



SLA MANAGEMENT

Service Level Agreements

A service level agreement (SLA) is a contract between a service provider and a customer. Here the service provider may be an Internet service provider, a telecommunications carrier, or any company that provides outsourcing services. The services, among others, include offsite application management (ASPs), offsite network management (MSPs), Web hosting services, dedicated leased lines, and shared packet-oriented services. SLAs specify the terms of the agreement, e.g., an SLA between a telecom carrier and its customers may specify the following:

- The minimum bandwidth to be provided
- The amount of burst bandwidth that the customer can use over the minimum and charges to be applied to that bandwidth
- The amount of time the service provider guarantees the service will be up and running, usually a percentage such as 99.95 % of the time
- Penalties for not meeting service requirements, or nullification of the contract if the provider continues to fail to meet its requirements
- If the service is packet-oriented over shared links, the quality of service (QoS) level to be provided for specific types of services
- Equipment setup, onsite service assistance, and help desk support

The terminology used in SLAs often includes phrases such as *outage duration* (length of time service is down), *mean time between failures* (length of time between service failures), *time to restore* (length of time to restore service), *trouble rate* (number of onsite service calls allowed), and *QoS*. QoS has its own set of terms, e.g., committed information rate (CIR) and committed burst information rate (CBIR), which refer to the specified data rate and the ability to burst over the specified data rate, respectively.

Service Level Management

Service level management has always been a key consideration that the customer looks into when seeking to outsource services to providers. Service providers, on the other hand, require tools that can help determine and guarantee that they are able to meet the SLAs they have committed to their customers.

In the telecom industry, however, customers can usually dictate the requirements for their SLAs as a result of increased access to more competing services. Hence, requests for proposals (RFPs) are written by customers and submitted to different providers in anticipation of the best solution offer. Another reason for the customer's control over SLAs is because customers have much better tools for monitoring and logging service levels. In the past it was difficult to determine when service levels were not being met, except when the service was completely down; but, not anymore.

MAX can help you, as a service provider, to easily monitor and manage the QoS levels you have assured your customers to provide, and to help guarantee that the same service levels are delivered. Most of all, MAX offers you the flexibility to easily create specific SLAs that meet the different requirements of your diverse customer base.

At the same time, MAX can help enterprises in monitoring all SLAs committed to by service providers and other vendors.

MAX SLA Manager

To manage a strong IT infrastructure using MAX to ensure your business availability, you have already laid the foundation to take your IT management into the next level of customer satisfaction—assuring service level agreements (SLAs). MAX gives you the flexibility to scale up your customer services to this next level with its Service Level Management feature. Using the powerful thresholds and notifications mechanism MAX also helps IT managers proactively track their service levels, and ensure that they not only meet the committed service levels, but also exceed them to gain customer satisfaction. Above all else, customer satisfaction is very vital in today's competitive environment. On the other hand, enterprises may also want to monitor the service levels committed to them by their vendors and service providers. Here, as always, MAX also proves indispensable.

MAX allows you to provide straightforward accountability to your SLAs. Its proactive SLA monitoring alerts you whenever the predefined parameter falls below the specified thresholds. Your customers can access to service level agreement (SLA) compliance reports real time, allowing you to communicate the quality of your service to your customers effectively.

SLAs, the driving force behind SLM, should clearly define service goals, and the prerequisites required to meet those goals. SLAs should be flexible enough to adapt to a rapidly changing technology environment and changing customer needs. Every SLA must have a clear definition of the products and services involved, and an understanding of how these products help complete the mission of the customers who use them. SLAs must also define responsibility for each of the products and services, have a classification for severity, have measurable events, based on time, that vary by the severity of the problem, and tie compliance to performance.

Following the traditional approach, the systems management software monitoring the IT infrastructure can see what is happening in the environment in real-time, but cannot accurately predict what will happen next unless it factors in data that has been captured over time. You need both the real-time and the historical views of your infrastructure to be able to proactively impact your business. MAX covers these issues flawlessly.

Service Level Assurance Using MAX

SLAs have long been established between service providers and customers alike as a yardstick for the quality of services being supplied or received. As the importance of SLA management continues to increase, so does the typical cost of maintaining a Service Level Manager. MAX, on the other hand, banks on its cost-effective solution in SLA monitoring, which provides visibility on service level and quality to both user and supplier.

In contrast to most infrastructure monitoring and management products, MAX can configure any SLA resource or any performance statistic, for that matter, to keep track of and administer your SLA compliance status using one and the same SLA module. You do not need to invest in separate utilities or packages to configure different SLA statistics. Moreover, you can create any number of configurable SLAs based on an unlimited number of statistics and resources in MAX.

Setting SLAs in MAX allows you to achieve proactive management functions, e.g., alerting users or the administrator prior to the actual breach of the SLA. MAX implements SLA as a compliance statistics of the condition; hence, you do not need to learn a new user interface to review SLA information. Moreover, most of the online real-time graphics report tools available for other statistics also apply to the SLA statistics.

Alarms and events may be set for an SLA resource if you intend to be informed through alarms, events, or event notifications when the SLA compliance percentage falls below a certain percentage. The events and alarms for an SLA can be viewed just as for any other resources in MAX.

Additionally, threshold alarms can be set for an SLA resource with various severity levels for the SLA compliance percentage, just as thresholds can be set for other resources in MAX.

SLA Reporting and Forecasting at All Levels

In great part, assuring high levels of QoS involves fully anticipating the early symptoms of any breach or anomaly in SLA conformance, and taking immediate action or remedy before service levels are actually compromised. And what better way to do this than forecast SLA compliance and degradation using the extrapolation tools in MAX.

Extrapolation of SLA compliance trends can be performed easily and conveniently using MAX's Reports module. Looking at SLA resources in a MAX report, it doesn't take much to be able to predict way in advance any future possibility of SLA breach. This is done by extrapolating available SLA compliance data into any given period of future time, plotting possible trends even before they happen.

More importantly, MAX provides SLA reports that can be customized for personnel at different levels and of varying areas of expertise—for the CIO down to network engineers, for example—and together, though separately, synergize into guaranteeing the SLA levels are high, and ultimately, the customers are happy.