

# Riverbed Performance Management and APCON



**Proactively monitor application service levels, bottlenecks, and spikes in network activity and accurately allocate resources for maximum network efficiency**

Riverbed Performance Management solutions give you the visibility and actionable insight to deliver the application performance users and the business demand. The unique combination of end-user experience monitoring, transaction tracing, deep component monitoring, and IT infrastructure/network management maximizes the performance, availability, and productivity of critical applications.

APCON provides an enterprise-grade intelligent network monitoring switch solution with the port density, overall port count and throughput capacity, and high availability to handle the volume of data generated in a modern data center. APCON also provides time stamping capability at the nanosecond level and the ability to eliminate duplicate packets, slice packets at the header, and filter packets on any criteria. This allows network engineers to bring together data inputs from any point on the network, aggregate and manipulate the data at the packet level, and then direct those data flows to any Riverbed Performance Management appliance for analysis.

## Benefits

The business-critical nature of application monitoring is why more than 20,000 companies worldwide use Riverbed to manage their application performance. Riverbed® Performance Management solutions provide IT with the visibility and actionable insight to help deliver the application performance that users and businesses demand. The solution correlates the three critical parts of the application delivery chain: end-user experience, transaction tracing, and the underlying network and infrastructure to deliver a powerful, predictive, and common toolset for solving today's application performance management challenges. In this way, it enables a comprehensive application performance monitoring strategy by allowing you to:

- Monitor any point of the network at will
- Collect data streams from a variety of sources and merge them into a continuous flow
- Direct the right flow to Riverbed OPNET AppResponse Xpert™ and/or Riverbed Cascade® Shark appliances at any point in time
- Filter the flow to provide only the data that your Riverbed Performance Management tools need

In today's fast-paced and continually evolving markets, companies of all sizes absolutely depend on their data networks to maintain their competitive edge in the marketplace. That edge dissolves when network application performance slips leaving end-users dissatisfied. Applications are the means for businesses to reach customers, build products, automate business processes, and perform almost every other task critical to the business. Fast, reliable application performance is the most visible indicator of success for IT organizations. Network speed and reliability has grown from a side issue to a top priority, and resolving problems quickly is simply no longer good enough. Network slowdowns and outages must be prevented rather than repaired.

Network architectures are growing to meet business and customer data needs. As a result, there is growing complexity in managing and monitoring a network efficiently. By utilizing an APCON intelligent network monitoring switch, customers can gain greater visibility and scale of their network and application performance monitoring investment by monitoring across multiple network layers, zones and monitoring points.

The APCON solution enables the aggregation of packets from multiple mission-critical monitoring points. Utilizing APCON's IntellaFlex solution, customers can then manipulate, filter and load balance this traffic to the appropriate Riverbed Performance Management tool.

