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# **IT Business Brief**

## **Application Performance Management Strategies and Goals**

by R. 'Lynn' Nye Jr.

APM Advisors

**Business Strategies**

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## ***A note from the founders***

To an ever-increasing extent, the world of applications and the world of the network to support those applications are converging. In fact, one of the most exciting technology areas for 2004 will be the continued integration of "layer 4 through 7" capabilities into traditional networking equipment.

But what does this mean to the enterprise, and how do you architect your network to take advantage of these emerging capabilities?

In this IT Business Brief, our long-time associate, Lynn Nye, proposes both a function description of what you should expect from application performance management systems and an architecture that provides these function at various points in the network.

- *Steven Taylor, Distributed Networking Associates / Webtorials*



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# Application Performance Management Strategies and Goals

Application Performance Management (APM) means many different things to many people. APM Advisors (APMA) has developed a solution model that includes three key elements for the development of an APM solution. They are *information*, *resolution* and *control*.

Most organizations are up to their ears in *information*, some of it is even helpful. The recent developments in APM *resolution* are demonstrating real value in many production environments, but it is APM *control* that will provide the ultimate value.

For both intranet and Internet business-based application services, an APM Strategy isn't complete without control. There are dozens of technical elements that contribute to the realization of the value, but for the business it's pretty straightforward:

- **Maximizing Resources** - deploy applications with confidence and utilize resources

(servers, networks and employees) to their full potential.

- **Employee Productivity** - responsive application transactions and limiting the use or impact of non-business applications maximize productivity.
- **Customer Satisfaction** - user expectations are continually on the rise, so the fewer delays and outages will help the business sell and service their customers.

## APM Control & QoS

Quite often when APM and control are brought up in the same sentence, the first association people make is with QoS, QoE, AQoS or some other alphabet soup. However, the breadth and functional capabilities available to an architect are quite extensive. There are many cases where APM goals can be met without even using network based QoS solutions.

One of the major themes that APM Advisors attempts to drive home with clients is the concept and practice of instrumenting the IT infrastructure to meet APM goals. Adapting this concept and putting it into practice take many of the problems out of the system before they cause network level chaos.

Like most idealistic goals, it's quite a bit easier said than it is done. However, unless in crisis mode APMA would recommend that organizations develop an APM Strategy and then begin to execute to that, versus spending resources (time and money) on tactical programs.

## APM Strategies and Goals

"It's important to know where you're going, so you'll know it when you get there."

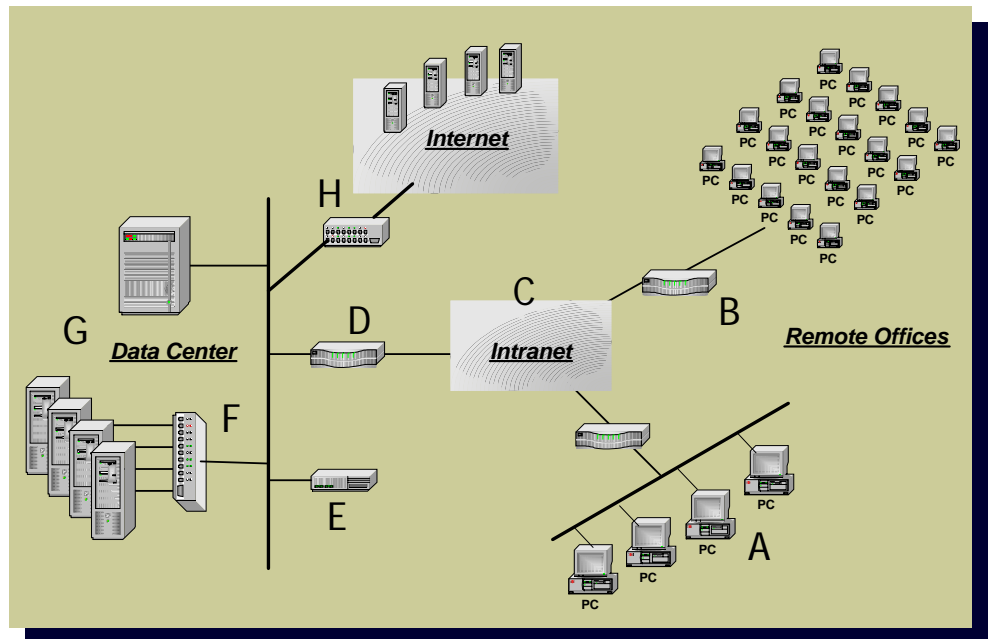
Unfortunately both the industry and many organizations are already on their way, but haven't figured out where they're going. There are no easy answers or shortcuts in developing and implementing an APM Strategy, but it's a task worth the effort.

The following outlines the elements of an APM Strategy. Obviously, not every organization is the same, but there are many themes that are common.

- **A** - There is a significant initiative within many organizations to focus on the user and their experience with applications and therefore the business. Therefore, there is no shortcut for instrumenting the desktop! It is critical that each and every desktop be instrumented with APM serv-

ices. While this sounds quite ambitious, it isn't that far out of reach. The critical aspect for this instrumentation is based on the granularity of information, the correlation required for APM resolution and the scalability of control. There is no comparison to understanding the specific user relationship with any application resource.

- B** - There is no exception to understanding the relationship between performance and the network resource that is providing local service to an individual or group of users. The last mile is a common element in contention for resources and a major expense to be accounted for within any business. This point of APM service can be an element of information, resolution or control, based on decisions developed within "A."
- C** - The backbone is basically a service that every organization obtains from a service provider. The current functional APM requirement is that the backbone of WAN service provide low latency and competitive cost. Anything above and beyond that is a service provider pipe dream and should stay there. Over time, an organization will be able to tag applications or resources for specific service operations, but for now it's "speeds and feeds."



- D** - The ingress point from the Intranet should be nothing but an extension of the Service Providers network. It is the demarcation point (demarc) for network services, but it should be fast and efficient. From an APM perspective it should be basically transparent.
- E** - As represented in the diagram, the performance monitor is somewhat out of place and looking for a role in the toolbox. A majority if not all of the functions provided by any probe should be instrumented within infrastructure.
- F** - The next generation of Front End Processors have a significant role in information, resolution and control. The primary focus from an APM strategy perspective is tar-

geted on the control aspects of performance of any Web enabled application service. This is particularly important for Internet accessed application services.

- G** - On server, application or database platforms, it's all about instrumentation of APM. While there is a role for pre-production testing of scalability, etc., the real issue is based on resolution in production. There are a number of solutions that provide information as well as control, but from a strategic perspective it's resolving problems, not about control.
- H** - Depending upon the organization, the gateway between the data center and Internet or Internet-to-intranet is a pivotal component in an APM Strategy.

From the management of content, security, bandwidth and cost, the gateway between employees, customers and external resources is a critical component of any organizations APM Strategy.

## Summary

Application Performance Management is one of the most important developments in IT. It provides the means for an organization to align all the IT resources with their value to the business, and IT organizations need to commit to the development and execution of an APM Strategy. While there are many point solutions today, an organization can begin to leverage their infrastructure to obtain critical APM information, to resolve performance problems and to control the elements that are out of line with business objectives.



**R. 'Lynn' Nye Jr.** - is the founder of APM Advisors a consulting firm specializing in Application Performance Management working with IT groups, service providers and product companies. He has over 17 years of experience in the industry including the founding of Centrisoft Corporation, his earlier consulting company NetResults, a Marketing role at Sync Research and his introduction into IT came at First Interstate Bank.

Nye recently published an extensive research report, "Application Performance Management," that is available at the Webtorials store.

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