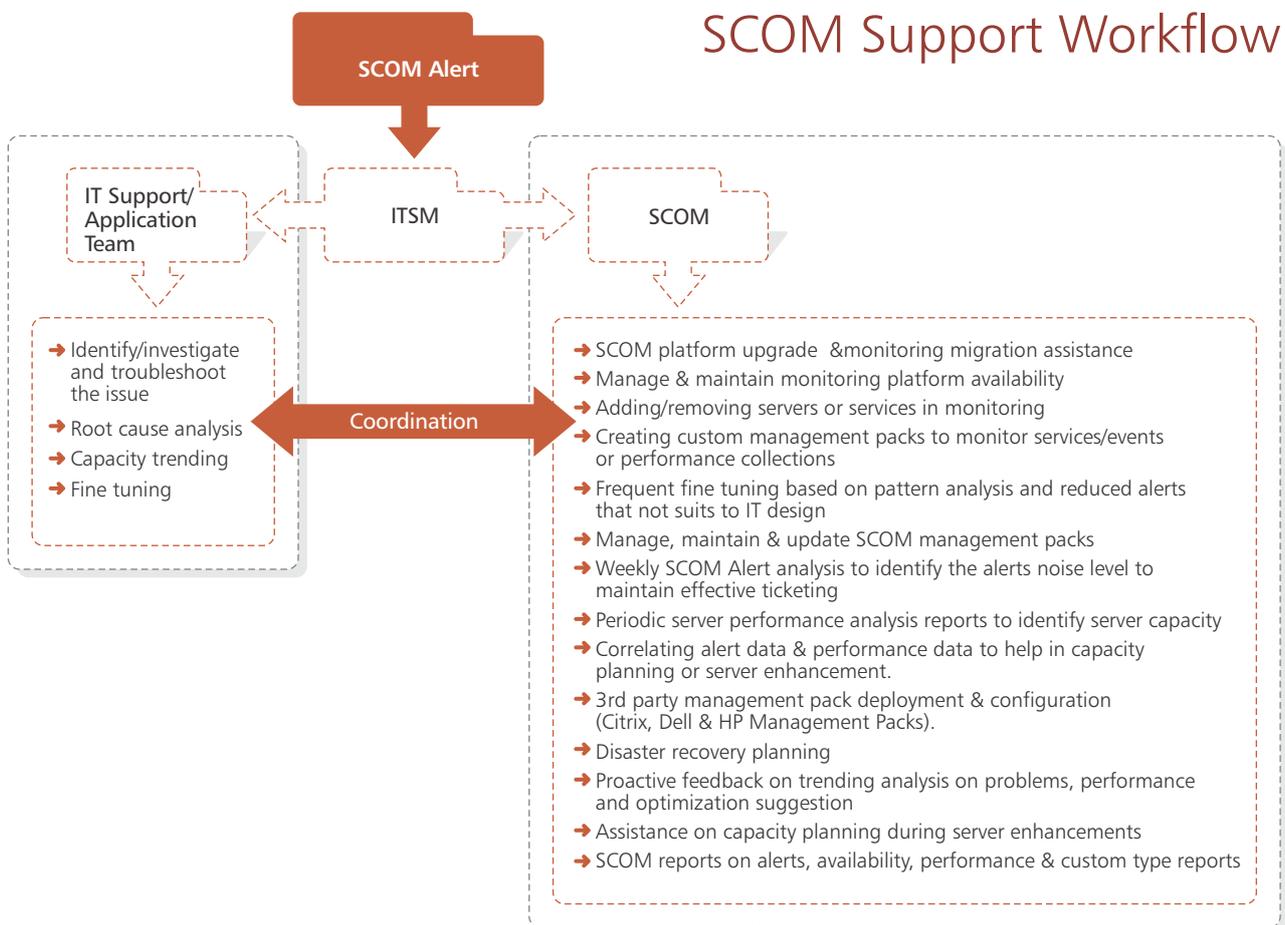
Our customer chose Aspire Systems as strategic partner to manage & maintain IT infrastructure. They selected Aspire Systems after performing deep dive analysis and evaluation process in the areas of Microsoft technologies & IT Infrastructure management. Aspire suggested Microsoft System Center Operations Manager (SCOM2007R2) monitoring tool to control the IT Infrastructure as 95% of their IT infrastructure systems were hosted on Microsoft platform. Aspire kick started the project by performing baseline analysis to assess IT infrastructure boundary, existing monitoring platform and then proposed SCOM Monitoring platform and platform upgrade with updated patch level. After mitigating the platform, Aspire approached layer by layer strategy in rebuilding the monitoring platform.

