Microsoft®
Solutions for Management

Managing the Windows Server Platform

Service Level Management
Service Management Function

Microsoft Operations Framework

patterns & practices

Contents

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Introduction

This chapter provides an overview of this document's purpose, its audience, and its use. It also provides the background of and a brief introduction to Microsoft Frameworks.

Document Purpose

This guide provides detailed information about the Service Level Management service management function (SMF) for organizations that have deployed, or are considering deploying, Microsoft technologies in a data center or other type of enterprise computing environment. This is one of the more than 20 SMFs defined and described in Microsoft® Operations Framework (MOF). The guide assumes that the reader is familiar with the intent, background, and fundamental concepts of MOF as well as the Microsoft technologies discussed.

An overview of MOF and its companion, Microsoft Solutions Framework (MSF), is available in the *MOF Service Management Function Library* guide. This overview also provides abstracts of each of the service management functions defined within MOF. Detailed information about the concepts and principles of MOF and MSF is also available at http://www.microsoft.com/solutions/msm.

Intended Audience

This material is designed to be of value to both internal staff and consultants. It is aimed primarily at two main groups: information technology (IT) managers and IT support staff who either introduce or support Service Level Management in a production IT environment.

It is assumed that readers are fully conversant with MOF Process, Team, and Risk models. Copies of documents describing these models are available at http://www.microsoft.com/mof.

How to Use This Guide

This guide can be used as a starting point for introducing Service Level Management into an organization or, when an organization has some degree of Service Level Management, for developing and improving existing Service Level Management processes within the organization.

This guide shows that Service Level Management can be used in line with or independent from MOF, but maximum benefits will be derived when it is used as a part of the complete framework of recommended practices.

Background

The United Kingdom Office of Government Commerce (OGC) developed the IT Infrastructure Library (ITIL) as a comprehensive and coherent code of practice to help organizations provide efficient and cost-effective IT services. The OGC is a government executive agency tasked with developing best practice guidance on the use of information technology (IT) in service management and operations. To accomplish this, the OGC charters projects with leading IT companies around the world to document and validate best practices in the disciplines of IT service management. Microsoft Frameworks recognizes that current industry best practice for IT service management is well documented within the ITIL.

Microsoft Frameworks

Microsoft Frameworks provides innovative solutions that are built on proven practices for people, processes, and technology based on the IT life cycle. A part of its strategy is to address the ever-changing nature of today's distributed IT environments. Its solutions are delivered through integrated frameworks and custom-tailored service engagements by MSO and Microsoft partners.

The frameworks draw on the extensive experience that Microsoft, its customers, and its industry partners have in implementing and running mission-critical systems using Microsoft products and technologies. The frameworks provide a bridge that connects products and technologies with customer solutions. The frameworks provide the managerial and technical knowledge that organizations need to get the most from their technology investment.

The IT life cycle contains four phases—planning, preparing, building, and operating:

- **Planning.** Identifying business needs, technologies, and solution options in order to align business and IT plans.
- **Preparing**. Developing the organizational readiness and individual skills needed to implement new technologies.
- **Building**. Designing, developing, and deploying IT solutions rapidly and efficiently.
- **Operating**. Implementing repeatable processes, procedures, and customized support options to run highly available, scalable, reliable, and manageable systems.

MSF and MOF provide the information, tools, and resources related to the people, processes, and technologies needed to successfully complete each phase. The first phase, planning, involves planning at the organizational level and necessarily precedes the planning for a specific solution that is the first phase of a project within MSF. Both MSF and MOF incorporate the preparing and readiness phases of the life cycle within their respective processes. MSF provides guidance on the building phase, and MOF discusses the operating phase of the IT life cycle.

Microsoft Solutions Framework

MSF provides guidance in the planning, building, and deploying phases of the project life cycle. This guidance is in the form of white papers, deployment guides, tools, templates, case studies, and courseware in the areas of enterprise architecture, application development, component design, and infrastructure deployment. Many of these resources are available on the MSF Web site at http://www.microsoft.com/msf

Microsoft Operations Framework

MOF offers comprehensive technical guidance for achieving mission-critical production system reliability, availability, and manageability for Microsoft products and technologies. This direction consists of white papers, operational guides, assessment tools, best practices, case studies, and support tools for effective data center management within today's complex distributed IT environment. Many of these resources are available online at: http://www.microsoft.com/mof.

Executive Summary

Delivering cost-effective, consistent, and reliable IT services is becoming increasingly business critical. Even with rapid technology advancements, many business customers feel that IT is failing them, and they are struggling for a way to address their concerns. Their questions reflect their frustration.

- Why can't I see a clear relationship between what I use and what I pay?
- Why can't I get straightforward, effective, consistent, and reliable service and support?
- Why does it have to cost so much?
- Why does it have to be so difficult?
- Why can't it just work?
- Why is it so expensive when it doesn't work well anyway?

Businesses and IT departments must understand the effect they have on one another. Their respective demands and expectations must be defined and agreed on. The most effective way of managing this is through the Service Level Management process.

Service Level Management is a defined process that enables the IT department to deliver exactly what is expected of it and to ensure that these services are recognized as beneficial to the business. IT can facilitate effective cost management of the services, focus on the full range of services available, monitor the service components, and ensure that the service is delivered through monitoring, reporting, and developing knowledge of the services that are offered.

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Service Level Management Process and Activities

This chapter provides an overview of Service Level Management (SLM), including the six major processes of Service Level Management: setup activities, service catalog, service level agreements, service level monitoring, service level reporting, and service level agreement review.

Overview

Service Level Management aligns business needs with the delivery of IT services. It provides the interface with the business that allows the other SMFs to deliver IT solutions that are in line with the requirements of the business and at an acceptable cost. The goal of Service Level Management is to successfully deliver, maintain, and improve IT services.

Service Level Management aims to align and manage IT services through a process of definition, agreement, operation measurement, and review. The scope of Service Level Management includes defining the IT services for the organization and establishing service level agreements (SLAs) for them. Fulfilling SLAs is assured by using underpinning contracts (UCs) and operating level agreements (OLAs) for internal or external delivery of the services. Introducing Service Level Management into a business will not give an immediate improvement in the levels of service delivered. It is a long-term commitment. Initially, the service is likely to change very little; but over time, it will improve as targets are met and then exceeded.

This document describes the framework to initiate, develop, review, and improve Service Level Management within the organization.

If an organization wants to implement Service Level Management, it must first assess what services IT provides to the organization's customers and determine what existing service contracts are currently in place for these services. This assessment can make the IT service department aware, often for the first time, of the full range of services it is expected to deliver. With the information gained through this exercise, the organization can then develop and implement the full benefits of the Service Level Management process.

Service Level Management requires that the IT organization fully understand the services it offers. Implementing Service Level Management follows these steps:

- Creating a service catalog
- Developing SLAs
- Monitoring and reporting
- Performing regular service level reviews

This SLA is developed in line with the requirements and priorities of the services documented in the service catalog, the requirements specified under negotiation of the SLAs, the monitoring of the service against the agreement criteria, and the reporting and reviewing of this information to highlight and remove failures in the levels of performance of the service.

Figure 1 displays the six major processes in the Service Level Management function.

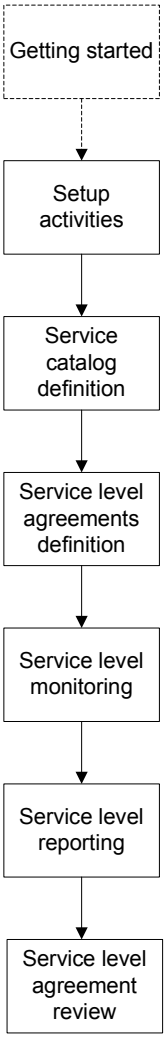

Figure 1

Service level management processes

The major processes shown in Figure 1 are discussed briefly in this chapter and are then described in detail throughout the remainder of this document.

Figure 1 illustrates the linear process for Service Level Management. There is also, however, a cyclical approach used throughout this document that can be applied to each process in turn. This cyclical process has been considered at each stage and can be used to add value in the implementation of the elements of Service Level Management.

Figure 2 illustrates this cyclical approach.

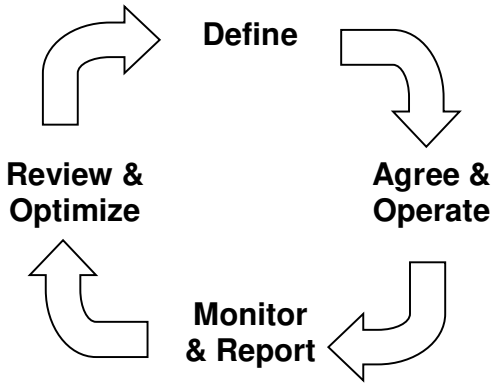

Figure 2
Service level management cyclical approach

Getting Started

Chapter 3, "Getting Started," although not strictly focused on a specific process, offers assistance and guidelines for introducing and implementing the range of SLM processes within an organization.

Setup Activities

Setup activities are a series of appraisal steps that are carried out at the beginning of a Service Level Management project. These preliminary steps help the business determine if there is a need for Service Level Management and if it has the resources to implement it. As part of this process, the IT department establishes a baseline for the business by taking a snapshot of the existing services and management activities. The final step is to analyze the information collected in the previous steps and use the results to plan the implementation of Service Level Management for maximum benefit to the business.

Service Catalog

A service catalog, written in business—rather than technical—language, is a definitive guide to the services available to the business. It provides end-to-end descriptions of the service components used to deliver the services and the IT functionality used by the business. This information is then used to create and define SLAs within each area, as SLAs are developed according to the priority and business requirements of the service.

Service Level Agreements

SLAs are an essential, beneficial, and often the most visible part of the Service Level Management SMF. The SLAs are a mutually agreed–on and negotiated offering for both the IT department and the business.

Service Level Monitoring

Services are monitored and measured according to the agreed-on SLA criteria in order to ensure compliance with the SLAs. Service level monitoring entails continual measurement of mutually agreed–on service-level thresholds and the initiation of corrective actions if the thresholds are breached.

Service Level Reporting

Service level reports, used by both the business and the IT department, contain the monitoring data used to measure performance against objectives.

Service Level Agreement Review

The service level agreement is formalized in a review procedure: the service level agreement review (SLA Review). The SLA Review is a two-way communication between the IT department and the organization. It ensures that the services are being delivered efficiently and are optimized to meet the organization's requirements.

Key Definitions

- *Operating level agreement.* An internal agreement supporting the SLA requirements.
- *Operating level objective.* Objectives within an operating level agreement that indicate the measures to be reported in the operational environment. The operating level objectives are aligned to the service level objectives.
- *Service.* A business function deliverable by one or more IT service components (hardware, software, and facility) for business use.
- *Service catalog.* A comprehensive list of services, including priorities of the business and corresponding SLAs.
- *Service components.* The configuration items (CIs) relating to the delivery of the service. They can vary in complexity, size, and type.
- *Service level agreement.* A written agreement documenting the required levels of service. The SLA is agreed on by the IT service provider and the business, or the IT service provider and a third-party provider.
- *Service level management.* The process of defining and managing through monitoring, reporting, and reviewing the required and expected level of service for the business in a cost-effective manner.
- *Service level objectives.* Objectives within an SLA detailing specific key expectations for that service.
- *Service level agreement review.* The operations management review (also referred to as the SLA Review) for Service Level Management. This involves reviews of the SLAs and performance against objectives, and a review of previous and potential issues that may affect services.
- *Underpinning contract.* A legally binding contract in place of or in addition to an SLA. This contract is with a third-party service provider on which service deliverables for the SLA have been built.

3

Getting Started

This chapter discusses the reasons for implementing Service Level Management, how to start its implementation, and the implementation cycle.

Why Implement Service Level Management

Why are so many customers unhappy with the quality and cost of IT service delivery? Are things really so bad, or are we seeing a symptom of poor communication between IT service providers and their customers?

You can use Service Level Management to improve communication. This includes using appropriate SLAs supported by a service catalog that shows customers the full range of options available to them. The principles outlined here produce a number of measurable benefits, including:

- Increased service quality
- Reduced cost
- Improved customer satisfaction

The main goal of Service Level Management is to improve the services available to the business in the long term and to resolve service provision issues that currently exist. Among the many benefits to the IT department, in addition to the improvement of service, is an increased knowledge of business expectations and improved cost management.

Service Level Management allows the IT department to meet business expectations and opens a dialog to confirm these expectations. For example, an IT department may want to deliver a service at a 100 percent, 99.999 percent, or even 70 percent availability, but it may not be able to explain how it arrived at this number. Unless this expectation is documented and agreed on early in the Service Level Management process, the IT department might focus on a non-business critical service—for example, developing staff, investing in hardware, software, and other costly endeavors—with little real benefit to the business.

How to Start

Service Level Management guides the rest of the operational frameworks processes and aligns them to the requirements and expectations of the business. When IT understands the organization's expectations, it can focus on meeting them. Establishing good communications between the IT department and the business representatives leads to a better understanding of the needs, abilities, resources, and costs, and it allows IT and business representatives to work together to deliver solutions.

Implementing Service Level Management should follow a cycle of defining, confirming, agreeing, monitoring, reporting, and reviewing. Consider the following processes when getting started:

- Creating a pilot area
- Creating a service catalog
- Setting service level objectives.
- Creating operating level agreements
- Reviewing underpinning contracts
- Using real-time monitoring
- Performing service level reviews

Pilot Area

Many organizations begin by implementing Service Level Management initially in one small- to medium-sized department, documenting the available services, creating a service catalog, and introducing SLAs.

Select a specific department to start with, such as a corporate finance department; or choose a business service, such as an order system. Alternatively, select a part of the business that in the past has had a poorly managed service that would see an immediate benefit from the introduction of Service Level Management. In any case, the number of users involved in the pilot area should be manageable, and there should be no degradation of service when introducing Service Level Management. The purpose of the pilot is to define, manage, monitor, and report on only the selected service. If the pilot succeeds, it can be applied to other services within the organization.

Explain the benefits of Service Level Management to the management and staff of the pilot area. Give them time to buy in and contribute to the pilot by means of discovery workshops, feedback and review sessions, and participation in the setup stages. This will acquaint them with services they have and what is important to them. It will help to set the scene for Service Level Management for the rest of the organization. Solicit volunteer staff from the IT department, if required, at the outset of Service Level Management to assist with the feedback and development of the Service Level Management process in the pilot area.

A simple baseline of existing contracts and services should be completed within the chosen pilot area, a review of service desk calls should be carried out, and workshops conducted to ascertain services delivered, consumed, and required. A service catalog should be created for these services and the effects and priorities confirmed for each service. For example, for a corporate finance department, the services and systems and their relative priorities should be documented, their cost should be justified, and beneficial SLAs should be created against services in order to add value.

Service Catalog

Once defined, the pilot area should be surveyed with interviews, workshops, and other discovery exercises (such as incident and change request reports) to learn what services are being consumed. Record only relevant information related to each service. This record of services is the service catalog.

Information that will be valuable may include:

- Priority of tasks
- Effect on employees
- Number of users
- Service components used in the delivery of the service
- Any third-party supplier or support contracts

The information recorded in the service catalog can then be used as a reference in the implementation of the other processes for Service Level Management. This record is essential to the other processes because it documents the services that will be managed.

Service Level Agreements

To create SLAs, start simply by using the information in the service catalog and build to more complex agreements once the simple processes have been validated. Begin with what can be measured, and deliver reports for these agreements. It is important to establish the importance of the SLA measurements and the time and costs that may be associated with producing the measurement report.

Service Level Objectives

When setting service level objectives, measure what the business is asking for. Often this can include process measurements—for example, rating customer satisfaction, returning phone calls, and response to queries. There may be ways in which existing technology within the organization can be used to assist in these measurements. For example, call-center technology can run reports that are collated against calls logged at the service desk registering outgoing calls by individuals.

There are often complex component chains that result in the delivery of a service. It is possible, however, to agree on a final objective for the service as long as the service delivery of this objective can be measured over the end-to-end chain of components. Figure 3 illustrates a typical component chain. If the service delivery of this objective cannot be measured, it should not be agreed on unless an alternative can be found.

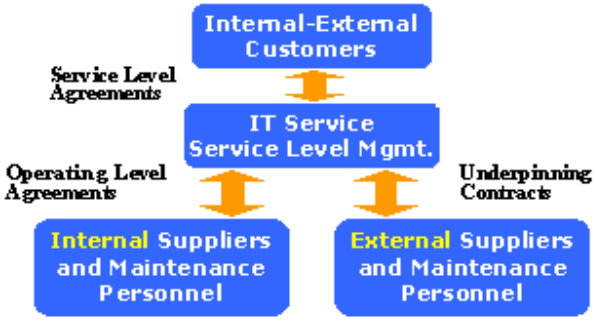

Figure 3

Typical component chain

Although it is important to acknowledge the business requirements and endeavor to report on them, it is also essential to ask why these objectives, or this SLA, or this measurement, are important. Answers to questions like these may reveal that the business wants something different or that the business needs can be provided by a different service measurement. If it is difficult for an organization to define its objectives or SLAs, it may need help in identifying and defining what it wants. A record of existing services, contracts, and performance metrics produced by the IT services department can help in this.

Operating Level Agreements

When implementing Service Level Management for the pilot area selected, it is helpful to prepare the IT department so that the pilot will be successful. To do this, create SLAs that are in line with the objectives by creating operating level agreements (OLAs – the internal service agreement between internal departments) and ensure that IT teams respond when an OLA is breached or when monitoring or reporting indicate problems.

Underpinning Contracts

Contracts with external service providers should be reviewed to ensure that any service levels stipulated in these underpinning contracts (UCs) agree with the SLA requirements. These contracts can be reviewed and brought in line with the new requirements, or the new requirements can be aligned with any existing contracts as long as there is no business requirement regarding changing external contracts.

Figure 4 illustrates the relationships between the SLA, the OLA, and underpinning contracts in end-to-end Service Level Management.

