5View™ Service Data Manager

Integrated Network and Application Troubleshooting™

5View™ Service Data Manager (SDM) delivers large enterprises and communication service providers (CSPs) the real-time insight they need to improve application availability and performance. By merging application response metrics and flow data into a unified view, 5View™ SDM allows network and application delivery teams to effectively troubleshoot and manage end-to-end application performance in a collaborative environment. 5View™ SDM increases visibility across the entire application delivery chain, providing transactional metrics on an application-by-application basis, and presents real-time flow data to quickly determine the source of degraded performance. Leveraging the actionable intelligence available through 5View™ SDM, CSP and large enterprise IT organizations are able to consistently achieve high-quality application and services delivery from the data center to network edge.
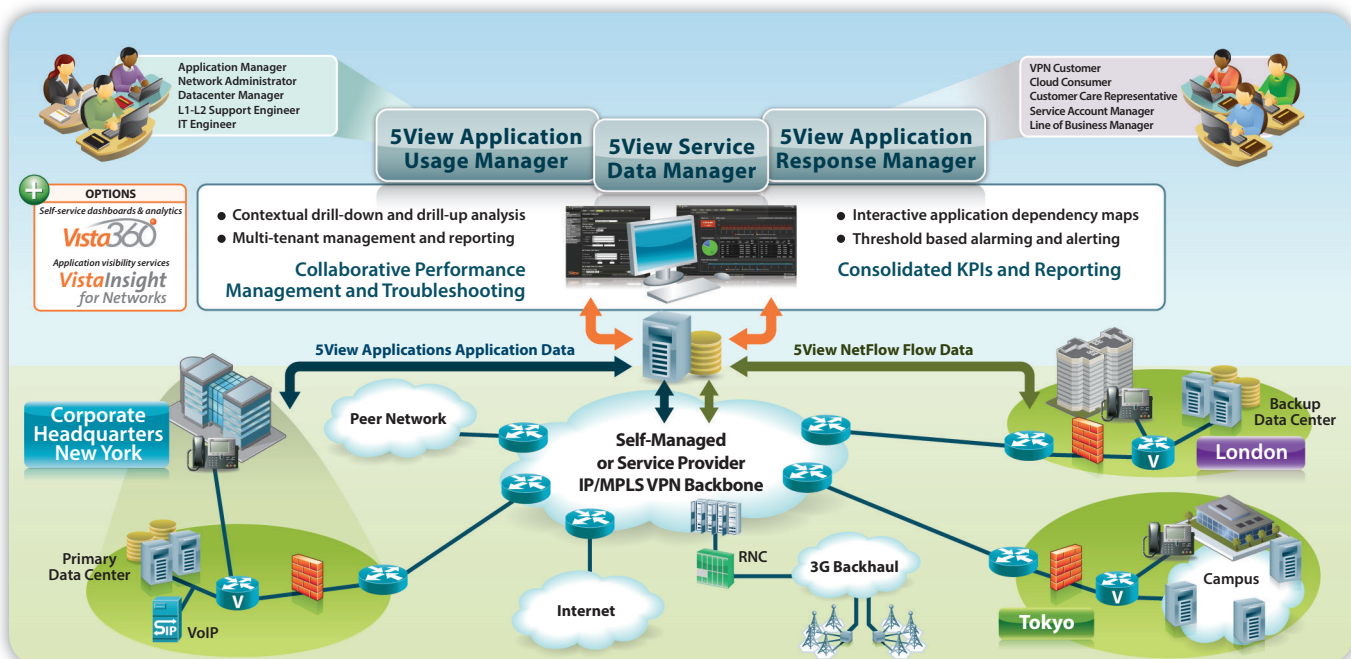

Figure 1. InfoVista's architecture for unified application and network visibility and troubleshooting.

Reduce Troubleshooting Complexity

Gaining an understanding of how applications are delivered and their overall performance may require employing a number of different techniques and tools. Using different tools can result in a disjointed and often contentious network and application troubleshooting process. Presenting flow data and application performance metrics in a single view ensures that CSPs and large enterprises have insight into all the factors that may be contributing to poor application performance. By implementing a unified approach, application delivery and network management teams have the opportunity to collaborate effectively and reduce their troubleshooting time and effort across the entire application delivery chain.

Consolidated Visibility

Effective management of application performance dictates that CSP and enterprise IT application delivery teams develop a deep knowledge of not only the applications themselves, but also their direct relationships to the underlying infrastructure components. Many CSP and enterprise IT organizations rely on multiple solutions during their troubleshooting process that only provide them with a limited understanding of the key application and infrastructure relationships. The ability to quickly pinpoint application or services delivery problems depends on having interactive application dependency maps that highlight either the point of failure or the cause of performance degradation in real-time.