- Environment assessment to list out monitoring requirement
- Mapped the requirement with present monitoring platform to identify gap
- Backup all the SCOM critical data inclusive of DB
- Migrating monitoring platform to new hardware
- Migrating DB's to new hardware and new SQL server
- Upgrading existing monitoring platform
- Applying all latest cumulative patches released by Microsoft
- Grouped the server as critical and non-critical servers to define custom threshold values
- Fine tuning monitoring values after performing pattern analysis
- Custom dashboard views specific to applications

Technology Snapshot

Monitoring Tool	Microsoft System Center Operations Manager 2007 R2
SCOM Support Team	Certified SCOM Administrator
Support Coverage	8 x 5
Server Details	Web Servers - 205 Application Servers - 75 Database Servers - 95 Total - 375

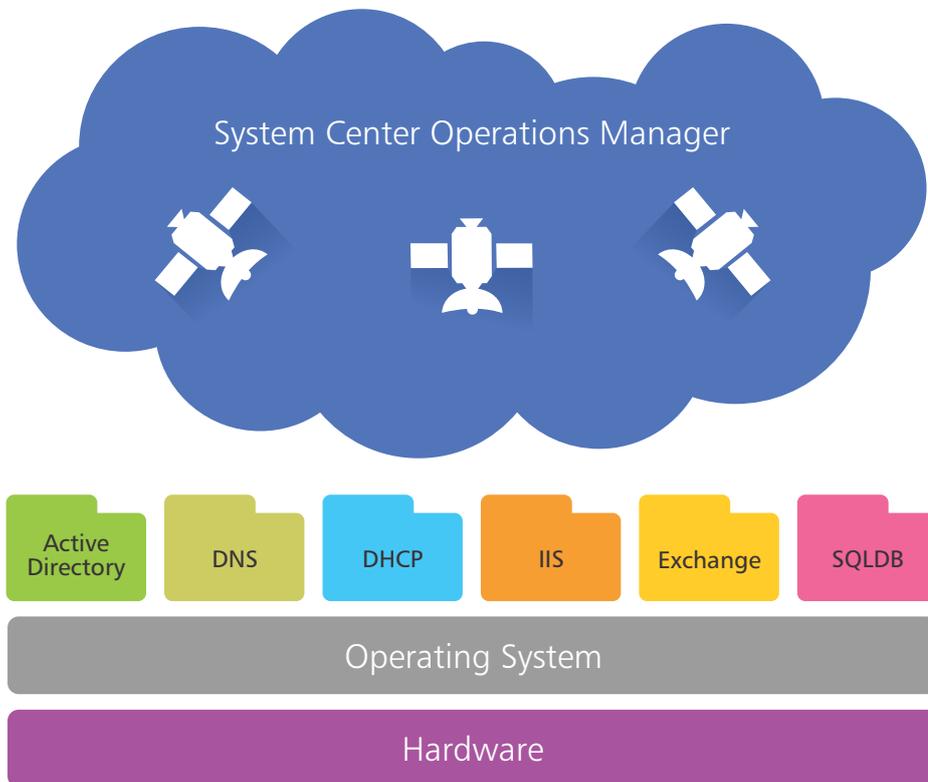
SCOM Support Workflow





Layer-to-Layer Approach

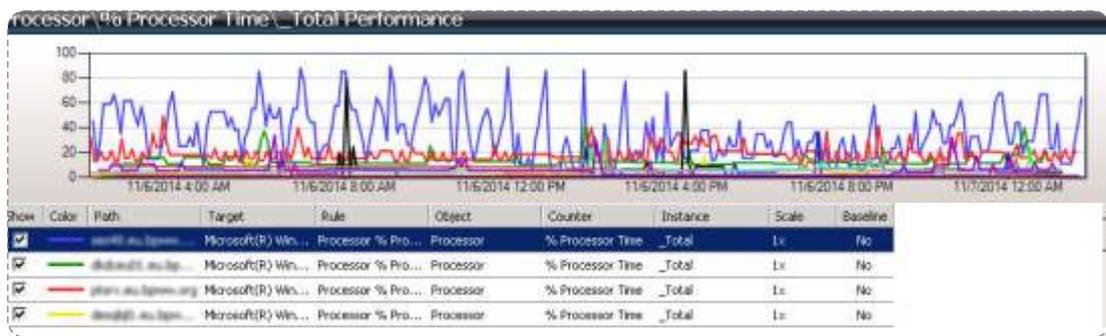
Aspire understood the IT Infrastructure functional levels and then coordinated with system & application support team to understand the design of the application and their dependencies to chart out the best and effective methodology. Aspire followed the below tiered method to fine tune and redefine monitoring



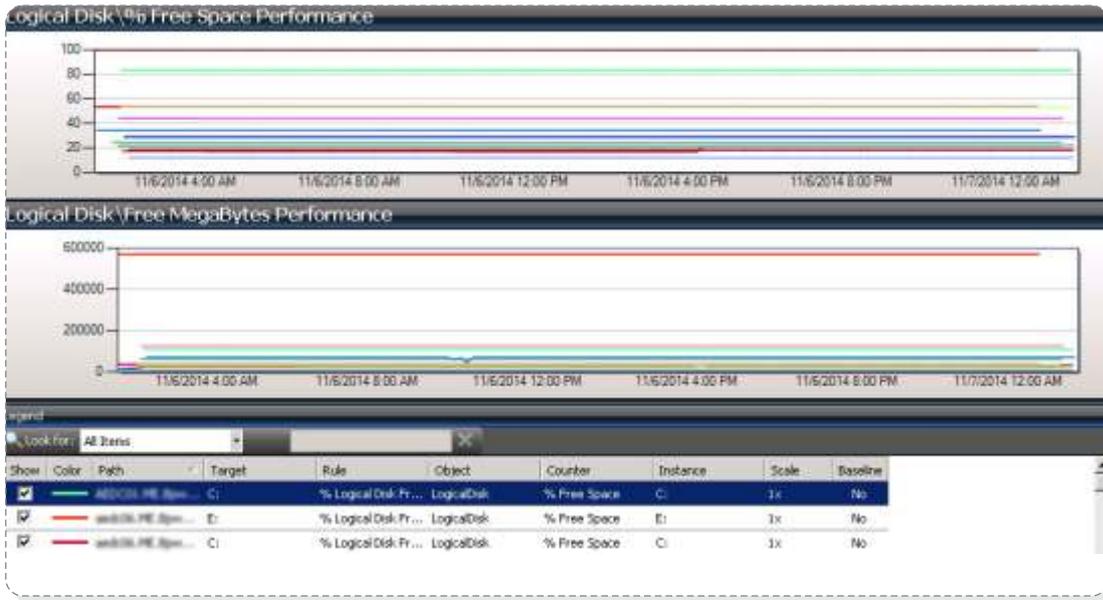
Windows Server Level Workflows:

Aspire redefined the monitoring strategy for Server Level Layer based on the collected data from SCOM and movement patterns for one month and then improved the effectiveness of all base class OS level monitoring like disk space usage, Memory, CPU utilization levels.