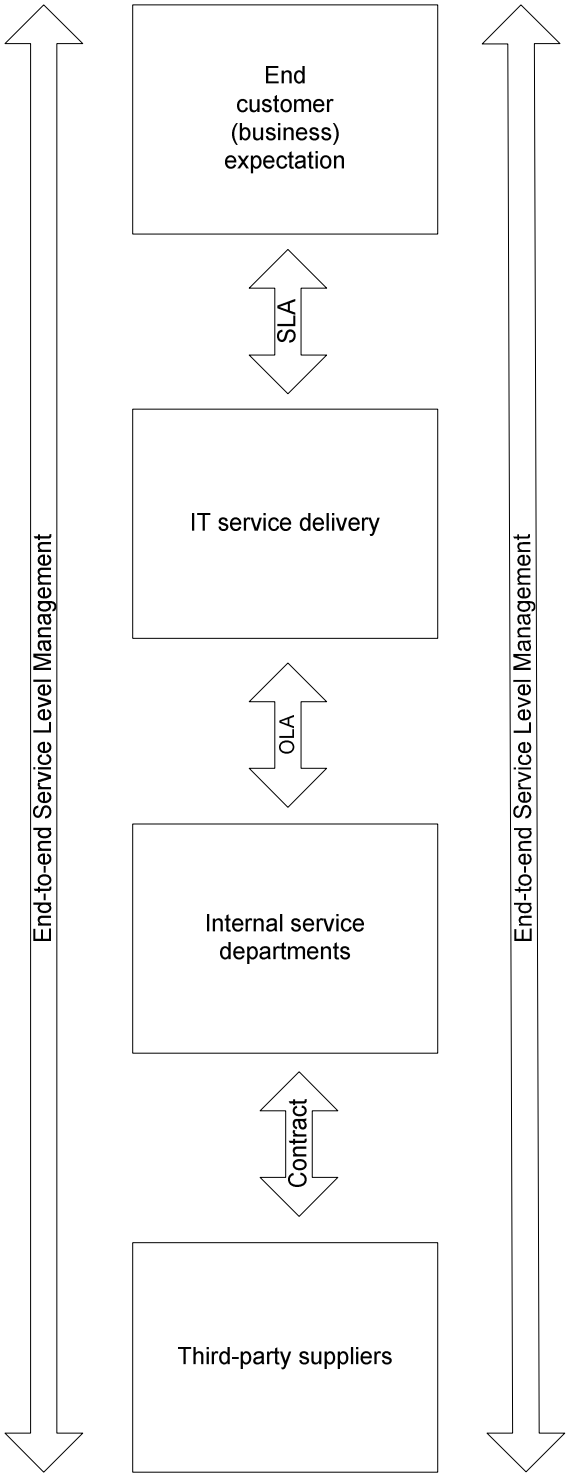

Figure 4

Relationships between the SLA, the OLA, and underpinning contracts

Monitoring and Reporting

Using the service catalog and SLAs for the department, reports should be designed and scheduled and, if required, real-time monitoring of the SLA criteria should be conducted. The thresholds, alerts, notifications, and actions for real-time monitoring of criteria should be considered and service performance measured against them. The reports produced from historical data and the monitoring function can then be confirmed at the required intervals during a service level review with the representative from the pilot department.

Service Level Agreement Review

The service level agreement review (SLA Review) provides an opportunity to review performance against SLA objectives and, more importantly, to gather perceptions and opinions from business representatives on any perceived change in service during the period of the SLA pilot. If any service levels were perceived to have been breached but have not been highlighted by the service review or reports, this would indicate that there might be issues with the criteria of the SLA and objectives. Work with the business representatives to identify any issues from the previous period and any current issues that may need to be addressed before the next review. These issues might include providing additional resources to support new services or service levels if these resources were not considered at the outset of the agreement period.

If any issues arise from the SLA Review or during informal discussion, review the SLAs and update them in line with the change management process. On a regular basis, review the reporting requirements of the SLA and eliminate any reports that are no longer relevant. Service Level Management reports and reviews should be adaptable and reflect business needs. Ensure that any changes are added to the internal service catalog, agreements, and reporting and review processes. Keeping these records up-to-date adds value to the Service Level Management process.

Getting Started Final Thoughts

This "Getting Started" chapter has briefly described the full cycle of implementing Service Level Management: defining, confirming, agreeing, monitoring, reporting, and reviewing. As long as the initial pilot has not uncovered any significant issues, the next stage is to confirm rollout to the rest of the organization in line with release and rollout planning principals within Microsoft operations.

Keep the Service Level Management process simple and at the appropriate level. Do not assume that, because it works in a small area, it will necessarily work in an expanded area. The expanded area might require an unmanageable (and often unnecessary) number of SLAs for a vast number of services. Not all services will need a specific SLA; most can be grouped under a corporate-level SLA.

Service Level Management is equally beneficial to the business and to the IT department. It should be:

- Straightforward to report on.
- Easy to implement and maintain.
- Accessible by all in IT and the business.
- Achievable.
- Simple, concise, and easy to understand.
- Supported by external contracts, underpinning contracts, and OLAs.
- Derived from open, knowledgeable, two-way communication from the business organization and the IT organization.
- Capable of providing performance reports.
- Manageable for the resources available.
- Able to be cost-justified.
- Focused on business-critical services.

Summary of Getting Started

The following list summarizes the important points discussed in this chapter.

- The purpose of Service Level Management is to improve the services available to the business operation in line with expectation and cost management.
- Service Level Management opens a dialog between IT and the business.
- Consider piloting Service Level Management in a small- to medium-sized part of the business.
- Consider the target area for the pilot in terms of services used, number of staff, existing service issues, and selling the benefits of Service Level Management.
- Complete a simple baseline of existing services in the pilot area before documenting them in a service catalog. This is a good starting point for building further development as it confirms the services in use.
- Introducing Service Level Management should not cause a degradation of service. The purpose of Service Level Management is to measure, monitor, and improve the service.
- Start with OLAs internally in order to become accustomed to working to agreed performance measures.
- Refer to existing SLAs and existing underpinning contracts when creating OLAs and SLAs.
- Define, confirm, and agree to the service catalog, SLA, OLA, monitoring, and reporting requirements.
- When creating SLAs and OLAs, be straightforward, and agree and document only what you can measure.
- Ensure that service level objectives are aligned to the business function requirements. Always ask why they want these specific measurements and what the measurements will be used for.
- Review performance monitoring, OLAs, and SLAs throughout the course of the pilot in order to discover issues early.
- Service Level Management is flexible and can be changed during reviews throughout the pilot. Make sure, however, that the changes are justified and are considered as carefully as the SLA requirements.
- Keep a record of the reports for each SLA and ensure that the SLA is under change control.
- Monitor, report on, and review the SLA and OLA monitoring and reporting functions.
- Service Level Management creates the processes that eventually lead to improvements. Keep in mind, however, that Service Level Management does not improve the service immediately.

4

Setup Activities for Service Level Management

This chapter describes how to assess the need for Service Level Management, determine the required resources, and analyze the metrics for a baseline.

There is a series of recommended setup activities to carry out when introducing Service Level Management. These activities are outlined in Figure 5.

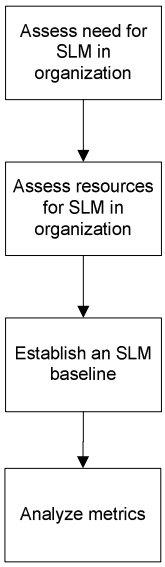

Figure 5
Service level management setup activities

Assess the Need for Service Level Management

To assess the need for Service Level Management:

- Review existing and future functions.
- Establish buy-in.
- Cultivate sponsors.
- Establish key contacts.

Existing and Future Functions

When introducing Service Level Management, review any Service Level Management functions that may currently exist and then determine what Service Level Management functions will be needed in the future. Most organizations will have some level of reporting on IT services that can be used for this purpose. For example, the organization might keep a record of calls received by the service desk or calls made to a third-party provider.

To implement Service Level Management, it is necessary to judge the relevance of the current measurements of IT services and to assess the requirements and measurements for future Service Level Management within the organization.

Buy-In

Service Level Management is most effective when IT and the business work together to achieve the objectives of the organization. Such a partnership can be established by conducting a *buy-in* exercise during the early stages of the Service Level Management implementation. Buy-in, in this instance, refers to joint workshops in which representatives of both the business and IT define the service catalog, develop the SLAs, and participate in the service level agreement reviews. Service Level Management is one of the few areas of service management that depends on input from the business as much as it does on the IT department's functionality. Effective Service Level Management works to the advantage of both IT and the business and benefits the other underpinning MOF SMFs as well.

Sponsors

Appoint a business sponsor who sits at the appropriate level within the business and who can give the IT department the authority to decline any unrealistic demands from the business, unless the cost of those demands can be justified. A sponsor must encourage buy-in among business and IT managers, ensure that they understand the potential benefits and long-term effects of service improvement through Service Level Management, and ensure that key people contribute in a positive way to the Service Level Management process.

Key Contacts

Key business contacts can help develop knowledge of the IT services available and the priority and effect of these services. It is essential that relationships be built with key personnel so that they can help to set up service catalogs and SLAs. In addition, when this relationship is established and Service Level Management is mature, these contacts can be used to review services outside of the SLA Review. They can act as contacts in case of a potential breach of the SLA, or if escalation is needed, or for advice on changes to be introduced to the service.

Assess the Required Resources

In many organizations, members of the Support Role Cluster carry out most of the responsibilities for administering Service Level Management. For example, reporting and metrics on support activities is a team role responsibility that may be carried out by the service desk.

The role clusters do not imply an organization chart or set of job titles. Regardless of who carries out the roles, there are functions that require different resources be assigned to them depending on the size of the organization and the scale of Service Level Management within it. Further information on the MOF Team Model and role clusters is available at www.microsoft.com/mof.

The size of the organization and the complexity of the services provided by IT may mean that its functions require a specific investment of resources—for example, support costs, head count, and technology. The cost of this investment should always be justified to ensure that the investment is reasonable.

In other organizations, the roles are distributed among different groups, including IT, the business organization, and sometimes external resources. The responsibilities of the Service Level Management function are documented in more detail in the "Roles and Responsibilities" chapter later in this guide. It is important to note, however, that SLA monitoring will affect all of the other roles and SMFs if an SLA objective is included within their areas.

In addition to personnel resources, other resources will be required for delivering the service catalog and SLAs. The catalog, as well as the monitoring and reporting of the SLAs, may require technology resources. It is during this stage of setup that the use of specific technologies and organizational standards need to be addressed. For example, it may be suitable to use e-mail to alert a breach of SLA, or to use pagers and SMS alerts to mobile telephones.

Establish an SLM Baseline

A baseline is a line drawn in time, taking a "snapshot" of the situation. In this instance, it is a picture of the Service Level Management within the organization. A baseline provides a picture of the services being delivered at that specific time and provides a plan for achieving future goals in Service Level Management. Optimizing IT performance requires not only a clear vision of the objective, but also of the current baseline from which the process will begin.

Baseline the Services Available

Measure the services currently available within the organization as a baseline for initiating Service Level Management. By baselining the existing services before creating a service catalog, measurable criteria for improving and maintaining the service can be formulated. New services or changes discovered by change management should be included in the procedure for updating and maintaining the service catalog from this baseline point onward.

Getting Information on Available Services

- Workshops
  - Conducting workshops with business and IT personnel is a good way to discover what services are used within a department and what priorities and effects these services have. It is necessary that the workshops be well structured in order to obtain the maximum benefit from them. Appendix A contains a sample workshop agenda that can help to identify the services within a department.
- Contact and CMDB databases
  - A contact database that has been created because of financial or supplier management can be a good source of information regarding the service and any external support or component information. It can be another starting point on which to base discussions and fact finding.
  - The configuration management database (CMDB) provides data on the components of the services and may also contain a full interrelationship mapping of them. The service catalog and Service Level Management functions, however, must be focused on the business and therefore the data retrieved from the CMDB must be reported in business—instead of technical—language.
- Service desk records
  - Service desk records contain information about legacy systems that may no longer be in common use but may still be needed. It is rare for an organization not to have some legacy systems that have at least a limited usefulness. These systems must be reviewed to see if they might affect the performance of the business operation.

Baseline Existing Service Level Agreements

Look for existing SLAs. For example, there may be SLAs with other providers. There may already be contracts that, although not SLAs by name, may adequately deliver the requirements of the business.

It is essential that Service Level Management benefit the business and IT. There should be no unnecessary redevelopment of contracts that already meet the needs of the business. Contracts that do not meet the needs of the business—for example, contracts with legacy vendors—should be reviewed in case an SLA is assigned to the service in question.

Analyze the Metrics for a Baseline

When considering the implementation of Service Level Management, the metrics may come from many sources. For example, we recommend reviewing existing contracts for baselining the existing Service Level Management function. The metrics should be collated and presented in a readable format for comparison against the completed service catalog. For example, contracts can be consolidated into a contracts database and may be under change control.

Apply change control to all of the elements of data gathering completed during the setup activities. This ensures that the Service Level Management processes will detect any changing services and minimizes the possibility of errors or inconsistencies due to changes.

The purpose of this analysis is to find any gaps between the existing and the required functionality of Service Level Management and to use this information to plan the implementation. Carefully examine your current Service Level Management status and consider your goals when planning and implementing the rest of the stages outlined in this guide. It is important that Service Level Management fit the organization. The baseline provides the information needed to help decide where maximum value can be added.

Note Once gathered, the baseline information provides a starting point for the Service Level Management project. From this point, additions, changes, and retirements to services should be discovered by the change management and new Service Level Management processes.

Summary of Setup Activities

The following list summarizes the important points discussed in this chapter.

- Assess the need for Service Level Management in an organization by comparing the current situation with the ideal future situation.
- Encourage buy-in from IT and the business by indicating the benefits of Service Level Management to both and by addressing any negative preconceptions of Service Level Management and SLAs.
- Ensure that sponsors of Service Level Management are at the right level to build Service Level Management into a strategic enabler, and ensure that IT is in a strong position to justify the cost of the SLAs and OLAs.
- Resources can be on a virtual basis initially and do not need an exact head count as Service Level Management roles mesh with responsibilities in other SMFs, especially Change Management, Configuration Management, and Service Monitoring and Control.
- Establishing a Service Level Management baseline helps the Service Level Management function move forward by ensuring a clear picture of the needs of the business before planning its Service Level Management.
- Gather information for a baseline from existing records, the change management system, service desk records, the CMDB, and workshops with the business and IT.
- Current service agreements should be included in the baseline, to be worked with and reviewed along with the business requirements.
- Analyze the differences between the baseline metrics and desired solution in order to create a plan for moving forward.

5

Service Catalog

This chapter defines the service catalog and describes how to make it an official record and how to maintain this record.

The service catalog is an essential record that will ensure the success of Service Level Management. The modern IT environment contains multiple components, all working together to deliver IT services to an organization. Each day new solutions are developed and implemented, and each day old solutions become outmoded and pass from use. Unless there is a record of the services an organization uses, it is impossible to meet the service expectations of that organization.

Figure 6 illustrates the process of making and maintaining a service catalog.

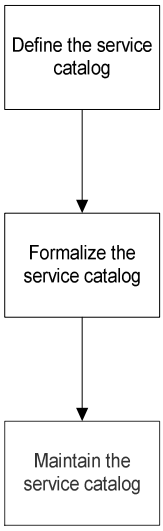

Figure 6
The service catalog

What Is a Service Catalog?

A service catalog is a record of all the services in use within an organization. The record should include:

- Services (expressed in business language).
- IT service components (or configuration items) used in delivering IT services.
- The priority of the service to business users.
- The number of business users.
- Supplier and maintenance agreements pertaining to the IT service.
- Supporting contracts.

The information in the service catalog should be manageable and realistic. Too much peripheral information will make it difficult to maintain.

A service catalog should contain all of the IT services provided within an organization. SLAs should be established and prioritized to monitor, report, and review those IT services. This does not mean, however, that some services should not be monitored; the requirements of the business can determine what is important in a department. For example, having a financial system in an accounting department should be a high priority and would certainly require an SLA. The same financial system, however, when used only occasionally by a few staff in—for example, a personnel administration department—may be of lower priority. It would therefore be unlikely to be subject to a specific SLA or to come under scrutiny during service level reviews. The financial system in the personnel administration department would still have an expected level of service, but this may not be officially recognized and managed.

The service catalog provides many benefits beyond Service Level Management. For example, it allows business impact mapping for the services, aids the change management team in assessing effects of changes on services, adds a business focus to the CMDB, improves communications between IT and the business, and improves knowledge-sharing between stakeholders in business areas and staffing issues.

Define a Service Catalog

A service is defined by the business organization's perception. For example, e-mail may be a service and printing may be a service, regardless of the number of service components (CIs) required to deliver the service to the end user.

Where to Discover What Services IT Is Delivering to the Business

- Workshops
  - Workshops for both IT and the business are concerned with current services in use. It is essential, due to the business focus of the SLA and service level review, that the services be recorded in business terminology. For example, the IT department may view the Internet as a service, whereas the business might record a specific Web portal that provides information to the financial sector as critical to their business functionality. This means that every IT component used to deliver this service to the end user's desktop must be available in order for the user to be able to use the financial Web portal. This can include Web servers, Internet Explorer technology, Internet service providers, desktop and laptop computers, and network connectivity—all of which contribute to the delivery of the service.
  - The workshop attendees must be a reasonable cross-section of the business organization. They must be aware not only of the systems they themselves use but of other services within their departments or teams.
- Service desk call records
  - Service desk call records may be reported by service, by department, or by user. These records can often highlight long-standing systems that are no longer in use by the majority of the staff and could otherwise be overlooked for inclusion in the service catalog. These services, however small, should be considered for inclusion or at least be examined for support implications and any effect on other services. For example, financial departments may use interfaces with less well-used legacy systems for their accounting function—especially if, for example, the business organization has had a history of mergers and acquisitions.
- Contracts database or record
  - A contracts database or record may highlight services that are being paid for but are not being used in the same capacity as they once were. Contracts may also highlight third-party support relationships and details of SLAs within these relationships.