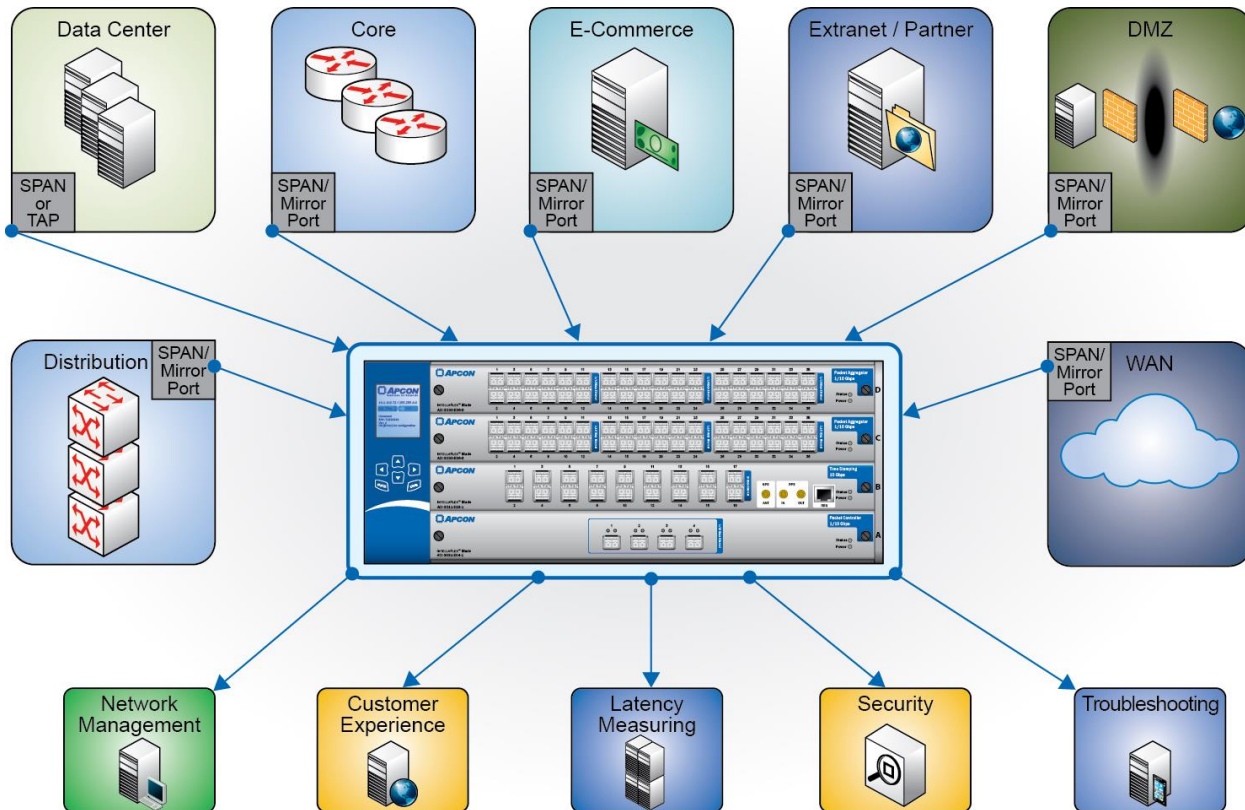


Figure 1: The APCON IntellaPatch Series 3000 provides a highly available, fault tolerant and scalable architecture suitable for use in a production data center running real-time application performance analytics.

## Optimum Data Center Visibility

Enterprise-grade data center monitoring switches must have the ability to bond several disparate data streams from external-facing, DMZ, and internal switches, and route all this data to Riverbed Performance Management tools with packet tags that indicate the source of the data. Further, the switch must be able to filter both individual and aggregated data streams using both pass and drop filtering. Figure 1 shows example of topology that enables multiple monitoring points to be wired to various types of monitoring tools.

