Challenges of Managing Complex, Converging Technologies

Customers expect a high quality of service despite the increased complexity of technology and service enablement. The resulting competitive pressures have made it imperative for service providers to take a customer-centric view of services, focusing on customer experience and service assurance. That means they must launch new services quickly, take an end-to-end view of services, manage service level agreements, and prioritize their actions based on customer and business impact. The challenge is that current approaches require heavy manual efforts, too many tools, swivel-chair management, and high integration and ownership costs.

Service-oriented management is complex because it must take an integrated view across vendors and technology generations and across multiple and overlapping management systems. And it must collect and process large volumes of data while zeroing in on the pertinent service and business issues. The vast majority of service management tools available today are expensive and difficult-to-configure point solutions that give a narrow – not unified – view into performance, faults, or availability. Taking an end-to-end service view, if done at all, is a manual process since the cost of integration across numerous tools is high. Yet to meet customer and business expectations, a unified, top-down, real-time service view across domains is essential.

The AssureNow Service Management Advantage

The AssureNow™ solution takes a unified approach to IT infrastructure, business service, and customer experience management. Discovery, fault, performance, topology, and service management are integrated onto a single scalable software platform that provides operations and business teams with significant performance, scalability, and cost advantages over legacy and silo tools.

AssureNow Service Management’s integrated approach enables service providers and IT organizations to focus easily on issues impacting customers and the business, rather than on technologies. It is an automated service management solution that enables operations teams to respond in real-time – and with priority – to service performance issues that impact customers. Service Management replaces the need to manually analyze and correlate data from diverse tools.

Service Management provides end-to-end visibility across domains in real time; proactive alerting so that problems can be resolved before they become outages; Service Level Agreement (SLA) management; centralized data to enforce consistency; and predictive analysis to enable effective capacity management. It provides comprehensive data collection, monitoring, reporting, and analysis that correlates Key Performance Indicators (KPIs) to service-oriented Key Quality Indicators (KQIs).

AssureNow Service Management reduces operations and customer care complexity; provides an immediate, rich, interactive, and secure user experience; protects vital revenue streams; and engenders customer loyalty.

AssureNow Service Management Overview

AssureNow Service Management provides end-to-end, consolidated threshold-based monitoring and reporting of service availability, performance, and utilization to ensure that service level commitments are met. The solution provides easy-to-configure, top-down views into business impact and service performance via dynamic, real-time, and multi-tenant dashboards that support complex service hierarchy definitions. AssureNow supports real-time analysis as well as historical reporting.

AssureNow Service Management is a unified, centralized, open, flexible, and highly scalable Manager of Managers. It is inherently integrated with and “runs on top of” AssureNow Fault Management and AssureNow Performance Monitoring. Event and metric data are automatically made available to Service Management, which then generates service-impacting meta-events and uses sophisticated alerting engines to automatically analyze the data.

Services are defined and configured through automated discovery and integration with systems such as customer care, configuration management, and provisioning. The topology stitcher determines relationships by mapping physical data to logical data to services to customers in order to create the customer or business view that is available in the dashboard. Service Management easily defines and creates custom service hierarchies; aggregates and measures performance metrics from many data sources; presents both real-time and historical service metrics in intuitive dashboards; and provides drill-down into service outages or service threshold breaches; conducts immediate impact analysis correlation during a critical service outage; generates service-impacting events and notifications; and provides dashboards that offer an aggregated view into the performance of a particular service or family of services.

AssureNow Service Management Benefits

- Provides real-time, service- and business-oriented, end-to-end views
- Enables proactive customer care
- Reduces customer churn
- Improves productivity and ability to identify and address the most important issues
- Shortens mean time to respond
- Protects revenue and customer satisfaction
- Monitors SLAs and historical trends
- Lowers maintenance and total cost of ownership
Real-Time, Cross-Domain, End-to-End Service Visibility

AssureNow Service Management provides complete end-to-end visibility across disparate technologies, vendors, or device types on a multi-tenant basis or down to the interface level. Normalized KQIs are stored and viewed in a service context in a single-pane-of-glass, as depicted in Figure 1.

Service Management leverages the unified fault and performance functions of AssureNow that enable data to be collected in any format, from any protocol or data feed. Data are managed and analyzed using event filters, performance monitors, and sophisticated alerting engines. Results are accessible immediately.

The solution enables the creation of services, any number of tiered sub-services, and any service hierarchy. Metrics can be collected and the resulting calculations stored for reuse for another service. Normalization capabilities integrate any fault or metric-based attribute to facilitate building and monitoring any service. The net result is the ability to slice and dice data and manage service performance to any degree desired.

Real-Time Business Impact Analysis

Real-time service views and drag-and-drop dashboards automatically provide prioritized focus on the problems that are affecting business, large numbers of customers, or top-tier accounts.

Real-time business impact analysis correlation is achieved with event-based SLM connectors, providing immediate notification when a service or customer is affected, including the resource causing the impact. Synthetic service events can be created that reference when and which service was impacted, for how long, and to what extent. Parent/child relationships can be created between the service impact faults and the synthetic event.

Historical SLA Compliance Alerting and Reporting

Monolith’s flexible and powerful reporting and dashboard engine provides at-a-glance assessment of the performance of a service or group of services in real time, at a given point in time, or over a longer term. Monolith’s solution supports advanced service thresholding capabilities with reports that are accessible from any web browser. The dynamic and easily customizable dashboard provides a critical top-down view of service performance, and the drill-down capabilities needed to manage business performance and pinpoint the root cause of service quality degradation.

Service Management’s historical SLA compliance reporting engine uses metric-based SLM collectors to alert and report when an SLA has been breached and why. Predictive service quality alerting leverages the service hierarchy and service level objectives.

Service Management extends consistent and unified operational and service views to multiple stakeholders, such as operations, business unit, executives, customers. By providing a clear view into the health, performance, and availability of key services, organizations can manage and respond to changes in service performance as they occur.

Automated Service Discovery, Provisioning, and Capacity Management

AssureNow Service Management automates the process of service discovery and provisioning through powerful and scalable network topology mapping and application dependency mapping. The service hierarchy discovery and configuration automation engine uses a topology-based SLM stitcher to determine relationships. AssureNow can audit, modify, or prune service trees and map physical and logical resources to services and products and to customers.

Because AssureNow Service Management takes a unified, end-to-end view, capacity management tasks are simplified because all the relevant data are in one place. Its predictive analysis is invaluable to end-to-end service-oriented capacity management, which requires agnostic monitoring of a variety of technologies, vendors, and device types. Instead of using a tool for each technology, which makes automated analysis impossible, Service Management automatically provides notification weeks in advance of any resource that will be exhausted, thereby avoiding the high cost of manual analysis.

About Monolith Software

Monolith AssureNow is a next generation, unified service assurance solution that unifies fault, performance, topology, and service level management in a single scalable software platform. Built from the ground up on a single codebase, the fully integrated and multi-tenant AssureNow solution uses an open and holistic approach for data collection, enrichment, and visualization and reporting. Leading telecommunications, managed service providers, and enterprises around the world use Monolith to unify and simplify their infrastructure management, consolidate disparate and legacy tools to significantly reduce operations costs and assure delivery of new services and enhance customer experience.