- Analysis of change records
  - An analysis of change records and a change pipeline review is needed in order to define the services within an organization. It is necessary to confirm that the changes to be implemented do not affect the components used to deliver the service or that the service is not being replaced by a project that consolidates that service within a new service. You should gather as much information as possible on the existing services and any potential new services in the CMDB and change request system, as well as any unconfirmed developments that might produce new services.
  - Some organizations may find it necessary to conduct a change freeze while they complete the discovery. Others may consult the sources of information available to them and ascertain from this an accurate picture of what exists and what is due to change. It is important to weigh the potential inconvenience of a change freeze against the potential cost of attempting to define and discover all of the services available and being incorrect.

Formalize a Service Catalog

To formalize a service catalog is to create an officially recognized record. Making the service catalog an official record within the organization places it under change control. This is important since the record is valuable only if it is maintained and accurate.

There are many ways to formalize a service catalog. When determining which method is most suitable for use, consider how you want to view, report against, and use the service catalog. A service catalog can be stored as part of the CMDB either as one component (the service catalog) or as its services. Microsoft applications, such as Microsoft Excel or Microsoft Access, can be used to record the services and such details as the components, effects, priorities, and SLAs and SLOs. If the tool selected allows the service catalog to be part of the CMDB, then this can add value by integrating the information in the service catalog with the configuration item (CI) in the CMDB. This can then be used to add value to the Change Management SMF, Incident Management SMF, and all other SMFs using the CMDB.

Note Most of the IT department, as well as key individuals, should have easy access to the service catalog. This ensures that everyone involved in delivering the service—such as supporting, operating, or developing solutions—can view the service information. This can be achieved in various ways—for example, by putting the catalog on an intranet or extranet site. In this case, unauthorized personnel should be able to access the catalog on a view-only basis. This will ensure the catalog's integrity of information.

Maintain a Service Catalog

Whatever the storage mechanism for the service catalog, the change controls on the records must be strictly monitored. Allowing read-only access to the majority of IT should ensure this. As with the CMDB, a service catalog's records are only as useful as their data.

When a change to a service or the development of a new service is made, however, the service catalog should be updated to reflect it. This may require some buy-in from IT and the IT development function; but once these groups recognize the value of maintaining the service catalog and the importance of the SLA to the operations of service provision, they will most likely cooperate.

Controlling service catalog entries may be the responsibility of the service level manager, an administrator, or someone defined by the Support Role Cluster. This ensures that changes to the services are noted and signed off. In this way, changes to the service catalog are subsequently reflected in the SLAs, OLAs, reports, and reviews.

Note It is important that the service catalog track its version and status. Recording changes to a service record will make it less likely that out-of-date versions of the service catalog will be used.

Change a Service

When changing an existing service or adding a new service, the requirements for the service catalog should be specified during the development stage of the change as part of the development deliverables. The expected priority and effect of the new service to the business organization should also be added. This information can include the specification of SLAs at the design stage. This can often be helpful because the solution is designed and built according to the SLA rather than the SLA being tailored to the solution once it is implemented, which can be costly and require further development.

A change to a service should take into account the range of service information recorded in the service catalog. For example, it may appear that although a service may not be changed, a service component used in its delivery may be changed. Therefore, a full impact analysis must be carried out as part of the change management and approval process. Then it must be fed back into the service catalog to be recorded. For example, end users might use a service, such as Microsoft Office, remotely at their client computer. The service, however, has not had a change raised on it. In addition, an element of the delivery mechanism, such as the bandwidth of the network, may be changed. This may or may not affect the performance of the service, but the details of the change to the service component should be recorded in the service catalog as part of the change management process.

Using different version or status controls for a service in the catalog can be useful here. For example, services included in the catalog can be defined by status—such as In Development, Test, Pilot, Production, Retired, and Training—depending on the needs of the business and IT organization.

Add a Service

As new solutions are brought into the production environment, information for the service catalog should be gathered from the business. For example, the following information should be added to the service catalog.

- The priority of the service
- The effect on the business
- The hours of service
- The components required to run and to deliver the service
- The internal and external support contracts
- The support chain

If a pilot is carried out for the release of a new solution, any degradation or impact on service performance would affect the priority and the level may be increased to that of a production service. Any issues in a pilot service would need to be highlighted immediately in line with the release, and pilot acceptance criteria and other issues would have to be resolved quickly.

As the new solution is developed, it is often easier to record all of the components used in delivering the service while they are being designed and built according to the requirements listed in the service specification. It is often more difficult, however, to record all of the components for an existing service. For example, if a new service is being designed and specified, the components to be used in the delivery are all apparent at this stage. If a service is in use, however, some of the components used in the delivery of the service may not be as easily identified.

There may be problems in determining the full range of components used in the delivery chain. It is a good practice to involve the service catalog requirements as early as possible in the development of a new service. This can save time and effort later on if the service catalog is maintained correctly. Version and status controls are helpful in adding a service because they can be used for test, pilot, and production services.

Retire a Service

As workshops, reviews, and informal reports highlight issues and legacy services that may no longer be in use, it may become evident that these services must be phased out. An organization might be paying licensing costs on legacy systems it no longer uses, while an existing new system could be used instead. Highlighting poor cost control in these instances indicates the financial benefits for the IT department of keeping a record of services.

If a service exists within the service catalog but is no longer used—either due to a change in IT or in working practice, or as a result of a larger scale transition to an alternative service—the project must ensure that the information from the service is still accessible or is transferred as part of the migration or replacement project. Then the record in the service catalog can be changed to a Retired status.

Review a Service

The service catalog is flexible. The service, for example, may no longer have a high priority or be used by as many staff as the record indicates. Conversely, the service might have gained a higher priority in the organization. For example, as recently as three years ago, many organizations regularly referred to e-mail as a non business–critical system. Now many organizations could not function properly without it, and their customers would be exposed to a service failure if their e-mail messages were returned undelivered.

The service catalog review process can link into the service level review and be a part of it, or it can use the reports and data produced for the service level review to prompt the review of the service catalog. In addition to the informal review of the service catalog, we recommend that a scheduled review be conducted. The frequency of this review depends on the number of services available and the overhead associated with them. One approach is to review by priority of service or department.

The stages of a review are:

- Review the existing services—for example, by department, by effect, or by priority.
- Review and confirm the existing services and the details recorded.
- Take action on issues that the review exposes—for example, increased usage or increased business impact.

Inform all interested parties when a review causes changes to be made in the service catalog. The service catalog can add further value by including records of the key consumers and users of the service and their preferred methods of communication. This information can then be used with other technologies. For example, you can use the intranet to report that the service catalog has been updated or that changes have been signed off by the relevant departments.

As with all processes and procedures, a review is often beneficial to other areas of IT and the organization. For example, change management and incident management may find new information on service effects and priorities useful in ensuring that their own practices are fully aligned to the organization. This should be a two-way communication: The incident and change management groups should share their information with the service catalog review using, for example, a share point or intranet.

Note You can review a service as part of a virtual team. This can benefit from a buy-in and have its own staff in a larger organization. This relates to the administration of the CMDB but is the service view of the components.

The CMDB can be used for Service Level Management administration in the following manner:

The service catalog can be stored as part of the CMDB—with the services recorded as configuration items (CIs) and the service details, SLAs, service level reporting requirements, and service components required to deliver the service recorded within the CMDB as a relationship.

Summary of the Service Catalog

The following list summarizes the important points discussed in this chapter.

- The service catalog is essential for the success of Service Level Management within an organization. It allows the Service Level Management processes to be built on the knowledge of the services and their importance and usage in the business organization.
- The service catalog should contain all of the services provided and be accessible in language and location to both the organization and IT.
- The details recorded against services in the catalog should include the business term for the service, the service components used in delivering it, the priority for the business, the number of users, the supplier (if required), key consumers, and any maintenance agreements or supporting contracts.
- Keep the service catalog simple and record information in detail only if keeping it up to date for that service can be justified.
- Get to know the services delivered to the business by evaluating IT workshops, service desk records, change records, and development and project teams.
- Define a service in terms the business understands, but be sure to understand the service components—that is, the IT technology used to deliver the service to the end users.
- Formalize the catalog using a simple and easy-to-understand application—for example, Microsoft Excel or a CMDB—and ensure that it can be accessed and kept up to date with the change management process.
- Adding services, changing services, and retiring services should be simple if kept up to date with the change management process.

6

Service Level Agreements

This chapter describes the different types of service level agreements (SLAs). It also provides a brief introduction to negotiating, documenting, and revising SLAs.

SLAs are useful in ensuring that the services delivered meet the expectations of the business, the required performance targets, and the required cost for delivery of the services. An effective SLA reflects the communication between the business customer and IT. It includes the organization's future plans and their uncertainties, and it lists the demands on IT that will have to be met in order to fulfill these expectations. Then both IT and the business community can be clear on the organization's goals and how to achieve them.

The flow chart in Figure 7 illustrates how this phased approach fits into the linear SLA process for Service Level Management.

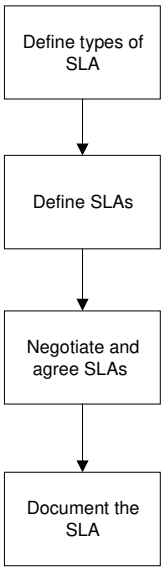

Figure 7

Service level agreement processes

The following diagram (Figure 8) was used in the "Overview" section of Chapter 2. It is, however, directly applicable to the SLA process. Figure 8 illustrates the phases that IT should go through in implementing effective SLAs. This cycle does not stop after the SLAs are implemented and subject to the service level review. It starts over following the review in order to ensure that the defined SLAs are still applicable to the organization's expectations.

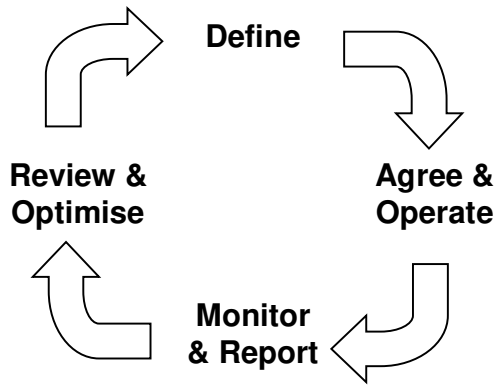

Figure 8

Service level agreements cyclical approach

What Are Service Level Agreements?

SLAs are formal, typically signed, agreements between IT and the organization to document the expectations and requirements of a service delivered to the organization from the IT service provider. There are many different types of SLAs:

- Internal SLAs
- External SLAs
- Nominal expectations SLAs
- Fully documented and legally binding SLAs
- SLAs for one part of the business area and one service within that area
- SLAs for one business area and all the services within that area
- SLAs for one service for all areas.

When considering how to build the SLA structure, it is useful to consider the service catalog definitions of the services in question and the business areas that they pertain to, the practicality of the reporting and monitoring functions, the involvement and manageability of the review meetings, and any informal communication. All of these factors can contribute to the structure that is put into place. For example, if an organization uses a service across several departments, but the culture within that organization treats different areas as separate functions, it may be worth creating an SLA that delivers the minimum requirements of the service across the entire business. This can be considered as a generic SLA, but departments may indicate that they want individually specified response times, resolution times, or review meetings specifically for their own areas. These are exceptions to the generic service availability. Because such specific SLA objectives may be added to a department's agreements, the organization-wide SLA becomes measurable, and the specifics can be reported when required.

Defining Types of Service Level Agreements

A successful SLA may be the result of many hours of negotiation, but the final report may be only a single-page document to be discussed at the SLA Review. An SLA will qualify as successful if it delivers what was requested, if it offers a simple representation of the complexity of the service and component architecture, if it can demonstrate the measures on performance, and if it is delivered in a suitable format. As long as they meet their objectives, SLAs do not need to be long, complex, multipage documents.

Although there are different types of SLAs, the basic process for their creation and content is fundamentally the same. The differences arise from the groups for which the agreement is made. A group's needs affect the requirements of the document and the actions taken should the SLA not be met.

The SLAs discussed in this document are:

- Internal service level agreements
- External service level agreements
- Operating level agreements
- Multilevel service level agreements

Internal Service Level Agreements

An internal SLA is most common between an IT department and another business department—for example, sales and marketing or human resources. However, an internal SLA can also exist between other, non-IT departments. For example, scanning, mail, customer service, and billing departments may all have SLAs with other business areas to which they deliver their services.

Although internal SLAs between two departments within one organization rarely have legal consequences, the internal SLA describes the relationship, the expectations, and the timescales for the delivery of the service. It is binding in that it represents an agreement between the two parties. Every endeavor should be made to meet the levels of services documented and signed off within it. The internal parties are accountable for what they do and do not achieve as outlined in the SLA. There may be repercussions within the organization when an agreed-upon service is not fulfilled, even though the document is not a legal contract. The status of IT may suffer, for example, if there are issues on chargeable services or if the costs of providing an agreed-upon service cannot be justified.

Internal SLAs require administration of their operation, reporting review, and optimizing processes. These functions can be carried out by various role clusters as deemed suitable within the organization, as responsibilities for this administration may be defined by SLO. System administration objectives, for example, may be monitored and reported on by the system administration function, and request for change objectives may be reported on and monitored by the change manager. The collation of all this data for the SLAs may be the responsibility of a service level administrator or the Support Role Cluster.

In addition to interval-based administration, there will also be administration as a result of changes. A change to a service component, a service, or a line of business can result in a change to the SLA itself. A change-control process must be applied to all SLA documents, and it can be useful to use version control for this. If it is possible within the organization to store the SLAs as CIs within the CMDB, then the SLAs will be part of the change control and will affect analysis processes within that system. If SLAs are stored in another format, ensure that there is a limited authority for changing them in order to guarantee their integrity. Make sure that they can be accessed on a read-only basis by any interested parties, in both IT and the business.

External Service Level Agreements

External SLAs are more formal, legally binding contracts than internal SLAs. External SLAs may be more structured than internal SLAs because they usually include costs, bonuses, and sometimes penalty clauses. The service is still agreed on at a specified cost and deliverables—for example, availability and security are often included in the cost. The variation and termination of this SLA differs from an internal SLA in that it is usually less flexible and involves a stated, rather than an undisclosed, cost every time service criteria are changed. Increased hours of support from an outsourced service desk, for example, will incur charges for increased staff and availability of services. Internally, these costs would still be present, and in some instances may be charged back to the business. However, they are likely to be justified by the increase in business revenue provided by the longer hours of service.

Any legal implications in the SLA contract—including termination, re-tender, bonuses, penalties, and costs—should be considered before the SLA is agreed on.

If an external SLA needs to be legally binding, it should be checked by a legally qualified professional. This may be an internal legal department or an external legal counsel. The legalities will differ in different situations, organizations, and countries, but a contractual SLA should not be entered into without confirmation of the legal implications in the SLA contract. This includes descriptions of termination, bonuses, penalties, and costs.

External companies that the organization may have an SLA with include any outsourcing arrangements, telephone companies, hardware suppliers, lease companies, software suppliers, service desks, data security firms, backup companies, and business continuity firms. Consider entering into an SLA with any external contract you have with a supplier. Even if the requirements are not technical, they indicate the level of service you expect from the contract. Such an SLA would put the business in a much stronger position in managing the external relationship.

Operating Level Agreements

An operating level agreement (OLA) is an internal SLA to meet operational requirements and is invisible to the service's consumer. An OLA is rarely legally binding but does assist the IT organization in meeting internal requirements. For the OLA to be successful, IT groups must be aware of and aligned with the organization's goals. Meeting performance measures or resolution timings within an IT department, for example, enables the end-to-end OLA to be achieved for the organization. This may result in maximum availability or flawless data security, for example, for the customer.

Table 1 lists the differences between SLAs and OLAs.

Table 1. SLAs and OLAs

Service level agreement (SLA)	Operating level agreement (OLA)
Describes the service, terms, and conditions for agreement between IT and one or more customers.	Describes service components, requirements, and conditions required from an internal service provider (IT entity). Describes service components, requirements, and conditions required from an internal service provider (IT entity).
Defines the duration of the SLA with a start and end date.	Is reviewed frequently to capture changes in day-to-day service delivery.
Focuses on business and customer.	Focuses on internal IT.
Describes the specific business metrics committed to by IT and the frequency they are reported.	Describes the service component metrics and the frequency they are measured by the internal service provider (IT entity).
Describes roles and responsibilities for customer and IT.	Describes roles and responsibilities for IT staff and individual contributors.
Describes the business linkages between IT and the customer.	Describes the day-to-day linkages between IT service providers and customers.

SLA and OLA templates are available in the appendices in this guide.

Note OLAs used within departments may need some administration in documentation reporting and applying a change process in line with any changes affecting the OLA. For example, a technical support unit may offer a resolution time of six hours on a certain component. If a change should affect the configuration of this component, however, the OLA may require review in line with the change and its potential effects, positive or negative, on the resolution agreement in the OLA. The change process should ensure that the OLA changes are applied to the SLA process as a related activity.

Underpinning Contracts

Underpinning contracts may undermine SLAs if the service level requirements are not synchronized with each other. For example, an eight-hour response SLA for a telephony fault would mean the contracts in place with an external telephony supplier would need to be less than the eight hours for the SLA requirements to be achieved in case the external party needs to be called in.

There may be a cost associated with ensuring that the underpinning contract meets the demands of the business. There may be an alternative method, but it is still likely to incur a cost, which should also be justified. For example, if an organization has a vendor who supplied a complex and expensive disk array that experiences a fault, the vendor may have a 15-hour SLA for finding and delivering a replacement from anywhere in the world. If the business cannot manage without the service delivered by this component for 15 hours, then it may manage this continuity issue by having a hot-swap component stored on site. This incurs a cost to the business for the hot-swap component, but this may be justified if the service delivered generates enough income for the organization.

