TRAVERSE: UNIFIED NETWORK AND BUSINESS SERVICES MANAGEMENT FOR MANAGED SERVICES PROVIDERS (MSPs)

SUMMARY

Traditional providers of IT services, such as systems integrators, are expanding rapidly into the managed services arena, and becoming Managed Services Providers (MSPs). Two underlying developments are driving this transformation. IT service providers are under pressure to differentiate themselves from the competition by offering a broader suite of services and offerings. Businesses are also increasingly looking to their suppliers to take on more responsibility for the operational aspects of most of their IT and telecommunications technology.

Although managed services gives IT service providers the means to boost their revenues and profitability, a new set of operational and IT management challenges need to be overcome to successfully deliver managed services. The new and evolving MSPs have to now monitor the performance of applications and infrastructure that spans multiple types and layers of technology, includes a vast number of interrelated and co-dependent elements, and is spread across a variety of physical locations.

Traditional network management solutions are not capable of meeting the needs of the new age MSPs, where the services provided by the MSP directly support a number of critical business processes of their customers. Many activities -- from servicing an end-subscriber to shipping purchased products – performed by the MSP's customers are directly dependent upon one or more software applications and the underlying computing/network infrastructure that is directly operated and managed by the MSP. The legacy management tools focus on measuring and monitoring just the technical metrics and trends of individual nodes and components in the infrastructure, and do not have a business oriented monitoring perspective.

To ensure greater reliability of essential processes and systems for their customers, MSPs need to adopt Business Service Management (BSM) systems that are able to better connect business processes with IT operations to achieve a more holistic view. By connecting the worlds of IT and business, BSM solutions are able to identify the affected business processes or services when problems occur in the complex, distributed and virtual IT infrastructure that an MSP operates and manages. BSM solutions enable preemptive and rapid identification of business issues, accurate identification of root causes and quick resolution of problems.

TODAY'S MSP ENVIRONMENT – INCREASINGLY COMPLEX

MSPs have to manage a wide range of complex and disruptive technologies to deliver required services to businesses. The assortment of managed services includes things like Managed Router Service, Managed Backup, Managed Storage, Managed VPN / IP-VPN and Managed VoIP Service. These managed services depend on diverse technologies, such as, unified communications, web services, virtualization, composite applications, grid architectures, SaaS and green IT. In a managed services environment, a business application, for example, may leverage a combination of in-house managed servers, pre-built storefront virtual machines from an external cloud vendor, and an external application service. Additionally, a variety of network nodes and links are also part of the required infrastructure to ensure the proper functioning of the business application.

Traditional network management systems are incapable of effectively monitoring and ensuring the required performance of such a complicated environment. These systems are already being stretched to the limit given the universal adoption of multi-tier applications, distributed computing and web technologies in the last decade. Traditional network management systems focus on measuring and monitoring technical metrics and trends of individual nodes and components in the infrastructure. Although an isolated issue in the complex web of new technologies may impact one or more user-facing tasks in a business process, the current monitoring approaches cannot determine the business impact of such a problem.

There are even more fundamental capabilities missing that are needed to support the massive distributed infrastructure footprint and the multi-tenancy demands within the MSP environment. In fact, current tools limit the ability of the MSP to provide a variety of enhanced services to their customers, and do not enable MSPs to manage performance in a cost-effective and efficient manner. A new approach is needed.

BSM – LINKING MSP SERVICES TO THE CUSTOMER'S BUSINESS

Given the disconnect that currently exists between the MSP's operations/NOC personnel having a clear understanding of problems with business processes of their customers, and their view of what is going at the technical level, there is a need for solutions that bridge the information gap. To ensure greater reliability of essential processes and systems in an MSP environment, Business Service Management (BSM) systems can help MSPs connect the business processes of their customers with IT operations to achieve a more holistic perspective. By connecting the worlds of IT and business, BSM solutions are able to identify the affected business processes or services when problems occur in the complex, distributed and virtual IT infrastructure. BSM solutions enable preemptive and rapid identification of business issues, accurate identification of root causes and quick resolution of problems.

