

Service Level Agreement and Management

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Service Level Management

Service Level Management deals with how user service requirements are understood and managed. The objective is to balance what users want and what the business can afford to provide. Begin by examining the business environment and the ways in which information technology supports business objectives. Next, IT negotiates service levels or performance targets with its users. The result of the negotiations is a *Service Level Agreement* -a living document that is revised as the business environment, IT environment, and user requirements change.

Service Level Agreements

Service Level Agreements (SLA's) are the most effective way to establish a common understanding of what expectations are and what will be delivered to meet those expectations. An SLA should be in place before a business application is run in the production Data Center. It will detail the administrative services, supporting configurations (hardware and software), and supporting practices necessary to meet the application's business requirements. This agreement will be reviewed as needed, but at least annually, to insure that it is meeting the application's business Service Level Agreement requirements. At least once a year, a review process should include a customer satisfaction survey.

The objective of the "Service Level Agreement" (SLA) is to define a framework for managing the quality and quantity of delivered services, in the face of changing business needs and user requirements, at a price the business is able to afford. The SLA:

- Synchronizes IT services with the business needs of the customers
- Sets the correct level of service expectations and responsibilities for both IT and the customer
- Enables IT to be an effective and flexible partner to the business unit, aiding rapid response to the changing business environment
- Enables IT to plan for the delivery of required services at the lowest cost to the customer
- Enables IT to maintain quality and visibility of the services that they can provide, and thus demonstrate value for money

Without an established and agreed upon SLA, IT management supporting a Microsoft computing environment will be inundated with priority 1 Help Desk calls; and will eventually fail. In the eyes of his /her user base, everything will be deemed a priority. This will lead to ultimate failure as there will ALWAYS be more service requests than resources to support them.

There are 7 key focus areas (for Microsoft computing environments) that should be documented in an SLA:

1. Services and Service Availability Hours
2. Service Availability Commitments

3. Service Catalog
4. Service Delivery and Response Parameters
5. Escalation Procedures
6. Metrics
7. Glossary

Services and Service Availability Hours

The following services will be available from 3:00 AM – 3:00 PM (PST)

- File Server
 - Shared Directories (departmental, group, etc.)
 - Personal Directories
- Desktop application availability
 - Microsoft Office
- Business Continuity
- Phone System
- Email
 - Calendar
 - Contacts
 - Public Folders
 - Task List

Service Availability Commitments

An annual service baseline of **99.99% availability** has been established for the above services.

Effectiveness will be measured against this baseline with a joint understanding that 100% availability is the objective for the times specified in this SLA. IT will produce **metric reports** to measure monthly availability of the services offered. In addition IT will provide the following **Services** to its users:

Services

Application Support

- Configuration Support
- Training
- Trouble-shooting
- Technology evaluations

Database Services

- Support
- Testing
- Backups

Business Systems High Availability

- System Monitoring
- After-hours systems support
- Circuits Implementation and Management
- Hosting and Maintenance of all Hardware and Peripherals
- VPN Access

Business Systems Integrity

- Backup and Restore
- Security Planning
- Change Management
- Intrusion Prevention and Detection
- Firewall Management
- Virus/Spyware Management

Server/Web/Email/Network Services

- Network Configuration
- Archiving
- Spam Control
- OS Configuration
- Routers and Switches
- Active Directory
- Guest Internet Access
- Voice and Fax
 - Provisioning-circuits/lines
 - Voicemail
- Employee Moves, Adds, and Changes
- Tele-working Support
- Desktop anti-virus support
- Remote Support
- Desktop Security Support

Help Desk

- Incident Management
- Problem management
- Desktop Inventory
- Desktop Security

Requests for **service** submit via telephone (Extension 9999) or email (helpdesk@acme.com). An IT Help Desk agent will log information about each request, which will include a description of the problem, affected individual, location and incident priority. Time of day or other relevant factors will be used to determine priority.