A new contract can be negotiated in line with an SLA that is being agreed on with the business organization. However, this may incur a cost and should be carefully considered and justified against the requirements of the SLA before being financially signed off. The existing underpinning contracts and any new contracts taken out with suppliers need to align themselves to the end deliverable.

Figure 9 illustrates how the SLAs, OLAs, and underpinning contracts support the expectations of the customer and the organization.

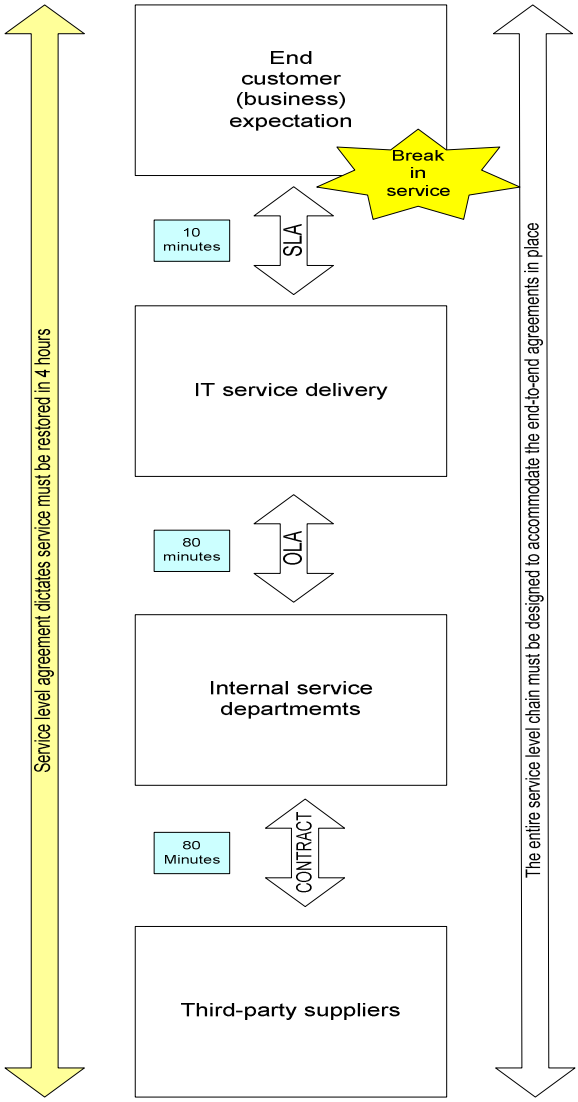

Figure 9

How the SLAs, OLAs, and underpinning contracts support expectations

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Note Underpinning contracts may require specialist administration skills because they may have a cost associated with them if they are external. The contracts should be managed, administered, and reviewed in line with the cost management procedures for the organization.

Multilevel Service Level Agreements

Multilevel SLAs are useful for managing SLAs where business areas, customers, and services can be grouped so as to minimize administration and management overheads. Multilevel SLAs include the following levels:

- **Corporate level.** Concerned with generic Service Level Management issues, a corporate level SLA is suitable for all areas and users within the organization and is likely to be stable and require few changes or updates.
- **Customer level.** Service Level Management issues relating to a specific business organization area or user group.
- **Service level.** All Service Level Management issues relevant to all specific services covered in the SLA for a specific business organization area.

Figure 10 illustrates the different levels that can be introduced.

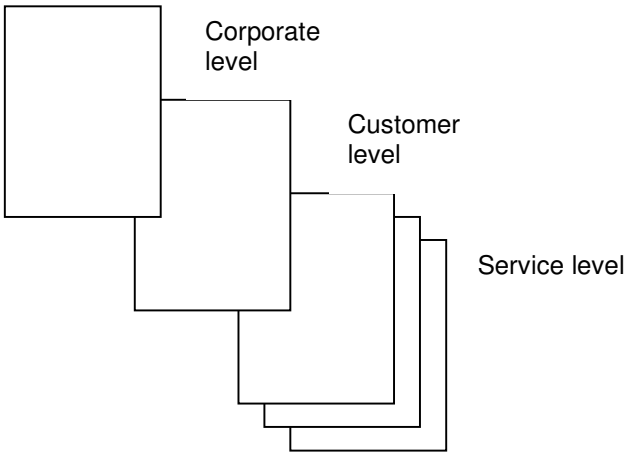


Figure 10

Multilevel service level agreement levels.

Multilevel SLAs increase manageability and reduce duplication across the organization. This means that updates are completed only when required. The names of the levels can be changed within the organization, for example: corporate, department, and service; or group, business area, and service. Although the principle is the same, it is important that the terms used be meaningful within the organization so that distinctions are recognized.

Note Ensure that the administration of the multilevel SLAs is controlled. This is because any change introduced will have a dependency in the other levels. For example, at the service level, a change must be communicated to the other levels if it is relevant. The same is true of any change made to the corporate SLA. This should be communicated to the other levels. However, the administration is still likely to be simpler than if the multilevel SLAs were not in place.

Defining Service Level Agreements

The definition of SLAs can begin because all parties now understand how they fit within the end-to-end Service Level Management process. Although initially it may seem unusual to define the SLA before negotiating and agreeing to it, it can be useful to begin formulating the SLA and then using it as a starting point for the cycle of negotiation and agreement. The first SLA can be the most difficult as it is a new experience for both parties, but taking a simple step-by-step approach should overcome these issues.

Start with the existing services for the area that are available from the service catalog, plus any existing performance metrics gathered during the baselining exercise for the setup activities. This enables the discussion to focus on whether the services are adequate or in need of improvement. It also means the priorities of the services for the business can be clarified.

Common Measures for Service Level Objectives

Table 2 lists common measures for use within SLAs.

Table 2. Common Measures in SLAs

Measure	Example
Availability	Days and hours the service is available or a % figure based on this.
Responsiveness and performance	Speed and volume (throughput or workload measures) of service, time to acquire data, speed of data transfer and response time, and technical and human speed of response.
Integrity and accuracy	Is the data in the service doing what it is meant to?
Security	The security of the service.

The measures for the service level objectives should be carefully considered using the following criteria:

- Do they support the business objectives?
- Are they specific?
- Can they be measured?
- Are they attainable, even if this requires significant effort on the part of IT?
- Are they realistic in relation to the benefit they will bring to the business?

Negotiation and Agreement of Service Levels

When the requirements of the SLA have been defined, determine if they can be delivered at a reasonable cost to the business and to the IT department. The relationship between IT and the business has begun to mature in the other Service Level Management processes so far, and there has been involvement from both parties in defining the services, priorities, and the requirements of the SLA, but there may still be issues that become apparent at the negotiation stage. The ideal result of any negotiation for an internal SLA is that all parties benefit from it. In external and contractual SLAs, the result should encourage a sense of partnership between the groups involved, although the costs, penalties, and rewards may be more debatable in this situation.

It may be necessary in external and contractual cases to use the negotiation skills available in other areas of the business—for example, commercial departments. If there will be an ongoing need for contract negotiation, it might be advisable to train the employees who will be involved. Internally, however, if there are issues to overcome, they can often be managed with relative ease by negotiating the SLA objectives and deliverables. As long as the IT department knows what it can provide, including monitoring and reporting capabilities, and the business can justify the cost of exceptions to these capabilities, then the negotiation should be straightforward. This may be where the Service Level Management sponsor can be useful, as any issues that cannot be resolved may have to be advanced up the management chain for a decision if cost justification is contentious.

While it is important to remember that the long-term aim of Service Level Management is improved service, there may be times during its initial stages in which the service does not meet the expectations and agreed-upon constraints. This is not necessarily a failure, but it can mean that the marker has been set too high and must be adjusted while the service gradually improves. SLA negotiation must strike a careful balance between the expectations and the realities of the service. At first the SLA will be measuring only the existing processes and technologies; but after the measurement has been made, methods for improvement can be developed.

Documenting the Service Level Agreement

The SLA documentation should be in a simple and easy-to-understand format, designed so that all interested parties can easily view the SLA and become familiar with the requirements specified within it.

Appendix D in this guide includes an SLA template that offers guidance in documenting and formalizing the agreement.

The SLA should include:

- **Agreeing parties.** For the SLA: IT and the business, for the OLA: IT and IT.
- **Terms**. The period the SLA will last—for example, one or two years. This is obviously subject to update and review in line with business requirements. For example, if the business runs on a project basis and no project runs for more than one year, then one year is a reasonable term for the SLA.
- **Scope**. The services and the line of business area covered.
- **Limitations**. Consider the services being delivered. There may be limitations—for example, the number of online users or the reasonable hours of usage—that may affect the SLA. These limitations should be noted so that the expectation of the service is practical.
- **Service level objectives**. These objectives should be simple and relatively few in numbers in order to focus on the most important objectives.
- **Indicators**. What determines success or failure of the objective? Be sure to use business language for this even if technology is involved—for example, *packets sent* means nothing to the financial manager.
- **Exclusions**. What is not included—for example, a high-speed printing service might be included in the SLA but not a check-printing facility.
- **Reporting**. What reports will be run to support the SLA, when, by whom, how will the reports be distributed, and what indicators will be measured?
- **Reviews**. Define the review period and the process for any informal changes and reviews—for example, who must agree in order for a change to be made to the SLA.

Changing a Service Level Agreement

Changes to the SLA may arise from other changes in the change management process or because of reviews or informal communications. Changes must be agreed on by both parties whether they are made in the internal review process or between reviews. Specify in the SLA the agreement process for making changes to a specific SLA. For example, a department manager and the IT representative may both need to sign off on any changes made to the SLA; but if it is a corporate service, this sign off may need to be made at a higher management level and involve more consultation with IT and the business.

Although interval-based reviews of the existing SLAs may be held (for example, every year), changes will also be made to SLAs following the review meetings and after changes are made to services or components outside the SLA Review life cycle. These changes must be agreed to in line with the procedures used in the initial agreement of the SLA. All parties should sign off any changes to ensure that the SLA has met the requirements of the business and can be achieved by the IT department.

The maintenance, change, and retirement of the SLAs must be carefully managed. Service level administration should always be advised of any changes that will affect the SLA or any of the components or services within it as part of the change control process. Maintenance of the SLA involves regular reviewing and auditing of the SLAs and their storage mechanism to ensure that the information on the SLA is still relevant and objectives are still being justified.

There will be changes made to the SLAs during the SLA Review, especially during the early stages of the Service Level Management implementation while the process is still settling in. It is essential that the SLAs be kept up to date and any changes be communicated to all interested parties once the changes are signed off. Further changes or exceptions may occur on an informal basis. For example, an alteration to core business hours will affect the SLA. Care should be taken to ensure that any updates such as this are added to the SLA and that the SLA is under strict change and version control.

Over time, service level objectives—if not entire SLAs—will become out-of-date and will not need to be included in the active processes. To avoid any confusion and unnecessary workload generated from monitoring or reviewing these performance criteria, it should be ensured that they are retired and are distinguishable from any live SLAs. The service catalog should detail key customers and service components related to these retired service level objectives or SLAs and the administration function should ensure that those responsible for the service are advised of any retirements.

Summary of Service Level Agreements

The following list summarizes the important points discussed in this chapter.

- SLAs document the business expectations and requirements from IT.
- Be sure to choose the right type of SLA for the requirements.
- External or contractual SLAs should always be checked by a legal professional.
- OLAs must be communicated well within IT and must be managed effectively.
- Objectives and measurables in OLAs and underpinning contracts must support those of the SLA.
- SLAs and SLOs may have a cost associated with delivering the service to the specifications in the objectives. These costs must always be justified.
- Ensure the use of individuals with the correct skill set when negotiating external and contractual SLAs.
- Multilevel SLAs may ease the burden of administration in some organizations.
- To help begin defining the SLA, direct the discussion by producing some existing measures that indicate room for improvement or show evidence of a gap in existing measures, which would add value if managed effectively.
- Consider the measurements in the SLA and confirm that reports or monitoring can be done to meet these criteria.
- When defining SLOs, ask:
    - Are they specific?
    - Can they be measured?
    - Are they attainable?
    - Do they benefit the organization?
    - Are the benefits cost-justifiable for the effort and expense required?
- Ensure that SLAs, SLOs, and OLAs are signed off by those responsible for service components in the delivery chain. This ensures that the capabilities of the IT function have been considered in line with the business requirements.
- Ensure that the documented SLA is simple, concise, and contains clear accountabilities and expectations.
- Ensure that external and contractual SLA documents are aligned to the organization's legal requirements.
- Ensure that there is a rigorous change control process supporting SLA administration.

An SLA template is available in Appendix D in this guide.

7

Service Level Monitoring

This chapter describes monitoring service components against the SLA, reporting the data that monitoring provides, and supplying end-to-end service level measurement that can be understood by the customer.

When the SLAs are agreed on and in place, the next stage in effective Service Level Management is to monitor the performance of the services against criteria specified in the service level objectives (SLOs). There are various methods of monitoring Service Level Management, but the main concern is if the performance of any of the criteria breaches or comes near to breaching the SLA. As shown in the process flow in Figure 11, performance monitoring should try to prevent the occurrence of breaches by introducing specified and defined actions when the SLA appears at risk. If an action brings the performance back on target, or if the performance is adequate and does not breach the SLA, the monitoring function reports this through a real-time reporting function.

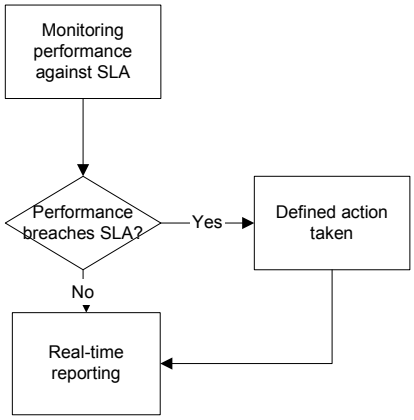


Figure 11
Service level monitoring

Why Monitoring?

Information is increasingly required in real time, and business demands a responsive IT environment that provides such information.

Although the business demands a responsive environment, the monitoring function mainly operates in the IT department. The business may not need to know the criteria, thresholds, alerts, and actions required to monitor its service components, unless it has a direct effect on its SLA. If an SLA's performance objective is an issue, then the monitoring function is not working correctly because the objective of the IT operation is to provide the required services seamlessly. Monitoring is key to the IT department delivering the expected services. Monitoring, however, should not be visible to the business. IT must strike a balance between IT knowledge and terminology, and it should provide only the information that adds value to the business and is defined in the SLA. For example, network packet size or transfer rate means little to the business, but such measurements may be needed to report on a service's performance—for example, that an accounting system met the SLA of 8,000 transactions per day.

Some organizations still monitor at a level that reports performance against SLA criteria after the fact, even though it attempts to be in real time. Address this issue by introducing thresholds to monitor highlighting issues before the SLA is breached, thereby indicating potential issues and exceptions before the breach happens. This means an SLA breach can be prevented rather than being highlighted only when the SLA is breached and there is an effect on the SLA performance objective.

The Service Monitoring and Control SMF provides more in-depth information on introducing these functions into the organization. Additional information is available at http://www.microsoft.com/technet/treeview/default.asp?url=/technet/itsolutions/msm/smf/smfsmc.asp. The detailed process for service level monitoring is explained in the next section, "Monitoring Performance Against an SLA." The purpose of service level monitoring is to ensure that the services specified are delivered in line with the SLAs.

Monitoring Performance Against an SLA

Service level monitoring observes the service provision in as close to real time as possible. This allows proactive identification of potential issues and service outages before they occur. The SLA for a service can be broken down into service components or configuration items (CIs)—for example, the hardware and software that combine to deliver the service to the business. It is common for service level monitoring to track and control these elements individually, although there can be end-to-end service level monitoring.

Identifying and Defining Criteria for Monitoring

Monitoring individual components should be carried out with the end SLAs and SLOs in mind. It may not be possible to monitor all elements of an SLA in real time—for example, some process-based SLAs may require some historical data for the performance measure. However, many SLOs have a technology foundation and these can be measured and monitored in a real-time environment. The various systems available for monitoring can ensure that these measurable targets set within the SLA—for example, security, performance, and availability—are recorded against the technology used to provide the service.

Defining Thresholds and Alerts

When the criteria and technologies for monitoring are identified and the relationships to the reportable SLA are clear, thresholds for the alerts on these elements of the service are defined. Although these practical definitions are the role of the monitoring manager, there must be a liaison with the service level manager to ensure that the thresholds are in alignment with the SLA requirements.

The technology components of the service monitored through management applications such as Microsoft Operations Manager 2000 (MOM) are referred to as managed objects—for example, database servers and Web servers. Managing these objects through applications that are running on them allows for the definition of thresholds for performance, availability, security, and other criteria defined by the SLA. These thresholds are tied to the measure of performance against the SLA and should be defined at the correct level in order to maximize the performance and to enable the service to meet or exceed the SLA wherever possible. For example, if server availability must be at 98 percent to meet the criteria defined in the SLO, then setting the threshold at 98 percent would not add any value to the service provision. It would mean there would be an alert only when the SLA has already been breached. The key is to ensure that thresholds and associated alerts are created at a point where actions can still be taken in time to remedy the situation. In the example above, you would want to highlight the availability when it is at risk of not meeting the SLA. In this case, you might set the threshold for an alert at 90 percent. Thresholds should be set to underpin, not undermine, the SLAs. Figure 12 illustrates SLA thresholds.