Within a BSM enabled MSP environment, business impacting issues are dealt with proactively and rapidly, with the joint MSP and customer team remaining informed and in control of setting priorities on the problems that need to be addressed right away versus things that can be postponed. Additionally, information is presented in a way that is relevant to the user roles within and across organizations. The end-customer business process owner may want to see a simple dashboard view for those MSP-provided

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IT services on which his business depends. The information in this view is described in business terms. An IT operations person working for the MSP may on the other hand want to view the detailed performance data plots for a given server cluster for example, where the data is defined in technical terms.

Traditional network monitoring products have made the implementation of BSM solutions a challenge. Older generation network monitoring products are unable to integrate fault/event, performance management and BSM within a unified system, and thus MSPs are forced to deploy and integrate multiple systems to get an end-to-end view. This cumbersome approach involves linking multiple disparate applications across different layers and domains of infrastructure and business services. Supporting a distributed environment, which is typically the case for MSPs, is also a challenge.

These legacy solutions contain a confusing array of complicated features, require specialized application-specific expertise to install, integrate and manage, and involve execution of complex projects to complete an implementation. All of this adds up to a significant investment in the initial deployment and ongoing administrative support, resulting in extremely high total cost of ownership.

Zyrion's Traverse solution on the other hand delivers advanced BSM capabilities required by the MSPs, pre-integrated with the necessary underlying fault/event and performance management capabilities.

## ZYRION'S TRAVERSE – A UNIFIED MANAGEMENT SOLUTION FOR MSPs

Zyrion Traverse is an integrated, feature-rich MSP network management solution with advanced capabilities, such as end-to-end correlated network and application monitoring, real-time status of IT services, integrated business/technical views and SLA management. At the same time, Traverse is easy to install and configure, requires minimal training to use and administer, has the ability to be made operational within days, and most importantly, require less than one or two dedicated personnel to manage.

Traverse includes a number of capabilities that allow it to support the unique needs of MSPs. Traverse's Service Container functionality allows grouping an organization's IT infrastructure to create logical, business-oriented views of the overall physical and virtualized computing network. Service Containers enable correlating network, application and IT service problems. MSPs can create Service Containers that include monitoring tests for multiple elements of the infrastructure, generate reports on service containers, get uptime information and real-time status for services, and be alerted if services fail or exceed defined thresholds.

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- Rules to create containers
- Define rules for setting status of a container
- Devices can exist in multiple containers
- Containers can be nested
- Synthetic Transactions monitor (web based)
- Escalation of notifications using rule based notification engine
- Baseline thresholds based on historical data
- Feed into Event Manager
- Reports to see business impact
- Composite metrics
- Top down & Bottom up views

Traverse has a fully distributed, real-time architecture for MSPs. What is unique about Traverse is that there is no centralized data warehouse. Other solutions typically centralize their data to generate reports. Traverse has a distributed collection AND distributed database architecture which allows the system to scale to extremely large environments with standard hardware. The Data Gathering Engine's (DGE) are data collectors – each collector can monitor about 800-1000 devices. The MSP can locate a DGE in each datacenter or remote location, or have a centralized one. As the MSP needs to scale, one or more additional DGE can be added. The BVE layer is responsible for correlation, reporting and other data management functions. When the Traverse end-user logs in via the Web UI, the data is automatically fetched from the distributed DGEs and presented in a unified, correlated view. Very little data is transmitted over the wide area network.
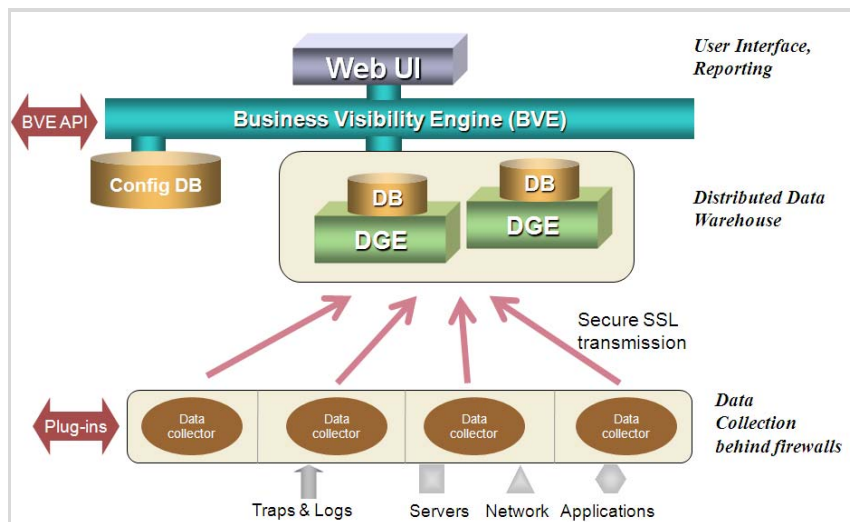
One of the largest MSP implementations of Traverse includes 7,000 devices and 500,000 metrics every 5 minutes using 15 DGEs on a dual-processor 1U Linux server. Another implementation of Traverse has deployed 20 DGEs in a virtual data layer, monitoring close to 1 million metrics every 5 minutes. This implementation covers infrastructure spanning 12 datacenters in Japan, Singapore, Europe & US.