Service Delivery and Response Parameters

The following severity level matrix outlines IT's commitment and determination of service priority. The priority level will be agreed upon by both the customer and the service technician upon receiving a request for service:

Problem Status	Response Time	Resolution Update	Estimated Time of Resolution (ETR)
Priority 0 (Emergency)	5 min	60 min	1 hr

Description

A Severity Level of "Emergency" is described as an outage that affects mission critical business functions or otherwise affects revenue stream.

Problem Status	Response Time	Resolution Update	Estimated Time of Resolution (ETR)
Priority 1 (Urgent)	1 hr	60 min	8 hrs

Description

A Severity Level of "Urgent" is described as an outage that affects one or more departments, such as an application, program, or peripheral unit.

Problem Status	Response Time	Resolution Update	Estimated Time of Resolution (ETR)
Priority 2 (Normal)	8 hrs	24 hrs	48 hrs

Description

A Severity Level of "Normal" is described as an outage affecting a single user that impacts that user's ability to perform his or her assigned functions or duties

Problem Status	Response Time	Resolution Update	Estimated Time of Resolution (ETR)
Priority 3 (Low)	48 hrs	48 hrs	2 weeks

Description

A Severity Level of “Low” is described as a non-critical request for service, instruction, or information on a product or application that has no immediate impact on assigned functions or duties.

Escalation Procedures

If a service request cannot be resolved in the appropriate time (as advertised in the ETR) an escalation path has been established for IT management. Requests exceeding the ETR will automatically be escalated to the appropriate individual in the order listed below. Users may also request ticket escalation or changes to priority as needed.

Metrics

Help Desk (performed on a monthly basis)

Category

Number of total calls/emails/walk-ups to the Help Desk by priority

of tickets resolved after the ETR

Percentage of tickets resolved under/over the ETR

Infrastructure (performed on a monthly basis)

Category

Application Availability

Server Availability

Glossary

99.99% Availability: Server/Application uptime of business-critical services for a calendar month. This is based on the hours of operation set forth in the SLA, not including weekends and holidays. The actual amount of allowed downtime varies per month based on number of business days. This equals approximately 53 minutes of downtime per year or an average of 4.42 minutes of downtime per month.

Metric Reports: Reports used to measure the performance of the IT department and whether the user’s expectations are being met.

Response Time: The time elapsed between the customer notifying the IT department of a problem and the moment the help desk begins work on that problem.

Resolution Update: The frequency at which the service technician will provide the customer with an update once the ticket’s resolution time has passed the ETR.

Estimated Time of Resolution (ETR): The estimated time that it will take a technician to complete a customer’s request from the moment the request is submitted.

Priority 0 (Emergency): A Severity Level of “Emergency” is described as an outage that affects mission critical business functions or otherwise impacts our revenue stream.

Priority 1 (Urgent): A Severity Level of “Urgent” is described as an outage that affects one or more departments, such as an application, program, or peripheral unit.

Priority 2 (Normal): A Severity Level of “Normal” is described as an outage affecting a single user that impacts that user’s ability to perform his or her assigned functions or duties

Priority 3 (Low): A Severity Level of “Low” is described as a non-critical request for service, instruction or information on a product or application that has no immediate impact on assigned functions or duties

Service Request: A request for assistance involving a task outlined in the Service Catalog.

Total Ticket by Priority (metric): Metric showing the total number of tickets opened in a month according to the priority assigned to the ticket.

of tickets resolved after the ETR (metric): Metric showing the total number of tickets for a month that were not resolved before the advertised ETR.

% of tickets resolved before/after the ETR (metric): Metric showing the percentage of tickets for a month that were and were not resolved before the advertised ETR.

Average age of ticket by priority (metric): Metric showing the average time it took to resolve tickets in a month based on the priority assigned to the tickets.

Application availability: Amount of uptime in a given month for a specified application

Server Availability: Amount of uptime in a given month for a specified server

IT Scorecard: A quantitative survey given to management on a quarterly basis in order to grade/assess the overall performance of the IT department.