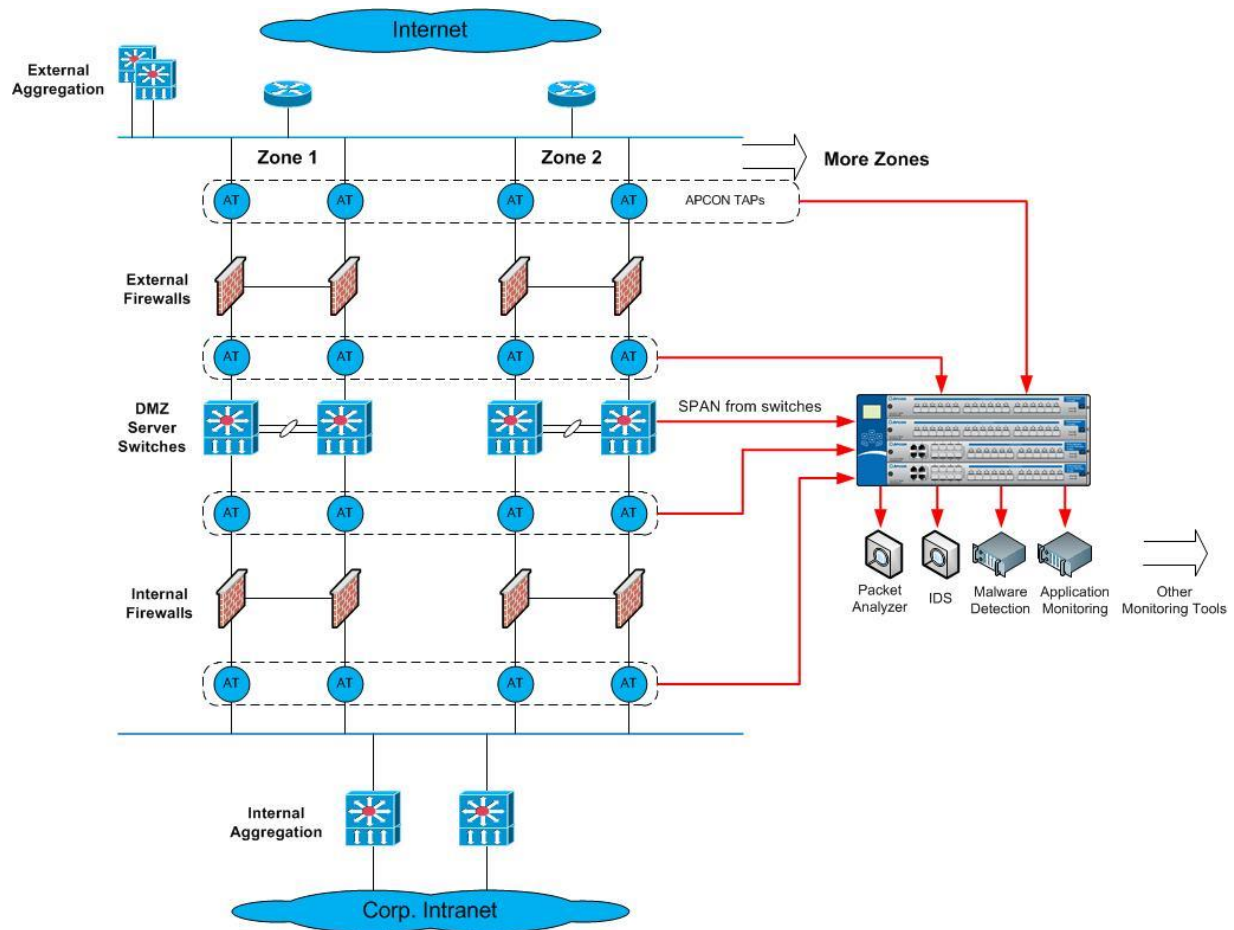


Figure 2: The APCON IntellaPatch Series 3000 aggregates packets copied from SPAN and TAP sources throughout the network and aggregates, manipulates, and filters the packet stream before passing the data to the Riverbed Performance Management appliances.

## Application-Aware Network Performance Management

Finally, application performance monitoring with Riverbed Performance Management tools increasingly involves packet latency monitoring as a means of tracking performance issues to particular locations within the data center. Precise and accurate time stamping of packets monitored as they traverse the data center is a requirement for a fully functional application performance monitoring program.