Traverse has a built-in federated security model which supports multiple departments, users or customers in using a single instance of the software. The flexible security model allows creating read-only or read-write users, administrative users within a department/domain, or administrative users across departments/domains. Each department or user group can be viewed as having their own "Virtual NMS" where they can add their own devices, thresholds, alarms, etc. Additionally, a higher level account can be created that spans multiple departments or customers. These are not "views" like in other products, but a fully functional "virtual NMS". Also, the MSP does not need to have a dedicated DGE for each department or customer – multiple departments or customers could use the same DGE, but internally the security model prevents data access unless authorized.
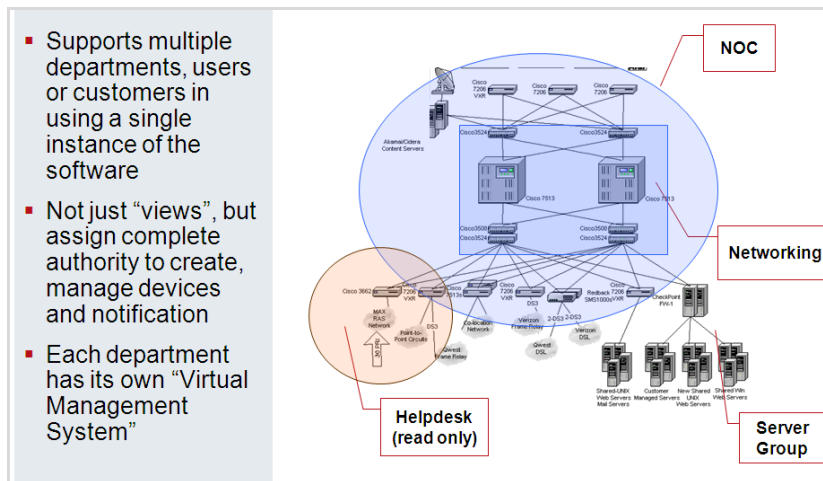
THE BOTTOM LINE FOR THE MSPs

The reliance by businesses on MSP infrastructure and services for critical process enablement and automation requires MSPs to adopt management and monitoring tools that enable the MSP operations/NOC team to ensure the smooth running of business services. MSPs need to deploy advanced Business Service Management (BSM) solutions that provide real-time visibility into the performance of applications and IT services. Zyrion's Traverse is the answer, and is an end-to-end, pre-integrated, distributed, and scalable BSM system that offers enterprise-class functionality at a lower cost of implementation and ongoing administration.

ABOUT ZYRION, INC.

Zyrion is a provider of Business Service Management (BSM) and IT infrastructure monitoring software for MSPs amd mid-to-large enterprises. The company's business service container technology allows organizations to more easily and effectively manage IT-enabled business processes and services. Zyrion's flagship Traverse solution provides correlated, end-to-end network and server monitoring capabilities that link underlying applications and the IT infrastructure to business services. Zyrion has corporate offices in Sunnyvale, Calif. For more information, go to www.zyrion.com or call +1-877-7-ZYRION.

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