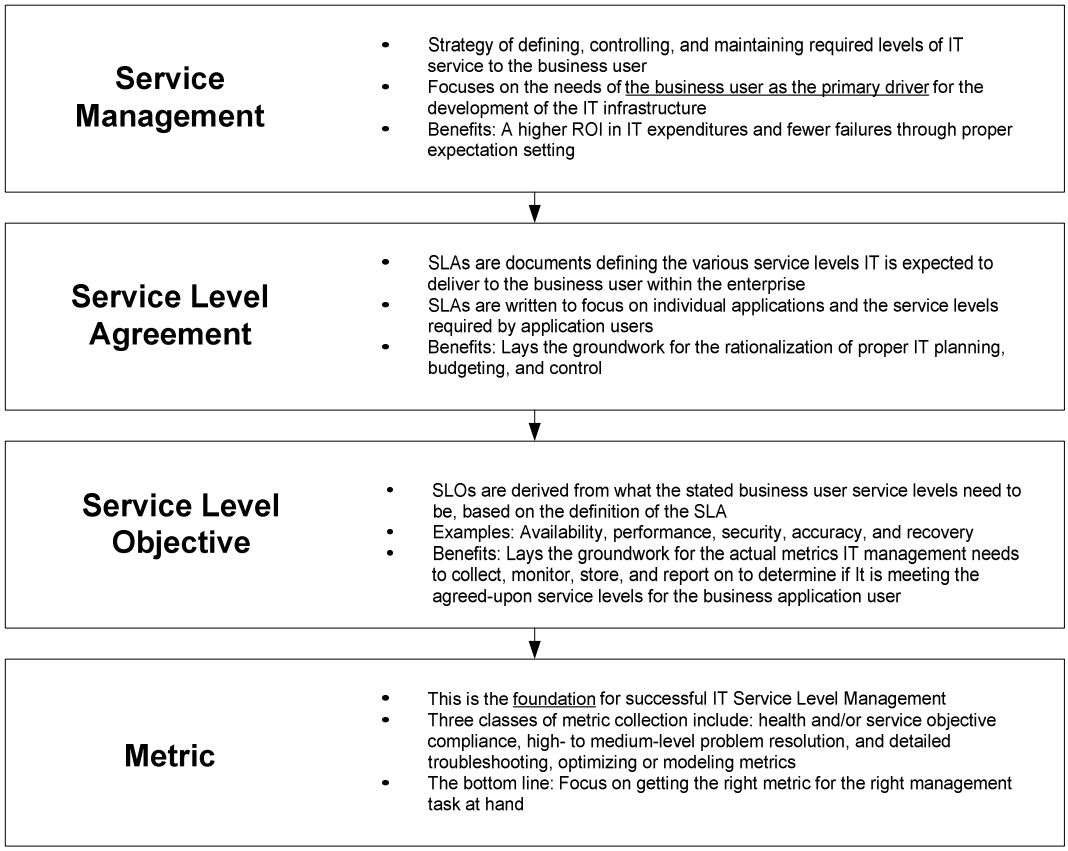


Figure 12

Service level agreement thresholds

Alerts associated with thresholds can take various forms, as discussed in the Service Monitoring and Control SMF. It is worth considering at this stage, however, how to ensure that the alerts are made available to the right person in the right format. The OLAs that underpin the SLAs for each service internally should have assigned responsibilities for individuals. The OLA performance measurement and the SLA measurement may ultimately be the responsibility of the service level manager, but there should also be individual accountabilities documented for the OLA relating to any alerts that indicate an adverse effect on performance.

Defining Responses and Actions

The alerts sent out by a service level monitoring tool do not always have to go to individuals or groups, although this is a common action in monitoring. There are more possibilities in systems such as MOM technology that enable the alerts to trigger defined responses and actions within the system, remedying any potential issues before they happen. For example, agents running on managed nodes can manipulate the system when thresholds are met. There are clearly instances that will require at least some level of operator intervention, and some where the response is possible only by operator intervention. In both cases, the responses and actions should be aligned to the SLA and objectives and should be underpinned by the OLAs. For example, if a threshold is met and an alert received for a potential performance breach, the defined response should be triggered, whether manually or technologically, to ensure that action is taken to minimize the potential effects on service performance.

Although these thresholds, alerts, responses, and actions are aligned to the SLA, the possibilities of the monitoring capabilities and systems in use within the organization should be taken into account and assessed against each service when building the SLA. This helps to ensure that if monitoring a certain service component is not possible, then the business will not expect real-time monitoring and alerts on these components.

Notification and Escalation

To be effective, actions rely on notifications. If a service component performance nears a breach of the SLA, then the threshold is highlighted and the action is initiated. If, however, no one is notified of the action, then it is likely that nothing will be done to manage the potential breach. If there is no defined response within a defined timescale, the notification and the subsequent action should also trigger the escalation process.

Escalation is one of the key actions defined when a potential breach of an SLA is identified. Within the SLA, the notification and escalation paths should be outlined for specific services. If the breach is for a service component, however, the notification and escalation path should be documented within the OLA.

Escalation for non-monitoring issues (for example, process-driven escalation) can also be defined in the SLA. For example, if there is an issue on service desk staffing that will affect the SLA or OLA for call responses, then there should be notifications to parties who can take action to minimize the risk of inadequate staffing. If these actions do not resolve the potential breach, then there should be an escalation path to follow in order to increase the severity of the issue and ensure that the defined action is taken.

Note It is worth considering that notification and escalation paths, event flow diagrams, and individuals responsible for taking defined actions may change on a regular basis because of, for example, shift changes or off-duty personnel. The contact details for the escalation paths are best stored on an intranet or share point to ensure that they are accessible by all and that they are kept current.

Real-Time Reporting

As pointed out at the beginning of this chapter, monitoring and the technology to deliver services have developed due to an increasing need for organizations and IT to receive information immediately. We no longer have time to wait for historical data to be collated and reported before making decisions. Everything must be available immediately, where it is needed, and by the people who need it. This is especially true within the IT services environment.

The most useful monitoring provides real-time data that can be used by skilled individuals within the IT department to analyze the performance of the services. There is also value in providing business-friendly real-time reports on service status to the organization. For example, if a key service becomes slow or temporarily unavailable, the IT department will immediately be aware of the situation and will be able report the service condition to the organization. This method alleviates end-user concerns and demonstrates to the business that the IT department is fulfilling its SLA.

The IT department can manage issues like this more effectively using real-time reporting from the monitoring systems. The IT department can translate the data received, as it does with historical reports, into simple business terminology. For example, the e-mail server capacity issue can be translated into slow performance on e-mail messages, and this information can be made available to the business community on whichever medium best suits the organization: intranet, extranet, phone systems, and so on.

A further advantage to real-time monitoring is that the actions taken to resolve, for example, the e-mail capacity issue, can also be posted along with the real-time report. For example, the report could indicate capacity figures, relate these to the performance issues people may be having, and recommend that they help resolve the issue themselves by removing attachments from e-mail messages and other similar housekeeping tasks.

Real-time monitoring and reporting enable immediate communication, making advice and information more useful because they are relevant. And it makes for rapid communication regarding resolution timescales.

In addition to being available when there is a potential issue or breach of the SLA, monitoring and real-time reporting can also be used as a window into IT from the business for other issues. For example, there can be real-time reporting on submitted requests for changes (RFCs) from the business within the change system. The organization may want to check the status of any service at any time. If the real-time monitor indicates that the service is fully available, then this may release resources in IT for use elsewhere.

Note If you are using real-time reporting to advise the business of performance issues, make sure that the communication method you use is not affected by the malfunctioning service. For example, if an e-mail server is slow, communicate the issue by intranet or telephone, not by e-mail.

Monitoring Components and Aggregating Results

When many service components are involved and a department does not want to be flooded with reports, it is helpful to represent all of the components in a realistic and accurate way in the review process. Consider the business point of view when reporting service availability. If the action for a potential SLA breach involves contact with the business, ensure that the non-technical employees can understand the information provided by the IT department. For example, non-technical employees may not understand the relationship of a processing rate to the service they use at their desks.

Building a composite picture of availability and performance usually requires a management tool or management database and reporting technology. Data captured by the servers or the management tool can be queried, but correlation and aggregation of the results need to be done across data from all components for an end-to-end view of the service.

Details on the technical aspects of monitoring the services provided by these multiple service components are available in the "Event Collection and Consolidation" section of the Service Monitoring and Control SMF and related white papers.

End-to-End Service Level Measurement

End-to-end service level measurement is often requested as a measurement in real time or historic data. This is a reasonable request because of the complexity of service components delivering many services to the business end user. The key to doing this successfully is to ensure that you do not agree to what cannot be measured and delivered.

It is not always possible to capture information at every stage of a service transaction or to account for availability or performance at every stage. However, for a number of technologies, this is now possible and measurements can be identified. The next step is to translate these measurements into a report that the organization can use and can relate to the SLO within the SLA.

End-to-end measurement involves:

- Instrumenting the application in development with markers that can be identified and monitored for performance and availability in real time.
- Simulating transactions, gaining knowledge of availability/downtime effects from this, and relaying data back against monitoring metrics.

Figure 13 illustrates end-to-end Service Level Management.

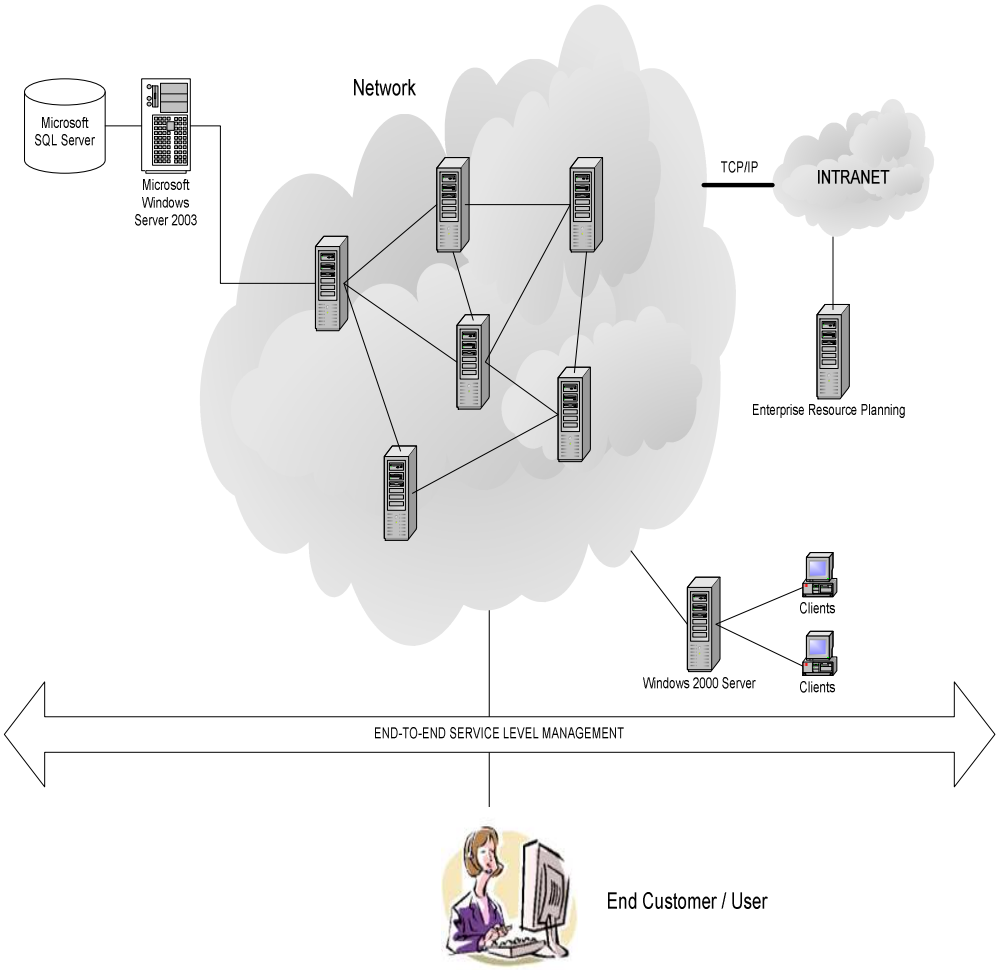


Figure 13

End-to-end Service Level Management

Note Service Monitoring and Control SMF and operations guides suggest how to get started with a monitoring function within your operation, including the daily, weekly, and monthly tasks required to administer and manage the function effectively.

Instrumentation

To successfully track SLAs, it is important that an IT organization measure service availability and performance. This can be instrumented by means of a number of mechanisms on the Microsoft Windows® core infrastructure.

To calculate the percent of service availability, use the following formula:

Service Availability (%) = (Success/Total) = (Total – Failure)/Total

Where,

Total = Number of total attempts made to access the service

Success = Number of successful attempts

Failure = Number of failed attempts

Microsoft Windows Server™ 2003 incorporates a number of connection status-related performance counters for the various core services (Microsoft Active Directory®, DNS, WINS, DHCP) that can be used to track these numbers. For example, the LDAP Client Sessions performance counter provides the total LDAP connections or attempts at any point in time. By capturing these performance counters over a period of time, you can easily obtain the desired metrics. You can capture these counters by using PerfMon logs, scripts using WMI, or Microsoft Operations Manager rules that are part of the specific Management Pack for the service you are interested in measuring.

The usual measure of service performance is the service response time. Service response time is the total time that a customer experiences during each request to the service. It is important to note that the total response time is a combination of three important time slots:

Total Response Time = $T_c + T_n + T_s$

Where,

T_c = Time spent by the request at the client-end

T_n = Time spent by the request on the network (Network Latency)

T_s = Time spent by the request at the server

Usually people relate the T_s to the service response time. However, in the absence of good client-side metrics, and assuming the standard network latency on each request, T_s could potentially be used in cases where it is difficult to obtain realistic T_c and T_n values. Keep in mind that separating these three time slots can be a challenge, so when making a request to a client and capturing the response time, it is safe to assume that the response time is the total response time.

Microsoft Operations Manager Service Pack 1 provides a core set of rules as part of the Active Directory Management Pack that can be used to measure this response time for Active Directory (or LDAP). These core set of rules, which are part of the Client Pack for Active Directory, can be instrumented on key client workstations, a selected sample of them, or Exchange 2000 Servers. These rules make synthetic (simulated) queries to Active Directory and capture key performance metrics such as the total response time for each request.

Assume, for example, that there is a requirement to capture service health and availability for Active Directory (LDAP). For a given Active Directory site, you want to know the availability and response time for LDAP queries to Active Directory. You can do this by using the Client Pack for Active Directory to install the client pack rules on a set of sample client workstations. The client pack rules make synthetic queries to the Active Directory servers (domain controllers or global catalogs) and capture key metrics for each query. The sample data collected is given in Table 3 along with the results for Active Directory service availability and health.

Table 3. Sample data and results for Active Directory service availability and health

Response time (seconds)	% Availability (Total – Failures)/Total	Attempts	Failures	Service	Date
0.1	100.00	2037	0	LDAP	6/20/2003
0.1	100.00	4961	0	LDAP	6/20/2003
0.1	99.15	2719	23	LDAP	6/20/2003
0.1	100.00	3683	0	LDAP	6/20/2003
0.1	100.00	2352	0	LDAP	6/20/2003
0.1	100.00	2286	0	LDAP	6/20/2003
0.1	99.04	5627	54	LDAP	6/20/2003
0.1	99.98	5586	1	LDAP	6/20/2003

Summary of Service Level Monitoring

The following list summarizes the important points discussed in this chapter.

- Consider the possibilities of monitoring for the SLAs.
- Define the criteria for monitoring performance.
- Define the thresholds and actions for potential breach of the SLA.
- Define the responsibilities for notification and escalation.
- Keep the thresholds and monitoring criteria simple and ensure that they add value and that their cost can be justified.
- Ensure that the business receives information that is meaningful in their terms, not in IT terminology.
- Consider using real-time monitoring and reporting to communicate with the business, but be sure to use business terminology.
- Consider end-to-end service measurement and collating the individual component measurements to a meaningful statistic.
- Measure service availability and performance to successfully track SLAs.

8

Service Level Reporting

This chapter discusses how to report the data generated by monitoring service components; and how to plan, design, present, schedule, distribute, and review these reports.

Service level reports are the historical version of the monitoring data used to measure performance against objectives. These reports are used by both the business and the IT department and should add value when they are interpreted.

Figure 14 illustrates the linear process for the reporting function. To establish SLA reporting, the process flow must be defined and planned. This includes scheduling the reports and their distribution. The final function is a review process that not only includes the formal review in the SLA Review but also the review of the reports in production.

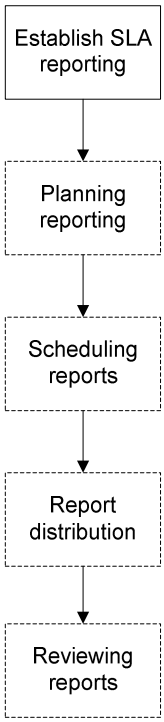


Figure 14
Reporting function

Establishing SLA Reporting

It is important to consider the reporting function of Service Level Management within the organization. The success of the Service Level Management process may depend on the quality and readability of the reports because this is the key output of the process in many cases.

Planning Reporting

Carefully planning and scoping reporting requirements at the planning stage can minimize having to adjust data or generate many types of reports later in the process. The quality of reports, how they are used, and whether they meet the organization's needs are factors that can determine their value. Consider the following when planning reports:

- Who will receive the report?
- How will the report be distributed?
- Who will generate the report?
- Where will the report be generated?
- What should it contain?
- Is this information available in a primary source?
- Does this information need to be adjusted before it can be represented in the report (secondary source)?
- Is this a manual or automatic process?
- How are the results best viewed—for example, by using tabular, drill down, or graphical formats?
- Will this report serve the needs of the organization and the specific audience for which it was designed?

Reports can differ, depending on their audience. For example, executives are often interested in the bigger picture in terms of costs and opportunities but often have little time available for studying these issues. Therefore, they will appreciate concise reports that use visual aids such as graphs and charts to quickly present an overview of the data.

Consider distribution at the planning stage. For example, will reports be distributed over an intranet, a URL link, by e-mail, or hard copies such as a newsletter? Preferences may change depending on the target audience. Discovering these preferences in the planning stage can improve the communication of the Service Level Management metrics and benefits.

Note When planning a report, it is important to ensure that the specifications requirements for the reports are recorded and referred to in an acceptance process when the report is designed and tested.