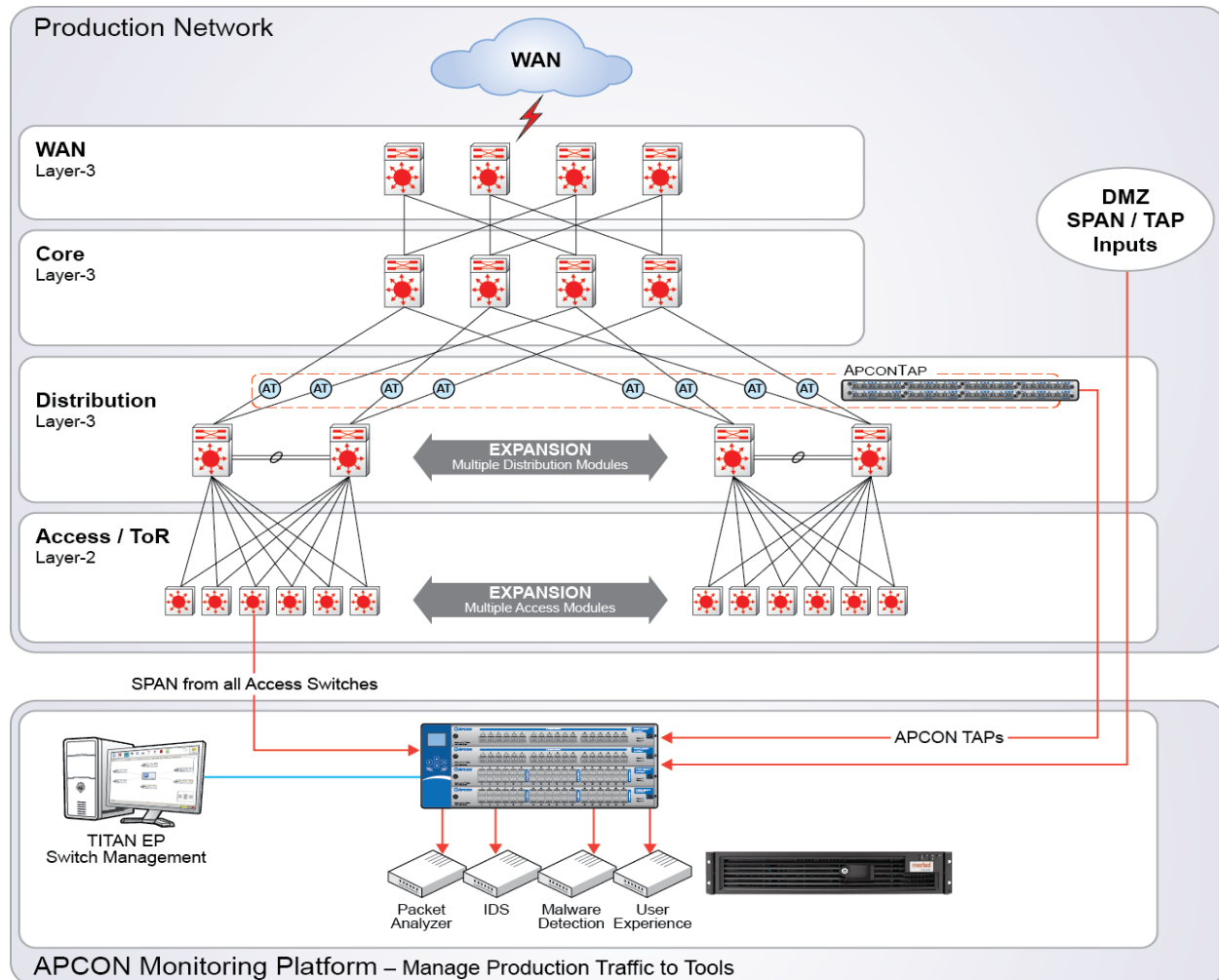


Figure 3: Monitoring tools leverage APCON intelligent network monitoring switch can be scaled across the datacenter. Additional sites can also be managed using APCON's TITAN EP multi-switch management software.

## About APCON

APCON develops scalable network switching solutions for enterprise data centers worldwide. APCON intelligent network monitoring switches and taps provide complete network visibility, improve network security and optimize monitoring tool efficiency. APCON's filtering and aggregation technology and multi-switch management software minimizes network downtime and maximizes monitoring tool investments. Learn more about APCON at <http://www.apcon.com/>.

## About Riverbed

Riverbed delivers application performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at [www.riverbed.com](http://www.riverbed.com).