Identify and Minimize Risks

Developing and deploying new applications or service offerings requires extensive planning, development resources and significant CAPEX investments. The success or failure of a rollout will depend on the ability of the network and application teams to identify and assess the impact of all the variables including; LAN and WAN traffic volumes, virtualization, datacenter location, CoS parameters, QoS policies, existing applications, and capacity constraints. To ensure success, CSP and large enterprise IT organizations need to have application and network centric intelligence to understand and mitigate any risks to ensure a smooth and trouble-free services rollout process.

With 24/7 access to services or applications by customers and end users, CSP and large enterprise IT organizations must be able to orchestrate a complex mix of protocols, virtualization, capacity, utilization, AAVPNs, policies, QoS and devices to maintain application quality of service and end user QoE. Lack of a composite view across the entire infrastructure inhibits the ability of network and operations teams to operate efficiently to resolve problems. In addition, IT organizations must also consider any new applications or services being developed and analyze how their deployment may potentially affect overall QoS and QoE.

5View SDM enables application delivery and network management teams to take a unified approach to managing application performance reducing the potential for performance degradations or costly outages. Architected as a scalable platform, 5View SDM's data collection/reporting engine is designed to process the massive volumes of real-time data generated by thousands of flow and application measurement sources found in today's global enterprises.

Interactive application dependency maps reveal the application to infrastructure relationships and provide real-time diagnosis and resolution of performance issues or equipment failures. Configurable dashboards summarize high-level performance data and provide drill-down/drill-up access to flow and application metrics to simplify problem correlation, and troubleshooting. 5View SDM's reporting capabilities include a comprehensive array of out-of-the-box reports, providing key performance indicators, real-time baselining and historical trending views of network and application performance. Baseline and threshold monitoring and alerting capabilities ensure that anomalous events or performance degradations are immediately identified as they occur.

CSP Application Visibility Services

5View SDM's multi-tenant capabilities, securely segregates each customer's performance data, allowing CSPs to rapidly deliver application visibility reporting services to their customers on an individualized basis. Providing a customizable customer-facing portal, 5View SDM enables CSPs to augment their existing business service VPN portfolios with L2/L3 VPN SLA reporting.

5View SDM Benefits

The fusion of flow-based analysis and application specific measurements in a single solution offers immediate value to IT operations teams by enabling cross-silo visibility into the end-to-end delivery of application and services.

5View SDM enables global enterprises to deliver optimal application performance and assists service providers in implementing innovative customer offerings by:

Increasing Situational Awareness
- Establishing performance baselines to identify and analyze deviations or trends over time
- Mapping application dependencies to indicate hot spots affecting performance

Streamlining Operational Processes
- Visualizing the alignment of applications and services to the infrastructure accelerates the resolution of degraded application performance
- Enabling collaboration between various teams troubleshooting performance issues

Enhancing Customer Visibility
- Defining new and differentiated service portfolio offerings such as application-aware VPN (AAVPN) reporting
- Meeting internal and customer demand for detailed service performance metrics, down to the application or user level

Key Features and Capabilities
- Integrates real-time performance data from 5View NetFlow and Applications appliances
- Scalable and optimized database and data processing engine
- Single pane of glass for network and application performance
- Support for Cisco's Application Visibility and Control (AVC) and Alcatel Lucent's 5670 Report Analysis Manager (RAM)
- Multi-tenancy enables secure collection, storage and independent reporting of multiple customers' data
- Application dependency maps display the application/infrastructure relationships and indicate the point of failure in real-time
- Configurable dashboards summarize key information with logical data groupings
- Comprehensive reporting facilities include; over 200 pre-defined reports and adhoc report creation with multiple formatting options including; matrix, chart and grid
- Provides contextual drill-down and drill-up support within maps, reports and charts
- Extensive out-of-the-box filtering options for network, user or application transactional data
- Configurable baseline and threshold alarms
- Role-based management with LDAP integration for single sign-on
- Configure and manage multiple 5View Netflow and Applications appliances from a single interface
- Application Usage Manager (AUM) module extends SDM functionality to improve the coverage of application specific traffic using flow analysis
- Application Response Manager (ARM) module extends SDM functionality to display transaction specific metrics using deep packet inspection (DPI) data
- Synchronizes network performance management data from VistaInsight for Networks to provide consolidated application/network performance management