Create and maintain a definitive list of reports. This is not only useful for what has been reported, but also for checking against when a new report is requested. For example, many duplicate reports may be requested because there is no record in a report catalog of reports that are already produced. This leads to duplication of effort and misuse of resources in defining and designing a report that may be available elsewhere.

Designing and Presenting Reports

The key to the design and presentation of reports is to keep them simple. Reports are often unread if the information is not accessible and easily understood.

When designing a report, make sure that the design meets the functional specification of the target audience. The design should deliver what is required for the target audience in order to illustrate the SLA's performance. However, the cost of changing a report's design as a result of a service level review should be justified in terms of its value to the organization. In other words, avoid making unnecessary changes to a report's design.

The presentation of the report should not be so overly complex that it detracts from the metrics it is presenting. Often a suitable method of displaying performance against SLA targets is using *RAG* status for each SLO:

- *R*ed for a breached SLA.
- *A*mber for an SLA that has been met.
- *G*reen for an exceeded SLA target.

This simple approach can be used as a starting point for the reports, which can then be formatted in more detail if required. For example, you can use the RAG method to search for more information and individual incidences of breaches that may tip the overall measurement.

Note There are many ways to design and present the SLA reports. It may be worthwhile to use skilled individuals within the organization to develop the reports. The Service Level Management and administration function can then closely manage the definitive list of reports, ensuring that they are under change and version control.

Consider also at the design stage the possibility of automating the reports. Avoid manual input or data manipulation, if possible, or at least keep them to a minimum.

Scheduling Reports

Careful planning at the design stage should reduce the necessity for manual interaction in the production of the reports. Scheduling the reports to run automatically will significantly reduce the time spent to produce them. For example, a report can be run over a data source during the night or be automatically scheduled as a system job at the end of the month.

Automation is available in some tools for reports. Other SLA reports will by their nature be a manual process in many organizations; but if the manual processes are kept to a minimum, the effect will be lessened.

Note There will frequently be some level of manual intervention in the production of SLA reports because not all SLA objectives are system critical. Many SLAs may measure performance of manual processes that require data manipulation from different sources. For example, call logging systems, telephone systems, and customer service reports may be used in conjunction to produce meaningful service desk SLA metrics.

A record of the method of production and the means for scheduling that method should be detailed in the definitive list of reports and should be under change control.

Distributing Reports

There are many methods for distributing SLA reports. In addition to the more traditional methods (for example, printed reports in tabular format), reports can be published to a URL or to a shared space for distribution such as the Internet or the organization's intranet.

Some SLA reports may be distributed only to the business representatives who visit the review. The methods described briefly above or paper-based reports may be produced for discussion over the meeting table at the physical SLA Review.

In other instances, a subset of the full SLA objectives reports may be distributed to a wider audience, such as all members of a department. For example, SLA reports may be produced on paper and put on display on notice boards within the organization. Or, when computer use is not universal, IT can provide other critical services—for example, telephone or electronic point of sale (EPOS) systems.

The audience of the report and the most suitable and effective method of distribution for this audience should be detailed in the SLA, which should also include the timescales and intervals for the distribution of the report.

Whatever the format of the SLA report, it is worth considering if the report can be distributed directly to an organization's representative (such as in automated delivery to an intranet on a certain date) or if it is more suitable for the organization that the report is presented from the IT representative, either in person or by accompanying mail or e-mail?

There are benefits and drawbacks to both of these distribution methods. For example, if the information in the SLA report is presented without an accompanying explanation to the organization's representative, then it may not be fully understood. Alternatively, some business representatives prefer to be able to think about statistics for a time before discussing and reviewing them with their Service Level Management representative.

Reviewing Reports

All reports produced for the business should be periodically reviewed. Requirements and priorities change, and SLAs must be updated to reflect this. These changes should be addressed in the SLA Review, and the changes in priority and the need for new reports should be communicated to the reporting function. The priority of reports that are no longer needed should be lowered–for example, from an automated report to a report that is generated on an informal basis only when needed. This review is often missed in many organizations and endless resources are spent on collecting data, scheduling, and distributing reports that are out of scope.

In addition to the changes from the SLA Review, there should also be a regular review of the reporting process to ensure that the reports are still valid, that the distribution groups are still relevant, and that the reports are still needed in their present format and production schedule. The service level manager should be notified of any changes in the report review in case they lead to follow-up on changes and actions relating to the SLAs, service catalog, or the review meetings.

Executive Reporting Summaries

Executives demand a different type of report than operational management. While operational management must be able to examine statistics and relate them to specific dates, tasks, and individuals required by their management key performance indicators, executives are often more interested in general trends in order to make strategic decisions. This does not mean the information is any less valuable for executives, it just means that the information must be analyzed before the reports are distributed.

It is often useful to discuss the preferred presentation. While some prefer tabular data, others prefer a visual format. Decisions should not be based on data that is not clear. For example, because of inadequate or unclear information, the IT department could make unnecessary changes to a network to improve performance at great cost, when the network may not be the component at fault.

Internal Customer Reporting

Internal customers may have certain expectations for their service level reporting. For example, there may be a company standard for reports, and the business clients may be comfortable receiving a report accompanied by a statement from the service level manager or a representative of IT. Ideally, Service Level Management will open a two-way communication between IT and the business client, and the reporting methods may differ from department to department as the preferences and requirements from IT and the business start to develop and be communicated effectively.

Internal customer reporting can also include reporting on the OLAs used to support the requirements detailed in the SLA. Although OLA reporting is carried out within IT for IT, the language and terminology in these reports should be similar to the language and terminology used in the business SLA reports. Producing reports in a language that business can understand creates a shared language and an understanding about the end result of the service delivery components.

OLA reports may not need to be presented and targeted to specific audiences in the same way if the task is too time-consuming for the IT department. IT should produce a simple, standard report of the OLA objectives that provides the information needed to improve performance against objectives. This report assists decision making or prompts further analysis of metrics in the individually responsible teams. For example, problem management or capacity management may have performance issues highlighted by a failure to meet objectives specified in the OLA reports, but it is the responsibility of problem management or capacity management to address failures internally.

External Customer Reporting

External SLA customer reporting is likely to be more formalized than the internal reporting methods. The legal implications of disclosing sensitive information must be considered when delivering content to an external customer. It is always best in these matters to confirm within the organization, in this case with the legal department, the nature of the contract and the implications of disclosing sensitive information. For example, if you have an external client to whom you provide IT services—such as an acquisition of the organization that operates under a different cost center—then you may not want to disclose information pertaining to averages of service achieved within the main organization.

Note If the organization has a CMDB, it can be used to help with the administration and management of the SLA reports. These reports can be stored as CIs within the CMDB. This ensures that the reports are under change control and that the service details, SLAs, and service components required to deliver the service are recorded in the CMDB as a relationship.

Summary of Service Level Reporting

The following list summarizes the important points discussed in this chapter.

- Plan the service level report design and presentation and consider the audience, the statistics involved, and best methods for communicating the performance against SLA objectives.
- Consider scheduling the service level report so it is aligned with other scheduled tasks—for example, monthly system reports and interfaces.
- Consider aligning the methods of distributing the service level report with the target audience and the size and format of the report.
- Ensure that service level reports are reviewed at specified intervals and that they are still relevant, are not outdated, and have not lost their value.
- Consider the delivery of the service level report and if it needs supporting documentation.
- Keep the service level reports simple and concise. Make sure that the language used in the reports is understandable. If the statistics and metrics are presented in business language, ensure that any supporting documents use the same common language, including OLA reports.
- Ensure that the cost of changing reports is justified and that any changes are signed off and assessed for relevance to business and strategic requirements.

9

Service Level Agreement Review

This chapter describes the purpose of the service level agreement review (SLA Review), who attends it, its inputs and deliverables, and how to conduct and document it.

The SLA Review is one of the four MOF operations management reviews (OMRs). It is a key management checkpoint and occurs at specified intervals (as documented in the SLA). This review is meant ensure that the business and IT have an opportunity to assess performance against SLA objectives and to review the operation of the SLA. The SLA Review is designed to involve high-level management in the review process, ensuring that involvement and communication is present from both IT and the business in all future decisions regarding the delivery of the service.

Figure 15 details the stages in setting up and operating the SLA Review.

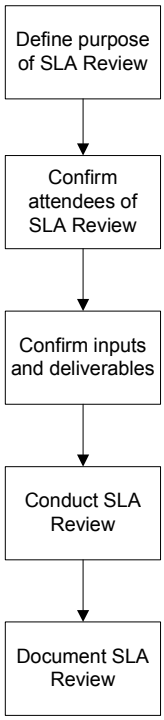


Figure 15

SLA Review process

Once the initial SLA Review has taken place, the process becomes a cycle of conducting the review, documenting the review, and taking corrective actions.

Purpose of the Service Level Agreement Review

The objective of the SLA Review is to assess and improve the IT services delivered to the business by reviewing the performance against SLA objectives. The review process reviews the ways in which service can be improved. It also ensures that consideration is given to the potential costs incurred in delivering the desired service.

The review process is conducted at specified intervals, which depend on the rate of change in the business and what the business deems manageable and useful. For example, reviews could be held monthly, quarterly, or bi-annually. The interval should fit in with the objectives of the organization and should be flexible. However, for an organization implementing Service Level Management, it is recommended that quarterly review meetings be held. If a pilot is being carried out, the review meetings may be more frequent in order to ensure that any feedback in the development of the SLA can be turned around quickly.

Although the reviews are usually periodic, there is no reason why the business or IT cannot call a review outside of this interval if they wish to discuss the service. The structure should not be so rigid that it stops communication. The regularity of the review meetings should reassure the business and IT that these reviews will be the minimum number of reviews conducted. There may be many reasons to call for an informal SLA Review. For example, service may have been affected by a change, the business objectives for the specified period may have changed, there may be an increased pressure expected on a certain line of business, or there may be a change in organizational structure. Whatever the reason behind the request, the attendees of the SLA Review meeting should always be willing to review the service outside of the normal interval arrangements.

On occasion, an event that calls for a review may not be important enough for a full SLA Review meeting. Informal service reviews, in the form of physical meetings, phone calls, or e-mail messages, may produce input that will need to be addressed during the full SLA Review process, but these do not constitute full SLA reviews. For example, a temporary change in working hours may require communication between IT and the business to ensure that adequate services are provided to meet the revised demands, but this does not need to be more than a phone call to the service level manager or the business manager in most cases.

The SLA Review is a scheduled opportunity for IT and the business to get together to discuss the SLA reports, any service issues they have experienced, any expectations they may have for future service, and any other service-related topics. It is important to use the SLA Review to discuss the SLA's performance against the SLA objectives. These SLAs and objectives have been carefully examined to ensure that they fit the organization's long-term strategy. They should be the focus of any discussions on improving service within the SLA Review.

Attendees of the Service Level Agreement Review

The attendees of the SLA Review must be of the right level in order to ensure that the meeting and actions that result from it are put into effect. If the attendees are not management level, then they need to have management support at a high level to reinforce their actions. This management support prevents other work receiving a higher priority than the delivery of improvements to the service. The SLA is the interface between the business and IT and is the only real disclosure of expectation and agreement of demands upon the service. Therefore, the actions and requirements negotiated and agreed to during the review have more weight than expectations stated outside the SLA Review or informal communications between the service level manager and business manager.

Representatives of the organization should be familiar with its business strategy and the operational priorities of their own and other areas. They should be at a similar level to the IT representative at the SLA Review and should have authority to speak to the other business and IT representatives in order to discuss the priorities of service provision in other business areas.

The IT representative is most often the service level manager, and therefore this position should carry weight within the organization to ensure that the service level manager has the authority to make decisions at the right level. In organizations where the role is a virtual one, often IT managers are assigned as service level managers within specific areas. These individuals then carry out the review meetings and act as a contact for their area in matters of service provision and performance. This can work well where this is manageable, but keep in mind that many managers are busy with their own OLAs and objectives and cannot reasonably manage the virtual role of service level manager for demanding business areas.

Occasionally, in addition to the standard SLA Review attendees, there may be other representatives from both the IT and business organizations who need to be present. For example, a project might involve the rollout of a new or improved service, and the business or IT project managers may attend the SLA Review to discuss any potential effects that may result from their work. Or a specific technical issue might have caused a service to breach the SLA, and a subject matter expert (SME), who is able to explain in business terms what happened to the service, would need to be involved.

The SLA Review will need a team of representatives from all of the MOF role clusters to carry out the required tasks and activities. More information on team roles is available in the *MOF Team Model for Operations* white paper, available at http://www.microsoft.com/solutions/msm/techinfo/default.asp, or search for the document title on TechNet at http://www.microsoft.com/technet/default.asp.

Note There should be secondary representatives for IT and the business area who can be contacted as reserves for attendance at the SLA Review and also in case of any informal service level discussions. The skill sets of these individuals would be the same as those who would normally attend, and the contact detail of all parties involved should be recorded in the SLA and, if required, in the service catalog and should be under change control.

Inputs and Deliverables

As with any operations management review (OMR) meeting, there are several inputs to the SLA Review, some of which are essential to the review procedure, while others may be optional but useful under certain circumstances. There are likely to be typical deliverables from the SLA Review and deliverables dependent on the contents and actions in the review.

Required Inputs

- **SLA document.** The SLA document should be brought to the SLA Review in order to be used as a reference for any discussion of performance against SLA objectives. In addition, the SLA document should be referenced in case of changes to the SLA or the objectives, priorities, costs, and contacts.
- **SLA reports.** The SLA reports, showing performance against the SLA, should be available at the SLA Review. If this is a virtual meeting, the reports should be provided by e-mail or posted to a share point or intranet for discussion. The reports may be distributed in advance of the review in order to give an opportunity to consider the metrics and form thoughts on the performance against targets for the service.
- **Forward schedule of change or change calendar.** To discuss the service and expectations for the forthcoming period, in addition to any review of changes implemented in the previous period, the change record is an essential input to the review meeting.
- **Actions and minutes from previous SLA Review.** The IT and the business representatives and any other representatives who have been involved in completing actions should provide an update for any actions since the previous review. The minutes from the previous review should be available at the review meeting for discussion and sign off by the IT and business representative.

Optional Inputs

- **Availability records.** If there are availability records in addition to those used or needed in the SLA reports, they may be useful at the SLA Review to review the issues in the previous period and also to consider future requirements.
- **Any extra supporting documentation.** There are different types of supporting documentation that can be valuable at the SLA Review. For example, if there is a change to an external underpinning contract that may affect the SLA, the documentation for the contract should be available at the SLA Review for discussion of the costs and benefits of changing the SLA or changing the contract. In a case where a SLA breach has occurred in the previous period, supporting documents can be brought to the review to explain the technical reasons behind the breach or the lost value to other business operations as a result of the breach.

Deliverables

SLA reviews may produce a variety of deliverables. However, the key deliverable that should be a product of every review is a document detailing the minutes and associated actions from the review.

The minutes of the review should document any progress measured against the actions and, if possible, successful closure of the actions, with the desired outcome of improvement to the service.

Other deliverables that may be a product of the review can include:

- Changes to the SLA document.
- Changes to the services used by the business area.
- Changes to the contacts and business representatives.
- RFCs for the service or components in order to meet the SLA and business requirements.
- Problem records to be raised because of any breach in SLA or performance against SLA highlighting issues to be investigated.
- Updates to the forward schedule of change in line with business requirements on planned downtime.

Note It is the responsibility of the service level administrator to track and manage the actions and other deliverables from the SLA Review. Should any deliverables prove problematic, we recommend that there be an escalation path through the service level manager for the IT actions and through the business manager for the business organization.

The control of the minutes and updates on actions should be carefully managed because the provision of a quality service at required cost is the goal. All minutes and actions should be distributed promptly following the review period, and they should be available on a shared area for viewing. All updates, however, should come through the service level administration function in order to ensure that there is ownership and control. The prompt completion of actions from the SLA Review is the result of the review meeting. If issues persist as unresolved and are not successfully managed, then commitment to the SLA may decrease.

Conducting the Service Level Agreement Review

The SLA Review can be a real or virtual meeting. The review can take whatever form is deemed suitable for the organization. As long as all the right attendees can be involved and the correct information can be shared, there is no reason for the review to have a specific format. However, it may be worth mentioning that as IT is using the Service Level Management function to build a better service for the business, it can be important to consider the nature of the business and the practices the business uses for review procedures. IT may have the technology to deliver a virtual meeting, but it must ensure that this is a format the business is comfortable using and that it offers the openness for discussion that the SLA Review demands.

The review should be held at a time mutually beneficial for both parties concerned. The key to the success of the review meetings, including attendance and perception of the two-way relationship between IT and the business, is for the meeting to be seen as an opportunity for improving service delivery from both sides.

Representatives from the business should attend because it gives them the opportunity to find out what is happening in IT and to the delivery of their services. In addition, they can advise IT of their own expectations and objectives for the coming period, ask questions, raise issues, and create actions pertaining to the SLA performance.

There is a suggested agenda in Appendix F of this guide but, in brief, the SLA Review should include the following items.

- **Review the preceding period.** This is the time elapsed since the last review meeting or the time since the SLA was introduced (if this is the first SLA Review). The period is reviewed in line with feedback from the business and the IT organization relating to the delivery of their service. Although it is unlikely that there will be problems bringing any issues forward, consider the following suggestions:
  - Review the previous meeting's minutes and actions.
  - Identify what went well during the previous period.
  - Identify what did not go well during the previous period.
  - Determine if there have been any changes to the SLA/SLM function for this area during the preceding period.