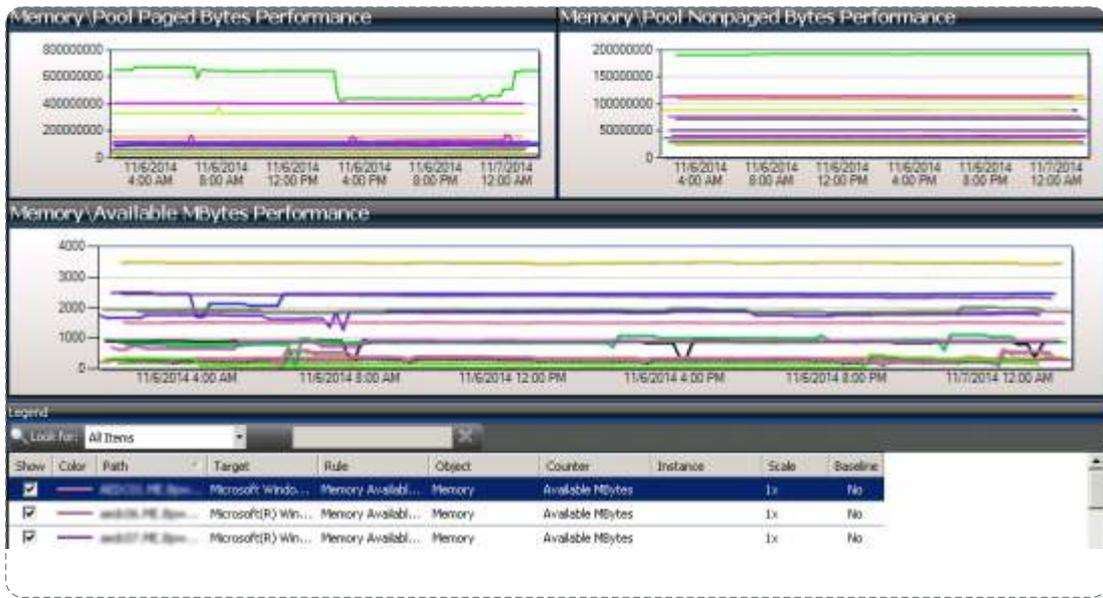
Processor Performance:



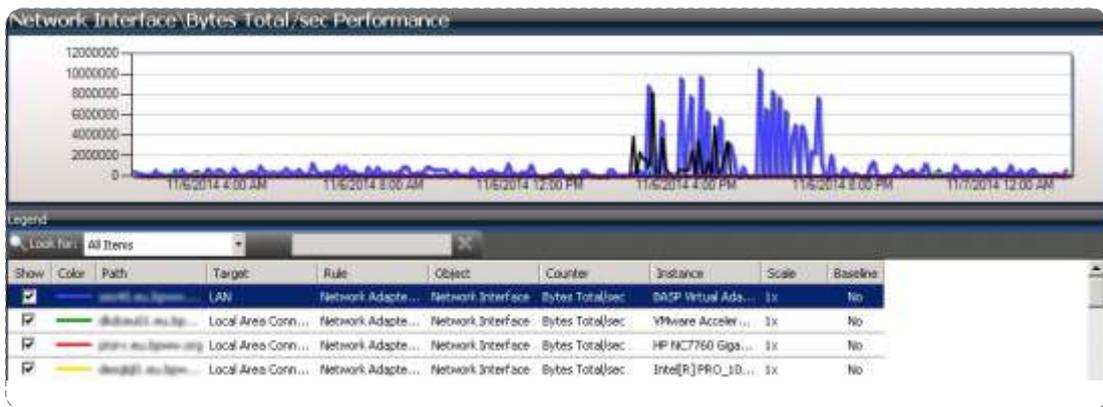
Logical Disk:



Memory Usage:



Network Interface: Total Bytes/ Sec:



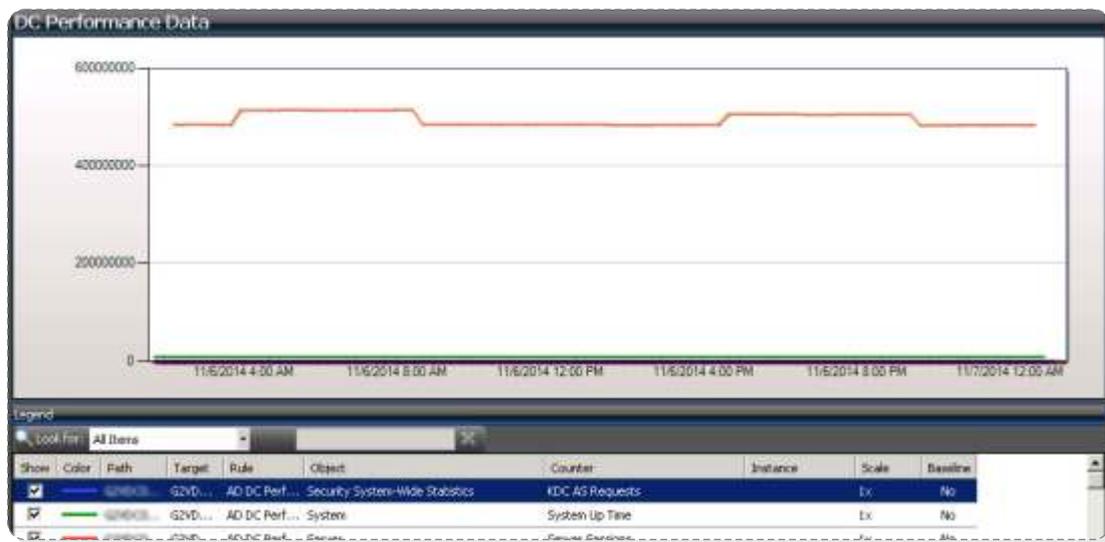


AD/DNS/DHCP Workflows:

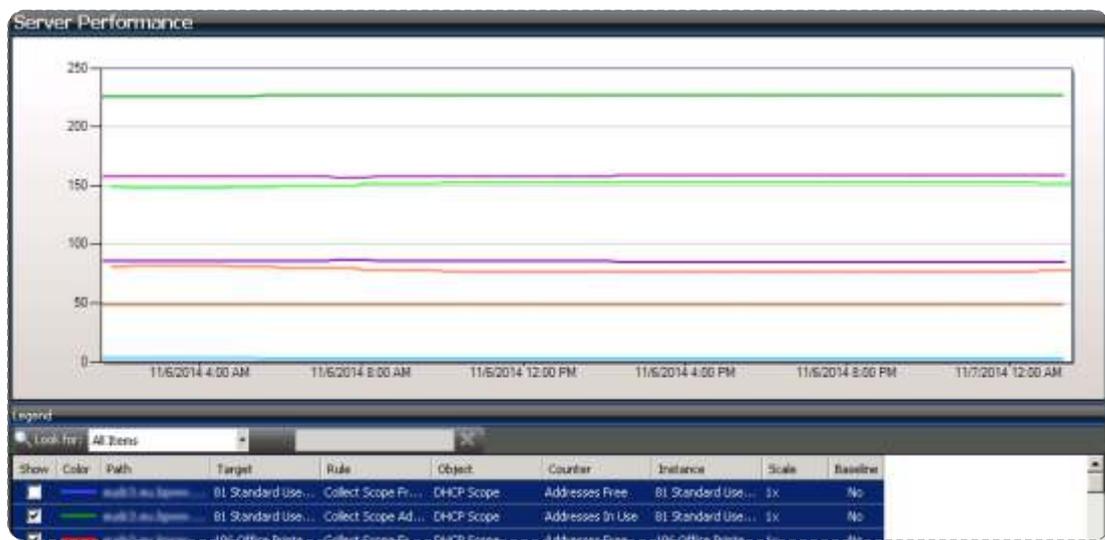
Active Directory, DNS & DHCP Management pack to cover AD, DNS & DHCP Layers as they are prime responsible and very much critical to windows domain environment.

- Monitoring all aspects of Active Directory health and also the health of vital processes that Active Directory depends on, including replication, lightweight directory access protocol (LDAP), DC Locator, trusts, net logon service, file replication service (FRS), intersite messaging service, windows time service, and key distribution center (KDC).
- Monitoring service availability
- Providing comprehensive reports, including reports on service availability and service health and reports that can be useful for capacity planning
- Monitoring DNS health, availability, configuration, security, and zone-transfer issues on DNS servers
- By correlating the request rate supported by DNS and the resulting response and resource consumption, administrators were able to identify capacity issues and bring additional DNS servers online before users are negatively affected