- **Performance against the SLA for the previous period.** The review of performance against the SLA should evaluate each area in the SLAs and systematically examine the objectives in the SLA document using the metrics and SLA reports to illustrate the performance against target. Any feedback directly related to the review of the performance should be noted, including the following:
  - New interest in different measurements.
  - Queries on performance and SLA breaches.
  - Explanations of SLA breaches or of changes in demands on the service.
  - Differences in the most recent reports and historical data.
- **Current issues.** Current issues can be directly related to the service and the contents detailed in the SLA, such as:
  - Poor performance.
  - Increased downtime.
  - Increased business demand for the service.
- **Peripheral issues.** Peripheral issues can be as important as the central issues and affect the service being delivered, such as:
  - Staff responsibility changes.
  - Contract issues.
  - News in the business (for example, mergers or sales increases).
  - Increases in call volumes to service desk.
  - New technology in use in IT or the business.
  - Current projects.
- **Items to note.** The issues, explanations, and any actions deriving from them should be included in the minutes for the review:
  - Changes to the SLA requested by the business group.
  - Changes to the SLA requested by the IT group.
  - Preview next period.
- **Next period.** The next period should be previewed at the SLA Review; this can include:
  - Predictions for the forthcoming performance against the SLA.
  - Dates for completion of actions from the SLA Review.
  - Forthcoming changes that may affect the service.
  - Forthcoming projects that may affect the service.
  - Changes in contact details for the forthcoming period—for example, escalation.
  - Updates on expected business demand in the forthcoming period—for example, increased overtime or new staff.
  - The date of the next review meeting.

Documenting the SLA Review

The SLA Review should be documented in a manner suitable to the organization. This can include minutes sent by e-mail or posted to an intranet site. Regardless of the media, the document should be circulated promptly to all attendees of the SLA Review and also to any interested parties. Technology managers or project managers, for example, may have input to some actions on a new service.

The SLA Review often produces a series of future actions. Some may be directly related to the SLA and the improvement of service, but there may also be other Service Level Management actions that are more peripheral. When they are discussed in the next SLA Review, the actions of the preceding meeting must be classified as resolved, in progress, or outstanding.

The service level manager who carries out the review is responsible for tracking the progress of issues of changes to the SLA, service catalog, OLAs, and reports and review processes.

Measuring Satisfaction

It is important for the IT representative or service level manager conducting the SLA Review to measure the satisfaction of the business with the service it is receiving from the IT services organization. It is useful to conduct a survey of all or a sample of the business involved in the SLA Review. These can sometimes highlight issues in the perception of service, even if the SLA is not breached—for example, issues with the way service desk technicians respond to calls.

These issues should be resolved by the service level manager when they come to light. This manager should also ensure that they are communicated to the service improvement program, if there is one.

Informal Communications

Informal communications can influence an organization's perception of service management. For example, a poorly worded memo regarding a breach of an SLA on a lower-priority service could convey vague or misleading information. To avoid such possibility, a representative from the IT department could contact the SLA Review representative in each area and advise him or her of the breach. This is often more effective and makes clients feel involved with the Service Level Management process. This approach allows questions to be asked and answers to be provided if they are known, or explanations if not.

The nature of informal communications can be defined and discussed during the SLA Review as each area may have its own idea for what will be most effective for it. It is essential for the IT department to commit the time and energy to meet these requirements, but the methods should be cost justifiable—for example, it might not be cost effective to send an individual to advise each employee separately of a breach of an SLA. However, should an incident affect telephony and data transfer, there should be an efficient alternate method of communication in place to notify the organization of the breach.

Note SLA Review meetings are interval-based and will require a level of administration to reserve the meeting space, track the attendees' availability, produce the content for the meeting, and manage the minutes.

If SLA Review meetings are being conducted for various areas of the organization, it is important that these be scheduled so that the service level managers can attend and act on the decisions made in the meeting in the time between the reviews. It can be useful to stagger the periodic reviews over a month, rather than scheduling all of the review meetings near the beginning or end of the month.

Summary of Service Level Agreement Review

The following list summarizes the important points discussed in this chapter.

- The review process looks not only at ways in which services can be improved, but also at the potential costs incurred in the delivery of the services.
- Attendees of the SLA Review meetings should be from IT and business management or have IT and business management support.
- The SLA Review meetings should have a team of representatives from all of the MOF role clusters.
- There are several essential inputs, optional inputs, and deliverables associated with the SLA Review.
- The SLA Review meeting can be a real or a virtual meeting, held at least once a month at a mutually convenient time.
- The SLA Review meeting should include a defined agenda covering a review of the previous period's performance and an assessment of current issues.
- The SLA Review meeting should be documented and the results distributed to all attendees.
- The service level manager conducting the review must measure the satisfaction of performance against the SLA.

An SLA Review sample meeting agenda is available in Appendix F in this guide.

10

Roles and Responsibilities

This chapter describes the roles and associated responsibilities of the service level manager and the service level administrator. It is important to note that these are roles, not job descriptions. A small organization may have one person perform several roles, while a large organization may have a team of people for each role. It is recommended, however, that one person perform the service level manager role.

Service Level Manager

The service level manager must fit comfortably into a position of authority and demonstrate respect for the IT department and for the business. Therefore, this manager should be sufficiently senior to manage business and IT managers in line with service requirements. If the manager is not a senior within the organization, then he or she should have senior management support that is apparent to all parties.

The service level manager role might seem too business-oriented for IT, and too IT-oriented for the business. The service level manager must be comfortable in both roles and be able to understand the IT elements and components as well as the service and the business priorities.

The role of the service level manager is to promote and manage the effective deployment and practice of Service Level Management elements in the organization. If the organization has not implemented Service Level Management, then the service level manager must administer the setup, oversee the development and documentation of the service catalog, and perform a key role in defining and negotiating the SLAs.

Service level managers are usually the key representative of IT at the SLA Review meetings and are responsible for ensuring that the reports monitoring the performance against service levels are produced and delivered for review in the required format. In addition to these responsibilities, service level managers also must be the key contacts for the business within IT, as the service levels offer increased visibility of IT service performance.

Service level managers represent Service Level Management within IT as well as the business. This means being present in times of unplanned downtime to research the service level implications, to act as an escalation point for breaches of the SLA, and to manage the performance against operating level objectives within the IT function. Although Service Level Management may not have direct reports who are involved in the OLAs, they may have virtual responsibility to measure performance against OLA and SLA targets and provide reporting on these targets to other areas within the department.

Service Level Administrator

Although this may not necessarily be a full-time position, larger organizations or organizations in which Service Level Management has a large scope may require a service level administrator in addition to the service level manager. The service level administrator is a supporting role whose duties may involve scheduling and arranging the SLA reviews, confirming any change to services with the change manager, documenting changes to SLAs from planned changes, and liaising with the service level manager to ensure that actions and updates resulting from the SLA Review are completed.

11

Relationship to Other Processes

This chapter explains how the four quadrants of the MOF Process Model (Changing, Operating, Supporting, and Optimizing) are linked and briefly describes the various roles and responsibilities within each quadrant.

Changing Quadrant

The Changing Quadrant includes the processes and procedures required to identify, review, approve, and incorporate changes into a managed IT environment. Changes can include hard and soft assets as well as specific process and procedural changes.

There are three service management functions (SMFs) supporting this quadrant. They are:

- Change Management
- Configuration Management
- Release Management

Change Management

The Change Management SMF is crucial because all changes to services—whether standard, major, or emergency—involve Service Level Management. Even sign-off or change authorizing processes can require this function. SLAs are used to measure not only availability and performance of live and existing systems, but also to approve the change process for certain services. For example, a customer-focused e-service may need to be very flexible in order to meet customer requirements. Therefore, any change raised to implement a preceding change to this system may have an SLA of its own—for example, three days to approval, or changes must be implemented within a week of initiation.

Configuration Management

The Configuration Management SMF is critical because the CMDB allows for the service catalog components that ensure delivery of the service to be updated. In return, there should be a feed from the service catalog into the CMDB—such as when services are added as CIs to the database. This allows full impact analysis and the relationship of the components and service in the CMDB to be managed where possible.

Release Management

The release of any change into the production environment is likely to affect the SLAs and Service Level Management SMF. The introduction of a new element of an existing service must be incorporated into any existing SLA for that service if required. Any positive or negative effect of the introduction of the release on the service must be noted as well, and users must be made aware of this. For example, a new interface from an online purchasing service (to deliver statistics to marketing) may be invisible to the end user. However, if during testing any performance delays (however minute) are noted in the functionality of the new system, then this may affect an agreed-upon performance SLA over time. However negligible, all delays in performance must be noted and monitored.

Release Readiness Review

Any release about to be implemented into the production environment must have completed a report on the effect of the SLA on existing services, or completed an SLA for a new service as part of the sign-off process.

Operating Quadrant

The Operating Quadrant includes the IT operating standards, processes, and procedures that are applied regularly to service solutions in order to achieve and maintain service levels within predetermined parameters. The goal of the Operating Quadrant is highly predictable execution of day-to-day tasks, both manual and automated.

There are eight SMFs supporting this quadrant. They are:

- System Administration
- Security Administration
- Directory Services Administration
- Network Administration
- Service Monitoring and Control
- Storage Management
- Print and Output Management
- Job Scheduling

System Administration

The System Administration SMF must ensure, through an effective schedule of proactive maintenance, that it provides a consistently agreed-upon level of service reliability, availability, and performance. System administrators must identify a set of maintenance tasks and activities for each service. These tasks can be prioritized by the information on each service held in the service catalog and through the SLAs. New services deployed within the production environment will also have SLAs and associated administration tasks that should be allocated to specific groups or individuals. The System Administration SMF must confirm that those tasks are being carried out in line with the SLA requirements.

Product operations guides have been jointly created by the Microsoft product groups and business partners. These guides provide details of the recommended maintenance tasks for the various service products offered by Microsoft. The product operations guides are available at

http://www.microsoft.com/solutions/msm/techinfo/default.asp#product.

Security Administration

Data integrity is a key element of many SLAs used against IT services today. It is a key element of many online and other data-critical systems, as well as a legal obligation in many countries—for example, the United Kingdom Data Protection Act of 1998. Security administrators must ensure that they can deliver the service required in the SLA. If not, then they must ensure that they are meeting the required standards set for them by the organization. The SLAs for individual services can be negotiated from these SLAs.

The SLAs are negotiated and agreed to by the Service Level Management and the business representative. Therefore, all elements of the Operating Quadrant must ensure that the possibilities offered by their area in terms of reporting and monitoring of services and any potential limits to the deliverables are available during the negotiation process. This means that the Operating Quadrant areas still need a service-centric and business-focused view of the components they deliver in the service to the end user or customer.

More information on the best practices for planning and maintaining a secure Windows Server 2003 environment is available at http://www.microsoft.com/security.

Directory Services Administration

The Directory Services Administration SMF is responsible for the day-to-day operations, maintenance, and support of the enterprise directory. The goal of directory services administration is to ensure that information is accessible through the network and that the processes to deliver this performance are aligned to the requirements detailed in the SLAs. Where required, actions involving the day-to-day operation, maintenance, and support of the enterprise directory should be subject to OLAs to ensure they are supportive of the SLAs, as required by the business operation.

Network Administration

The Network Administration SMF is responsible for the maintenance of all physical service components that are used to deliver the service to the business organization. Through fault management, performance management, and security management of the products, tools, people, and processes involved in delivering the service, network administration relies on the expectations provided by Service Level Management. The components must provide the performance required in order to deliver the end service as detailed in the SLA and, similarly, changes to the network components must always be fed back into the change process for the services they affect.

Service Monitoring and Control

Through the use of processes and technology, the Service Monitoring and Control SMF enables the IT department to measure in real time the performance against the SLA objectives. System administrators can detect and respond to events, regardless of their physical proximity to the systems. This proactive approach improves the quality of the services being delivered in line with the expectations agreed on in the SLA. The Service Level Management SMF and the Service Management and Control SMF have a strongly dependent relationship in which the Service Level Management SMF provides the information to add value to the Service Management and Control SMF. In turn, the Service Management and Control SMF adds value to the Service Level Management SMF by providing data on the services and service components.

Details of the Service Monitoring and Control SMF offering that helps customers design and implement effective monitoring solutions for technologies such as Microsoft Active Directory®, Exchange, and SQL Server™ can be found at

http://www.microsoft.com/solutions/msm/evaluation/overview/servicemontcontr.asp.

Storage Management

The Storage Management SMF ensures that important data and information is stored on a secure, well-maintained, and robust storage facility. The requirements for this storage can be determined by the Service Level Management function and the priorities and requirements detailed in the SLAs. Storage management also ensures that, should it be necessary, the information can be easily recovered in the event of failure. Many SLAs feature the recovery of data as a service level objective, but storage management and, to a similar extent, capacity management can be effective only if information is stored on managed storage devices. Organizations should define and establish working practices within the SLAs requiring users to store information on these devices rather than (or in addition to) their computer's hard drive.

Print and Output Management

The Print and Output Management SMF deals with all data that is printed or compiled into reports using another media and with the distribution of this information. This is therefore key to Service Level Management not only in the production and distribution of service level reports, but also in the production of reports for OLAs, change reports affecting services, and real-time reporting and results of monitoring. The reports used in the SLA Review can be distributed and produced in many different ways and print and output management must be aware of the variety of methods and how they are used by different groups within the organization. Some records may be widely available across the organization, whereas others, by contract, may be accessed only by specific groups. For example, external contract performance may have penalty-clause inference, which is confidential.

In addition to the data and reports produced to support the SLAs, it is also likely that the print and output function will have an SLA of its own, in that production of reports may have to be completed in specific timescales for specific business areas.

Job Scheduling

The Job Scheduling SMF is key to Service Level Management because it can apply to several services. Jobs should always be scheduled so that they have a minimum effect on the SLA for the service. For example, the schedule should ensure that jobs that use a lot of resources—such as print jobs, batch jobs, and interface jobs, which could affect performance such as availability and data access as detailed in the SLA—are run when the effect will be minimal.

Operations Review

The primary function of the Operations Review is to assess the effectiveness of internal operating processes and procedures on the delivery of the service. The OLA is structured to ensure service improvement and support of SLA objectives and expectations in the internal IT framework. As such, the OLA is a key input into this management review.

The information and improvements that come to light during the Operations Review are often directly relevant to the SLA Review and feed back into this process. However, if required, the depth and technical complexity of any IT operational information presented will be slightly altered to ensure that it is clear and concise for those present at the SLA Review.

Supporting Quadrant

The Supporting Quadrant includes the processes, procedures, tools, and staff required to identify, assign, diagnose, track, and resolve incidents, problems, and requests within the approved requirements contained in the SLA.

There are three SMFs supporting this quadrant. They are:

- Service Desk
- Incident Management
- Problem Management

Service Desk

The Service Desk SMF provides key data for Service Level Management initiation—for example, records for benchmarking and service-focused customer interaction.

In many organizations, key business-focused service levels are often those applied to the service desk since it is the main interface with the business operation and end users (for instance, call responses and customer satisfaction). The service desk function also acts as the single point of contact for the IT organization both from and to the customer, so it often leads to the service desk being key in the escalation of possible breaches of an SLA and liaising with the customer, service level manager, and key contacts across the IT organization involved in escalating the supporting OLAs.

Incident Management

All issues with the services in the production environment are reported though the incident management process. This allows details of the issue to be tracked and monitored. The Incident Management SMF can also provide detailed reports for the SLA reports and review process, as well as the information used to develop and review the service catalog.

Problem Management

The Problem Management SMF investigates and analyzes the root causes of incidents. It commonly initiates changes to internal processes, procedures, or the infrastructure in order to resolve the problem or provide a temporary workaround. In addition, problem management often contributes to changes in the SLA or the service components. Problem management uses the information provided by Service Level Management to prioritize and align its analysis to business requirements. The problem management function may sometimes be represented at the SLA Review where, for example, analysis of a recurrent SLA breach may need to be discussed and action taken.

Optimizing Quadrant

The Optimizing Quadrant includes the service management functions responsible for managing costs while maintaining or improving service levels. Their activities include reviews of outages and incidents, examinations of cost structures, staff assessments, availability, and performance analysis as well as capacity forecasting.

There are six SMFs supporting this quadrant. They are:

- Service Level Management
- Financial Management
- Capacity Management
- Availability Management
- Service Continuity Management
- Workforce Management

Service Level Management

This function manages the quality of IT services by negotiating, monitoring, and maintaining SLAs between the IT service provider and its customers. Service Level Management has been the focus of this guide.

Financial Management

Once expectations are documented for the service levels, there is a tangible service requirement that can be reported on in the SLA reviews. One of the key benefits of this can be the recognition of the true costs of delivering a service. The components of a service can therefore be effectively cost-managed in line with the requirements of the business operation. Service Level Management can offer an effective structure to contribute to the success of financial management within an organization, thus ensuring that the costs of delivering the service are realistic and aligned to the expectations of the service. Conversely, IT departments can use the measurements against the SLA from the SLA Review to negotiate the costs for improving the service where suitable.

Capacity Management

Capacity and workload, or processing speed, are commonly requested by the business organization for the SLAs against the services they use. When possible, the complexity of the measures and methods of monitoring and calculating capacity should be translated against the services available in order for negotiations of the SLA to be effective and realistic.

Availability Management

Availability, or the lack of it, has a dramatic influence on customer satisfaction and can very quickly affect the overall reputation and success of the organization. The goal of the Availability Management SMF is to ensure that service-affecting incidents do not occur, or that timely and effective action is taken when they do. It focuses on the reliability, maintainability, and serviceability of the solution.

Availability is one of the key SLA elements often requested by business operations. It is important that the possibilities for the measurement of availability are known by the service level manager when negotiating the SLA.

Service Continuity Management

Service continuity management is concerned with managing risks to ensure that an organization's IT infrastructure can continue to provide services in the event of an unlikely or unanticipated event. This is accomplished through a process that analyzes business processes, their impact on the organization, and the IT infrastructure vulnerabilities that these processes face.

The Service Continuity Management SMF enables the business and the IT department to understand the requirements and expectations of the business as documented in the service catalog, service level reports, monitoring, and reviews. These records offer a full source of information that can be used to ensure the alignment of service continuity with the business needs. It is critical that the relationship between the Service Continuity Management SMF and Service Level Management SMF be well maintained because the service continuity function must always be aware of the latest developments or changes in the services available.