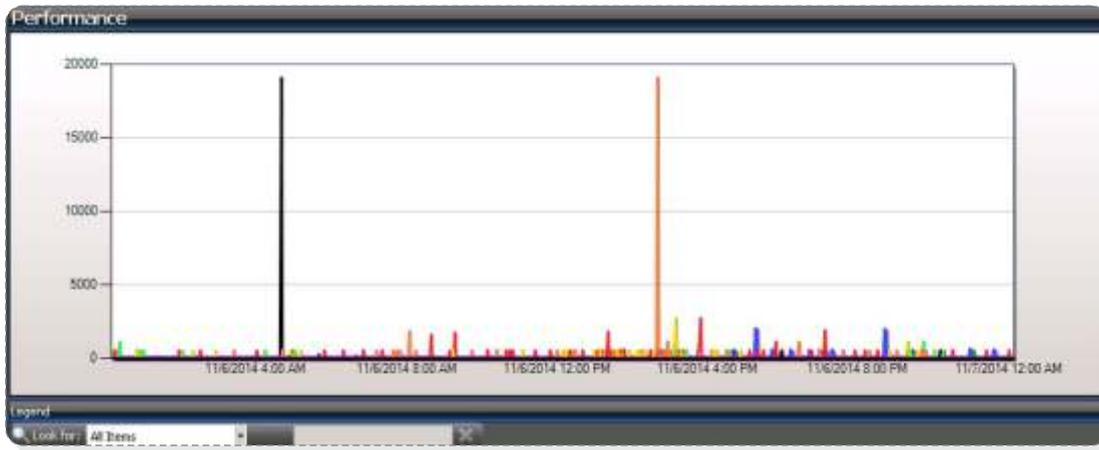
DC Performance Data:



DHCP Performance Data:



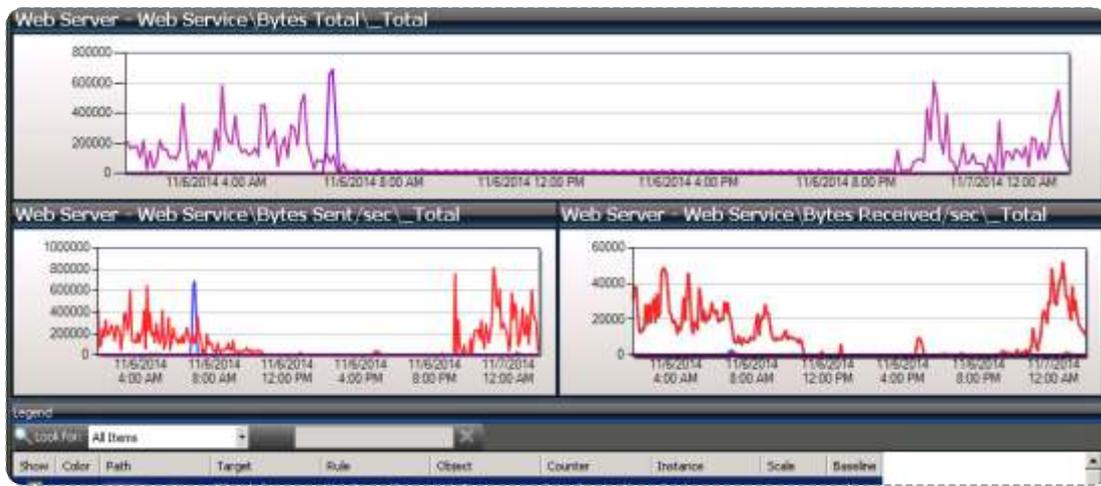
Exchange Mailbox Performance:



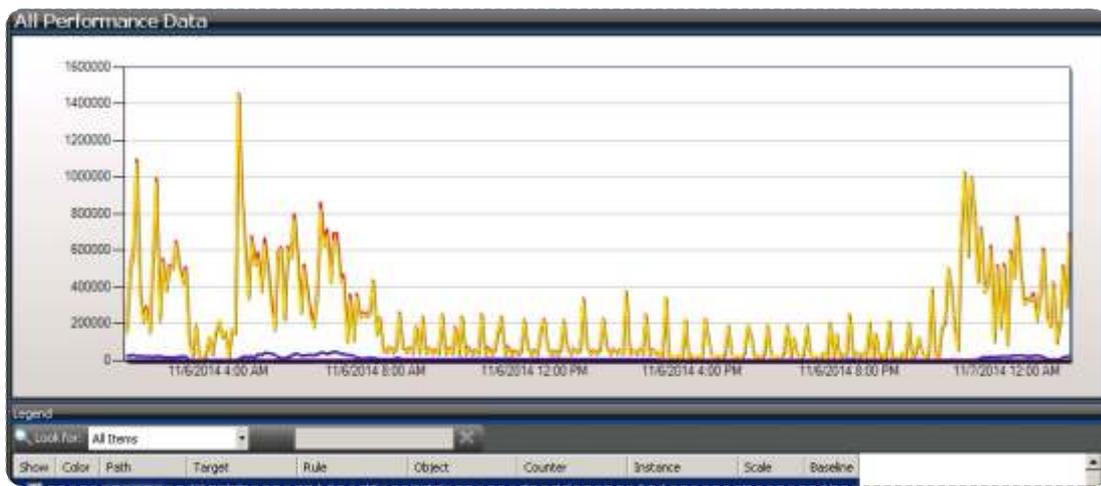
IIS Workflows:

SCOM IIS management pack is used to troubleshoot the performance problems and to achieve optimal performance by identifying performance bottlenecks, maximize throughput, and minimize the time taken for World Wide Web applications to process user requests.

Web Server:



IIS Performance Collection:

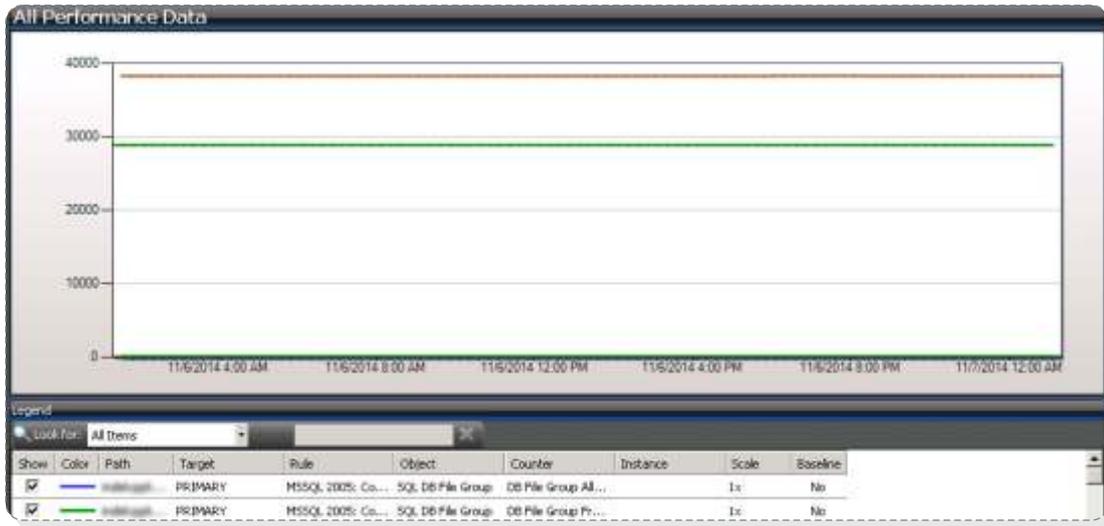




SQL Database workflows:

Microsoft SQL Server is used as an enterprise level database solution and the availability is key and critical to business. Aspire customized the SQL workflow based on the data collected from SQL counters like buffer cache hit ratio, page life expectancy, batch requests/sec, user connections, lock waits/sec: _total, processes block & checkpoint pages/sec

SQL Performance Data:



Benefits



Reduced business impact by increasing IT infrastructure availability



Increased IT infrastructure effectiveness by 80%



Redefined "Server Level Layer" monitoring and increased the performance



Capacity planning based on service availability & service health reports



Achieve optimal performance for all World Wide Web applications



ABOUT ASPIRE

Aspire Systems is a global technology services firm serving as a trusted technology partner for its customers. The company works with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in Aspire's specific areas of expertise. Aspire System's services include Product Engineering, Enterprise Solutions, Independent Testing Services, Oracle Application Services and IT Infrastructure & Application Support Services. The company currently has over 1,400 employees and over 100 customers globally. The company has a growing presence in the US, UK, India, Middle East and Europe. For the fourth time in a row, Aspire has been selected as one of India's 'Best Companies to Work For' by the Great Place to Work® Institute, in partnership with The Economic Times .

NORTH AMERICA | UK | BENELUX | NORDIC | MIDDLE EAST | INDIA
+91 - 044 - 67404000, +1- 630- 368 - 0970, +44 - 203 170 6115

For more info contact
info@aspire.com or visit www.aspiresys.com