Workforce Management

To meet SLAs, the workforce may be changed at different periods in line with the business requirements of the SLA. For example, a skilled service desk staff might need to be present only at the core hours of 08:00–19:00. Outside of these hours, however, the workforce can be contacted on an on-call basis. As part of the SLA, the customer agrees to this and therefore does not need or expect a skilled first-time fix when calling outside of these core hours.

Release Approved Review

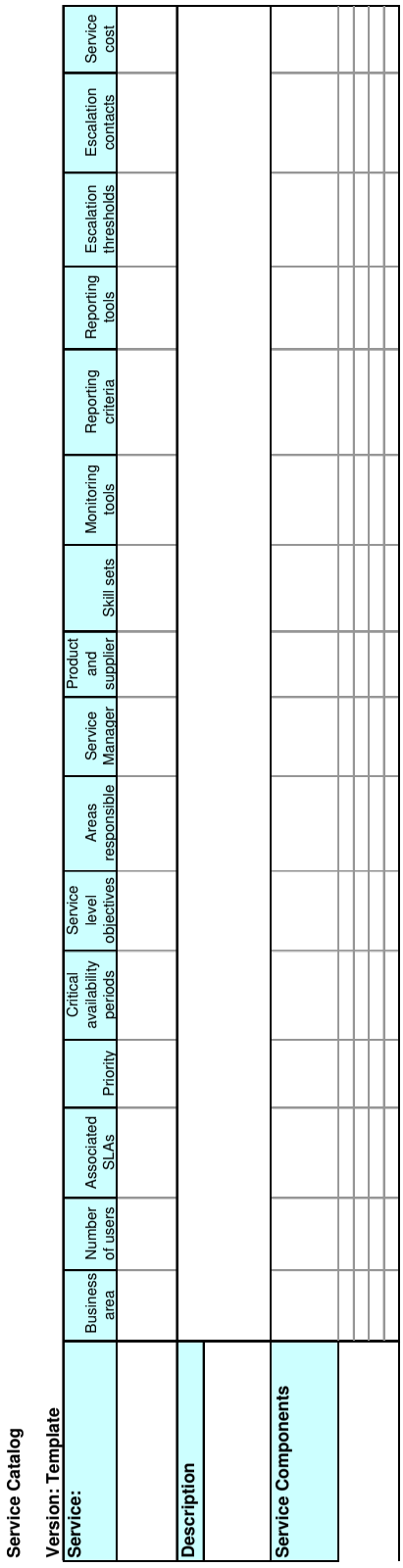
The service level requirements must be assessed in a Release Approved Review. The results of this review must be entered into the service catalog with the status of Release Pending if this status is used within the organization, which we recommend. Sign off on the effect of the service on the business, the performance targets, and the components used in delivery of the service before getting sign off to release. (The Release Approved Review may even have a new service SLA if deemed necessary—for example, pilot performance minimum requirements and breach/measure/monitor/reports that are aligned to it).

Appendices

Appendix A: Service Baseline Workshop Agenda

1. Introduce objectives of Service Level Management in the organization.
2. Introduce attendees.
3. Review existing sources of information:
   - Existing or historical SLA reports
   - Service desk reports
   - Existing contracts
4. Hold a workshop on current services in use. Use information-gathering techniques suitable to the organization—for example, whiteboards, flip charts, and Post-it methods.
5. Confirm and document existing services, service contracts, and service levels at the end of the workshop.
6. Describe actions to be taken.
7. Distribute a summary of the workshop to attendees and a wider audience. Include a deadline for feedback.

Appendix B: Service Catalog Template



Service Catalog

Version: Template

Service:	Business area	Number of users	Associated SLAs	Priority	Critical availability periods	Service level objectives	Areas responsible	Service Manager	Product and supplier	Skill sets	Monitoring tools	Reporting criteria	Reporting tools	Escalation thresholds	Escalation contacts	Service cost
Description																
Service Components																

Appendix C: Service Catalog Sample

Service Catalog

Version: Sample

This is a sample service catalog

Service: E-mail	Business area	Number of users	Associated SLAs	Priority	Critical availability periods	Service level objectives	Areas responsible	Service manager	Product and supplier	Skill sets	Monitoring tools	Reporting criteria	Reporting tools	Escalation thresholds	Escalation contacts	Service cost
	All	Total: 3,500	1. E-mail corporate 2. E-mail personnel 3. E-mail executive secretaries	High	Core business hours 7:00 A.M.-7:00 P.M.	99.999% availability 99.999% data security	System administration Security Data center	SLM manager's name	See component level	See component level	MOM	Availability, data security, speed of performance	MOM; Microsoft® Excel	99.999% availability for any security breach	Don Funk	$0.003 per e-mail transaction (sent or received)
Description																
The provision of an incoming and outgoing electronic mail facility to the business organization																
Service Components																
E-mail server	All	3,500		High	Core business hours: 7:00 A.M. - 7:00 P.M.	99.999% availability 99.999% data security	System administration Security Data center		Dell Poweredge 1500SC server	Server administrators	MOM			Any server outage	Gabrielle Dickmann	Data storage $0.5 per kilobyte (KB)
Web server	All	3,500		High	Core business hours: 7:00 A.M. - 7:00 P.M.	99.999% availability 99.999% data security	System administration Security Data center		Dell Poweredge 1500SC server	Server administrators	MOM			Any server outage	Gabrielle Dickmann	
Network	All	4,000	Corporate network management SLA	High	Core business hours: 7:00 A.M. - 7:00 P.M.	99.999% availability 99.999% data security network performance targets	System administration Security Data center Networks specialists			Network administrators	MOM			Any network outage or performance issue alert from monitoring product	Kathie Flood	
Mail software	All	3,500		High	Core business hours: 7:00 A.M. - 7:00 P.M.	99.999% availability 99.999% data security	System administration Security Data center			Mail administrators	MOM			Any e-mail software incidents affecting more than 10 users	Eva Corets	Software license $700 per 1,000 users
Desktops	All office-based staff	2,800	Corporate desktop SLA	Medium	Core business hours: 7:00 A.M. - 7:00 P.M.	99.999% availability	Service desk System administration Security Data center Desktop support		Compaq	Desktop support skills Windows NT® operating system Windows® XP operating system	-			Any desktop incidents affecting more than 15 users	Randall Boseman	
Laptops	All remote users	700	Corporate laptop SLA Remote field sales SLA	Medium	Remote users: access 24 hours	99.999% availability	Service desk System administration Security Data center Laptop/remote support		Dell	Laptop support skills Windows NT operating system Windows XP operating system	-			Any laptop incidents affecting more than 15 users	John Wood	

Appendix D: Service Level Agreement Template

Note You can customize this template by substituting your organization's information for the *italic* text.

Service Level Agreement for *Insert Service*

Version:

Date:

Author:

Contents

Purpose:

Authorization:

Reviews:

The Service:

- Description:
- Business Organization:
- Service Availability:
- Standards:
- Job Scheduling:
- Changes to the Service:

Service Level Objectives and Measures:

Monitoring and Reporting:

- Metric Definitions:
- Other Definitions:

Underpinning Contracts:

Charging:

Escalation:

Agreement by Signatories:

Purpose

This service level agreement (SLA) documents the characteristics for the provision and support of *insert service* that is required by *insert business function* as understood and agreed to by the representatives of the owner groups.

The purpose of this SLA is to ensure that all components and commitments are in place to provide optimal service performance for the business function.

The owner group representatives can use this SLA to facilitate the planning process and improve provision of the service. Service levels specified within this agreement will be communicated on a monthly basis to the owner group representatives.

Outside of this monthly review period, this SLA is available at *insert URL or file path*.

Authorization

This SLA is made between *insert IT service level manager or representative* and *insert business organization manager or representative*.

Table 1 describes the representatives of the business organization and the IT services organization. These groups share ownership of the service, and the representatives listed have reviewed and approved this SLA.

Table 1. Authorization of This SLA

Function	Organizational group	Representative
Business	*Insert business area supported by the service*	*Insert business area representative*
IT Services	*Insert name of service*	*Insert name of service level manager*

Note There may be other representatives from other groups who may need to attend meetings and be involved in the agreement of the SLA. For example, other business area representatives or operational management from the IT services department should be listed at this stage if they have been party to the agreement.

Reviews

The review of the performance against targets for the SLA shall take place on a *insert one: monthly/quarterly/annual* basis. The representatives guarantee their attendance at the review meetings, or they guarantee to send a suitable and prepared alternate representative.

Last Review: *insert date of last SLA Review*

Next Review: *insert date scheduled for next SLA Review*

The representatives from the business organization and IT services may review the SLA criteria and service details *insert "annually" or "biannually"*.

This SLA expires at *insert date.*

The Service

This section provides a description of *insert the name of the service* and the business user organization, including its physical location.

Description

The IT services organization will deliver the following services, *insert names of services*, in the following ways. (The following is a list of examples only.) The named service will:

- Specify the purpose of the service.
- Be available for users to log on.
- Respond to and resolve user questions about, problems with, and requests for enhancements to the application.
- Provide a set of operational services that enable users to communicate with each other and with users at other locations both inside and outside the organization.
- Provide a set of information services and support services that increase the effectiveness of the use of the basic operational services.
- Supply a set of network security services that can respond to network security emergencies and can provide information and advice on network security matters.

The full set of services offered by the IT service organization is described in the service catalog. (See Appendix B: "Service Catalog Template")

Business Organization

The business organization has the following functional specifications:

Number of users	*Insert number of users in the business organization*
Location	*Specify the geographical locations of users*
Platform	*Specify operating systems, desktops, service prerequisites, databases, and so on*

Service Availability

This section lists the times when *insert the name of the service* is available. It also describes the process for making changes to the availability of this service.

Table 2 lists the standard availability for the agreed-upon service.

Table 2. Service Availability

Times	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Start	0:30	0:00	0:00	0:00	0:00	0:00	0:30
Stop	24:00	24:00	24:00	24:00	24:00	24:00	24:00

Note These times may vary as required by scheduled or unscheduled operational management tasks. When such changes in service availability occur, *insert name of representative who will notify the appropriate person* will notify *insert name of representative or group to be notified*.

Standards

This agreement uses the following naming standards when referring to availability. (This is a list of examples only.)

- Time is expressed in the format "hours: minutes" using 24-hour notation. The time zone is assumed to be Central Time.
- Core business hours are from 8:30 to 17:30.
- Times expressed as a number of "business days" include business hours, Monday through Friday, excluding designated holidays.

Job Scheduling

Scheduled jobs may cause performance issues, such as service downtime for a specific period. Schedule these jobs to minimize impact on *insert the name of the business organization*. Table 3 provides examples of the expected timetable for these jobs.

Table 3. Example of Scheduled Jobs

Times	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Start	---	---	---	02:00	---	---	01:00
Stop	---	---	---	02:30	---	---	03:00

Changes to the Service

All RFCs requested through the change management process that will take more than *insert number of hours (for example, two hours) to implement* or that affect the service will be reviewed by the CAB for approval in accordance with the change management process.

Changes to the service or service components that do not require a service outage are implemented according to the agreed-upon timescales for their priority and impact.

Changes that require a service downtime are authorized and scheduled for the agreed-upon timetable on *insert days and times (for example, Saturday morning 01:00–03:00* or *Wednesday morning 02:00–02:30)* when the impact will be minimized.

The business organization will be notified by the service level or change manager by means of an e-mail message or a telephone call at least *insert number of hours (for example, 48 hours)* in advance of a requirement to implement a change outside of these periods.

Note A register of the agreed-upon priorities for this service is maintained by the change manager. These priorities may be included in "Other Definitions" later in this appendix or in a separate appendix.

Service Level Objectives and Measures

Table 4 lists the agreed-upon service level objectives for the performance of the service.

Note These examples suggest measures for objectives, but their cost must be justified and must be beneficial to the business organization in accordance with the guidelines in the SMF document.

Table 4. Service Level Objectives and Measures

Service activity	Description	Measure	Target
Incident response time	The time it takes IT services to acknowledge receipt of an incident.	All incidents must be acknowledged either: During the initial telephone contact with the allocation of the unique incident reference number to the customer. –or– Within 30 minutes of the customer's sending an e-mail or intranet record reporting the incident.	99.9% of all calls assigned and provided with an incident number.
Incident resolution time	The time that elapses between acknowledged receipt of an incident and incident resolution.	The expected resolution times for each priority are: Priority 1 = < 1 hour Priority 2 = < 4 hours Priority 3 = < 8 hours When the incident occurs during scheduled downtime, these resolution times will start from the end of the downtime. Any extension to this resolution time for priority 1 and 2 must be agreed on with the business representative.	95% of all calls assigned are fixed within the designated time.

Service activity	Description	Measure	Target
Service availability	The time the service is available, according to the service hours described in this agreement.	IT services will calculate the end-to-end service availability using information it gets from monitoring the service, and IT will notify the customer of the service availability figures by the sixth day following the end of the measurement period.	99.6% average over the measurement period.
Service level reporting	Production of monthly service report in the agreed format.	1. Report in correct format. 2. Correct number of copies received. 3. Report received by the customer contract manager by the 6th day of the following month.	100%
Root cause analysis problem reports	Production of report describing the root cause of a particular incident or sequence of incidents.	Reports to be provided on demand.	100% within the next working day of the incident whose report is to be provided.
SLA Review	Minimum frequency of 1 month, but either party may request additional reviews for specific service issues.	Service review and determination of any associated changes and new requirements in light of reports produced.	100%

Monitoring and Reporting

The service shall be subject to monitoring and reporting on service level objectives performance against the target.

Note Specify responsible team, functions, or individuals if required

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For each of the service OLAs, the information relating to the monitoring and reporting for that objective shall be delivered according to the following schedules:

- A report that is scheduled to be delivered each calendar month will be delivered by the sixth working day of the following month.
- A report that is scheduled to be delivered quarterly will be delivered by the sixth working day of the subsequent quarter.
- Unscheduled reports will be delivered as agreed upon between the service level manager and the business organization representative on a case-by-case basis.

Metric Definition

For the purposes of this document, Table 5 lists the measures for metrics for the service level objectives.

Table 5 Metric Definitions

Measurement	Definition
Service availability percentage	The proportion of the total available service in a given period in which service is provided. This is expressed as: (24 × M – O) ÷ (24 × M) × 100 % Where: M = number of days in the measurement period O = Outage time in hours for each affected site The measurement period for service availability is each calendar month. Outage time for service availability will begin when the customer reports an incident.
Service response time	The time taken for the application to complete a user request and return a response.
Incident response time	The time required for a user to receive a response after reporting a problem to the service desk.
Incident resolution time	The time required for a user to receive a circumvention or a solution after reporting a problem to the service desk.

Other Definitions

There may be other definitions within your SLA to describe the objectives and terms used within it. The following are examples of definitions that may be useful.

The service desk prioritizes requests for support according to the priority-level guidelines listed in Table 6.

Table 6. Priority Guidelines

Priority	Definition
High priority	*Service name* is not operational for multiple users, or a major function of *service name* is not operational for multiple users.
Medium priority	*Service name* is not operational for a single user, or a major function of *service name* is not operational for a single user.
Low priority	A minor function of *service name* is not operational for one or more users (who can continue to use other application functions). A user has questions about *service name* functionality. A user needs administrative assistance about *service name*.

Underpinning Contracts

The IT services organization remains responsible for ensuring that the *service name* is provided to the business organization with the agreed-upon levels of performance. If the IT organization chooses to subcontract for the provision of some or all of the services covered by this SLA, it will manage the contract with the external provider according to the service requirements described within this agreement.

Charging (Where Required)

Where a charge is made for delivery of the service to meet the required performance defined within this agreement, the IT services organization shall collect the agreed-upon charges from, and report the receipts to, *insert the name of the business organization representative*. These receipts and charges will be analyzed in terms of the services provided.

Escalation

In the event that an issue—for example, an incident change—cannot be resolved within the agreed-upon time, then this issue will be escalated immediately to the service desk. The service desk will escalate this issue to the service level manager within the IT organization as appropriate.

Escalation levels and named contacts for both IT and the business customer are described at *insert URL or filename*.

Agreement by Signatories

This agreement remains valid until superseded by a revised agreement mutually endorsed by the signatories below. The agreement will be reviewed annually but can be changed at any time as agreed upon by both the signatories.

Signatories

Name:

Position: *(for example, business organization representative)*

Date:

Name:

Position: IT *(for example, organization representative or service level manager)*

Date:

Appendix E: Operational Level Agreement Template

Version:

Date:

Author:

Operational Level Agreement for *Insert Service*

This agreement is made between *insert the name of the IT service level manager or representative* and *insert the name of the IT manager or representative*.

This agreement covers the provision and support of *insert the service and a description of the service capability and/or department*.

The IT department guarantees the following operating level objectives for the service that *insert a description of the service deliverables.* (The following are examples only.)

- The support function must be available 24 hours a day, seven days a week. Priority 1 and priority 2 incidents must be resolved within 6 hours. Priority 3 and priority 4 incidents must be resolved within 8 hours.
- Any downtime associated with changes to the components delivering the *service* must occur outside the core hours of 07:00–22:00.
- All minor or standard changes must be acknowledged within one working day from receipt.

This agreement remains valid until it is superseded by a revised agreement mutually endorsed by the signatories below. The agreement will be reviewed annually but can be changed at any time as agreed upon by both the signatories.

Signatories

Name:

Position:

Date:

Name:

Position:

Date:

Appendix F: Service Level Agreement Review Meeting Agenda

Date:

Attendees: *Insert the name of the service level manager*

Insert the name of the business manager

Other attendees:

Review of the previous period:

Issues resolved:

Outstanding issues to be resolved:

Review performance against the SLA:

Successes against the SLA:

Performance not meeting the SLA:

Additional requirements for the last period:

Review of any current issues:

Requests for change by the business group:

Request for change by the IT group:

Preview of the next period: