

White Paper February 2007

# BMC® Best Practice Process Flows for ITIL Service Level Management

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## Chapter Introduction

BMC Best Practice Process Flows for ITIL Service Level Management describes the process flows implemented in the BMC Service Level Management 7.0 application, which is based on IT Infrastructure Library (ITIL) best practices.

The following topics are provided:

- Outline (page 6)
- Process flow shapes and text indicators (page 6)
- Further information (page 7)

## **Outline**

To help you understand how the ITIL service level management processes are supported by BMC applications, this white paper includes:

- Process flow diagrams—for both the high-level overview and the detailed steps.
- Text explaining how the process is supported by the application.
- Delineation of the process into separate user roles.

## Process flow shapes and text indicators

The process flow diagrams in this white paper use the following shapes and text indicators:

Table 1-A: Process flow shapes and text indicators

Shape or text indicator	Description			
Initiate Process	Start or end shape indicates the starting or ending point of the process flow, for example, Initiate Process.			
-	Flow line shape indicates the sequence of steps and the direction of the process flow.			
Act on Service Improvement Program Results	Action or process shape indicates a single step in the flow, for example, Act on Service Improvement Program Results.			
1.4 Customer info correct?	Decision shape indicates a branching point (Yes or No) in the process flow, for example, Customer information correct?			

Table 1-A: Process flow shapes and text indicators (Continued)

## Shape or text indicator Description Off-page shape indicates that the process continues in a different diagram; the number indicates the step. 2.1 The subroutine shape represents a process that is defined elsewhere. **Predefined Process** Direct data shape identifies a databases that is accessed by SLM. Data Source Italicized blue text indicates a system notification. System Notification Italicized green text indicates a system status change.

## System Status

## **Further information**

For information about additional BMC best practices, see the following documentation:

- BMC Best Practice Process Flows for ITIL Incident and Problem Management
- BMC Best Practice Process Flows for ITIL Change Management
- BMC Best Practice Process Flows for ITIL Asset Management

For detailed information about the SLM 7.0 and ITSM 7.0 applications, see the following documentation:

- BMC Service Level Management 7.0 User's Guide
- BMC Service Level Management 7.0 Configuration Guide
- BMC Remedy® Change Management 7.0 User's Guide
- BMC Remedy Asset Management 7.0 User's Guide
- BMC Remedy Service Desk: Incident Management 7.0 User's Guide
- BMC Remedy Service Desk: Problem Management 7.0 User's Guide
- BMC Atrium™ CMDB 2.0 User's Guide
- BMC Remedy Knowledge Management 7.0 User's Guide Remedy Interface

## Service Level Management process flows

Service Level Management is the continuous and proactive process of defining, agreeing, monitoring, reporting, and reviewing the performance of IT services to make sure that adequate levels of service are delivered in alignment with business needs and at an acceptable cost.

The following topics are provided:

- User roles for service level management process flow (page 10)
- Overview (page 11)
- Details (page 12)

## User roles for service level management process flow

The service level management process flow includes the following user roles:

Table 2-A: Service Level Management user roles

Role	Description		
Service Level Manager	Service level managers oversee the relationship between the IT organization and the customers. They identify services and define contracts, agreements, and service targets to manage the services and their committed levels.		
Business Manager	Business managers are customers who are responsible for those people who use the service. They have ownership of revenue targets.		
Business User	The business user is the customer who is using the service.		
IT Service Manager	The IT service manager is responsible for establishing and delivering a service. The IT service manager agrees to the level of service that can be provided. The IT service manager is responsible for defining operational level agreements and service targets to monitor the performance and enforce the processes of the service.		
Service support, service delivery, and other related processes	This includes databases and ITSM processes that interact with the SLM processes, including:  Change Management  Incident Management  Request Management  Availability Management		

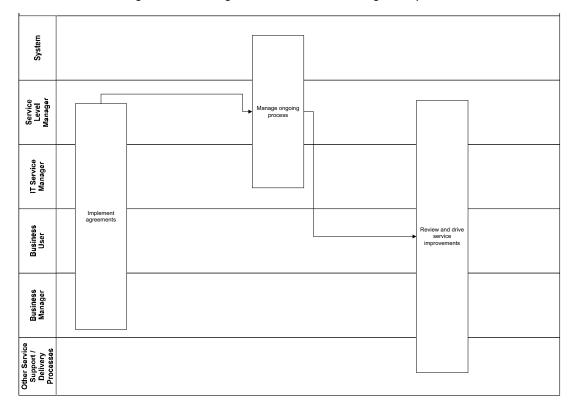
For information about using the application, see the *BMC Service Level Management 7.0 User's Guide*.

## **Overview**

The service level management process includes the following three stages:

- **Stage 1** Implement agreements
- **Stage 2** Manage ongoing process
- Stage 3 Periodic review and drive service improvement

Figure 2-A: The stages of the service level management process flows



## **Details**

This section describes the detailed steps for each stage of the service level agreement process.

## Stage 1 Implement agreements

In this stage, the process is initiated with the business, operational level agreements (OLAs) and underpinning contracts (UCs) are validated, and service level agreements (SLAs) are defined and implemented.

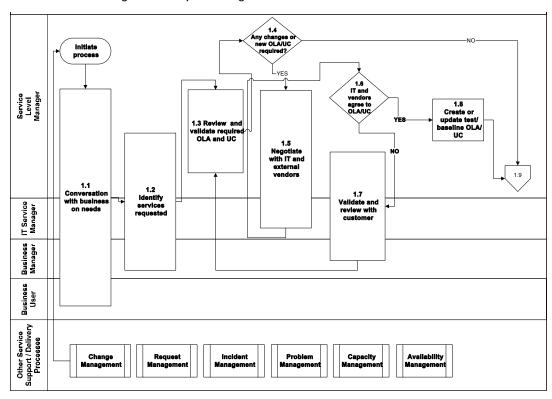


Figure 2-B: Implement agreements

The process begins with the following steps:

- 1.1 Conversation with business on needs—To be successful with service level management, a relationship needs to be established and nurtured between IT and the business (the customer). The service level manager (or business relationship manager) meets with business managers and business users to understand their needs.
- 1.2 Identify service requested—The outcome of the discussion with the business is an understanding of the services the business requires for the upcoming period and into the future. Some of these services might already be established services that the IT organization provides. Some of the requested services might not yet exist.
- 1.3 Review and define or validate required OLA or underpinning contract (UC)—For those services that already exist, the service level manager verifies that valid (that is, unexpired) OLAs and underpinning contracts are in place. The service level manager can also review past performance of the service's OLAs and underpinning contracts or both.
- 1.4 Any changes to OLAs or underpinning contracts required?
  If there are no changes, the procedure continues with step 1.9.
- 1.5 If there are changes required, negotiate with IT and external vendors.
- 1.6 IT and external vendors agree to OLAs or underpinning contracts—If there is a new service that the business requested, the service level manager engages the IT service manager to establish the new service and commit to certain levels of service. These new OLAs or underpinning contracts are then defined.
  - If IT and vendors agree, the procedure continues with step 1.8.
- 1.7 Validate and review with customer—If IT or the external vendors do not agree to the changes, the service level manager re-engages with the business. They discuss the levels of service that can be delivered and work to gain consensus.
- 1.8 Create or update the test or baseline OLA or underpinning contract—When all parties are in agreement on the type of service and the level of service, the baseline OLAs and underpinning contracts can be created (if needed) and tested.
  - The process for implementing agreements continues as described in the following section.

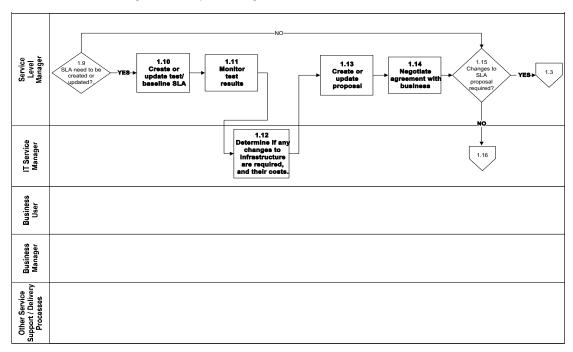


Figure 2-C: Implement agreements

- 1.9 Does a service level agreement (SLA) need to be created or updated to support business needs?—There might be an existing SLA between IT and the business with the same levels of service.
  - If the SLA does not need to be created or updated, the procedure continues with step 1.15.
- 1.10 Create or update a test or baseline SLA—If an SLA must be created, or an existing SLA requires modification, it occurs at this stage. The SLA is then tested or baselined to see if it meets its compliance levels.
- 1.11 Monitor test results—The service level manager is diligent when monitoring how the SLA performs so that the customer's expectations will be met or exceeded when this SLA enters production.
- 1.12 Any changes to infrastructure required?—If the SLA is not performing to expectations, the service level manager discusses the problem with the IT service manager. The IT service manager determines if any changes to the infrastructure are required and estimates their costs.

- 1.13 Create or update proposal—If additional infrastructure is required, the business might be responsible for the costs. The service level manager creates or updates the proposal for the services and levels of service that can be provided to the business.
- 1.14 Negotiate agreement with business—The service level manager negotiates further with the business.
- 1.15 Changes to SLA proposal required?

If changes are required, the procedure continues with step 1.3 where supporting OLAs and underpinning contracts are validated again.

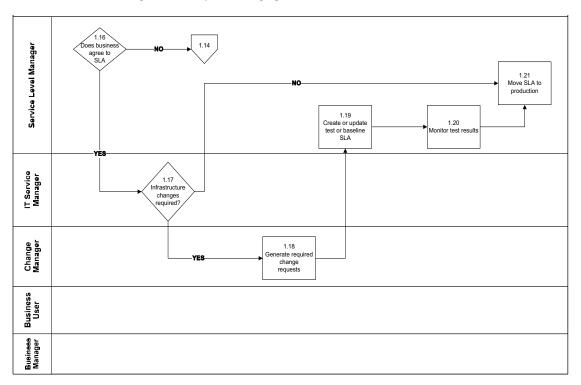


Figure 2-D: Implementing agreements

1.16 Does business agree to SLA?

If business does not agree to the SLA, the procedure continues with step 1.14 for more negotiation.

1.17 Are infrastructure changes required to support and fulfill the SLA? If no changes are required, the procedure continues with step 1.21.

- 1.18 Generate required change requests to assess, schedule, and implement the infrastructure changes.
- 1.19 Create or update test or baseline SLA—If the SLA requires modification or one must be created, it occurs at this stage. The SLA is then tested or baselined to see if its compliance can be met.
- 1.20 Monitor test results—The service level manager is diligent when monitoring how the SLA performs so that the customer's expectations will be met or exceeded when this SLA is put into production.
- 1.21 Move SLA to production.

The agreements and service targets are implemented. This concludes the first stage. For details on how to implement the agreements and service targets, see "Defining agreements and service targets" on page 24.

## Stage 2 Manage ongoing process

In this stage, agreements and service targets are monitored automatically. If targets are not being met, or agreements at risk, notification actions are automatically triggered for the appropriate people. In addition, the service level manager keeps track of results using the dashboards or reports, and works with other IT staff to create appropriate action plans for service improvement.

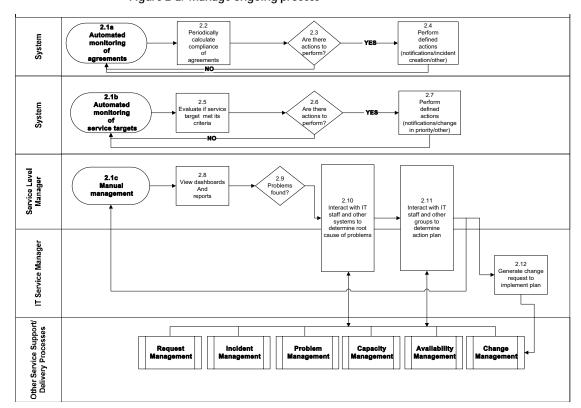


Figure 2-E: Manage ongoing process

- 2.1 Monitoring and managing agreements.
  - a Automated monitoring of agreements—The results of one or more service targets are combined to determine the overall compliance of an agreement (an SLA, OLA, or underpinning contract).

This procedure continues to step 2.2.

b Automated monitoring of service targets—Each service target is monitored based on changes to an incident or other request, or based on key performance indicators collected from the infrastructure.

This procedure continues to step 2.5.

c Manual management—In addition to the automated monitoring and sending of notifications that occur, the service level manager monitors daily status and trends over time.

This procedure continues to step 2.8.

2.2 Periodically calculate the compliance of agreements—Compliance is calculated based on the defined review period as shown in Table 2-B:

Table 2-B: Frequency of compliance calculations

Period	Frequency of calculation		
Daily	Every hour		
Weekly	Every 4 hours		
Monthly	Every day		
Quarterly	Every day		

- 2.3 Are there actions to perform?—Based on the defined milestones. If an agreement is at risk or has been breached, actions might occur to alleviate the breached compliance.
- 2.4 Perform defined actions (Notifications/Incident Creation/Other)—The service level manager or IT service manager might want to be notified. You can configure SLM so that an incident is automatically created to track an issue with compliance.
- 2.5 Evaluate if the service target met its criteria—For example, was the incident resolved within 4 hours? Was the application response time less than 5 seconds?

- 2.6 Are there actions to perform?—Based on the defined milestones, if the expression for the service target reaches a specified threshold, or there is no response to a request within the allotted time, actions can prevent inadequate service.
- 2.7 Perform defined actions (Notifications/Change in Priority/Other)—The IT service manager or incident manager can be notified about an incident that has not received the appropriate response.
- 2.8 View dashboards and reports—By viewing the dashboards and reports, the service level manager can see immediately which agreements are at risk or breached, which service targets are not performing well, and the costs and penalties that have accumulated.
- 2.9 Problems found?—Do any agreements or service targets need attention?
- 2.10 Interact with IT staff and other systems to determine the root cause of the problems—Now that the service level manager knows which agreements and service targets have problems, she reviews the key performance indicators that those service targets are measuring. Working with other IT staff and other processes, such as incident management and problem management, she can determine the root cause of the problem.
- 2.11 Interact with IT staff and other groups to determine action plan—What steps must be taken to improve the service?
  - The procedure can continue back to step 2.1c.
- 2.12 The IT service manager generates a change request to implement the plan.

## Stage 3 Periodic review and drive service improvements

In this stage, a periodic review is initiated. Any adjustments to SLAs, OLAs, or underpinning contracts that better support the customer's needs are identified.

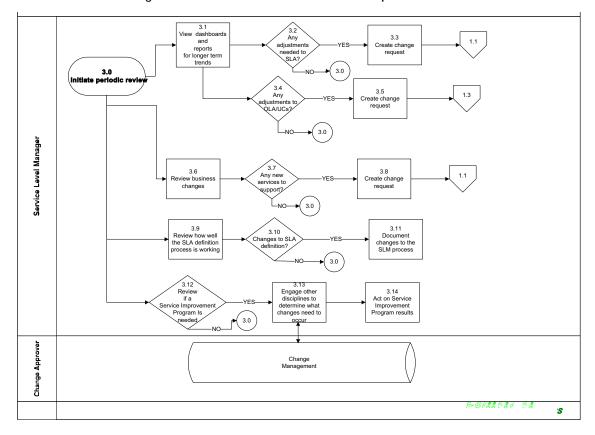


Figure 2-F: Periodic review and drive service improvements

- 3.0 Initiate periodic review.
- 3.1 View dashboards and reports for longer term trends.
- 3.2 Are any adjustments needed to the SLA?—Are commitments being met? Has the SLA compliance changed over time? Is the SLA reasonable and able to be met? How does the penalty and reward accrual look?

If no adjustments are needed, the process continues with step 3.0.

- 3.3 If adjustments are needed, create a change request.
  - The procedure continues with step 1.1 of stage 1.
- 3.4 Are any adjustments needed to OLAs and underpinning contracts?—Does the process that supports the SLA perform to expectations, or are changes needed to the OLAs and underpinning contracts?
  - If no adjustments are needed, the process continues with step 3.0.
- 3.5 If adjustments are needed, create a change request. The procedure continues with step 1.3 of stage 1.
- 3.6 Review business changes—Meet with business representatives to get an update on their needs and planned initiatives. For example, will there be a surge in hiring? Will there be any mergers or acquisitions? Are there new application or capacity needs?
- 3.7 Are there any new services to support?
  - If no adjustments are needed, the remaining activities in the periodic review are initiated, and the process continues with step 3.0.
- 3.8 If adjustments are needed, create a change request. The procedure continues with step 1.1 of stage 1.
- 3.9 Review how well the SLA definition process is working.
- 3.10 Any changes to how SLAs are defined?—Are any process changes needed to take pre-emptive action when SLAs are at risk?
  - If no adjustments are needed, the process continues with step 3.0.
- 3.11 Document changes to the SLM process.
- 3.12 Review if a service improvement program is needed—In what ways can service be improved to better support the business and to meet SLA compliance expectations?
  - If no adjustments are needed, the periodic review is initiated again on an ongoing basis.
- 3.13 Engage other disciplines to determine what changes need to occur.

3.14 Act on service improvement program results—Change management processes, IT service managers, and other IT managers are highly engaged during this stage if any changes to SLAs, OLAs, underpinning contracts, process, or other elements of the service are involved as part of the Service Improvement Program. Verification with business representatives also takes place to make sure that the business benefits from the changes and that they agree to the priorities.

Note: Although there is a natural progression for these processes, step 3.1, step 3.6, step 3.9, and step 3.12 can occur in parallel.

Stage 3 repeats on a periodic basis.

# Creating agreements and service targets

During Stage 1, Implementing Agreements, the service level manager determines the type of service targets required and creates the service target definitions and agreement definitions. This section describes the process for defining agreements and service targets during Stage 1.

The following topics are provided:

Defining agreements and service targets (page 24)

## Defining agreements and service targets

The process for defining agreements and service targets is shown in Figure 3-A.

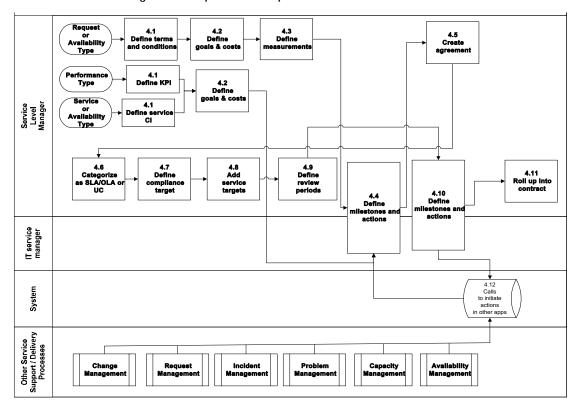


Figure 3-A: Implementation process

- 4.1 Define the terms and conditions or data source for the service target.
  - a Define terms and conditions—For a request-based or availability service target, define terms and conditions to identify which requests or incidents, assets, or configuration items apply to a specific service target. For example, if the terms and conditions are 'Priority' = "Critical", then this service target would only apply if the priority of the incident is critical.

- **b** Define KPI—For a performance-monitoring service target, define the KPIs (Key Performance Indicators). For example, the selected KPI might be Application Response Time. Or several KPIs might be selected to form an expression where Application Response Time must be less than 5 seconds and Memory Usage must be less than 50%.
- c Define service CI—For a service availability service target, (such as is used with Service Impact Manager), select the service, or other CI.
- 4.2 Define goals and costs—What is the goal for incident resolution time? What is the goal for application response time? What is the monetary impact on the business for every minute that this service target is missed?
- 4.3 Define measurements—Define the measurements for request or availability service targets. What statuses identify when the asset or configuration item being monitored is available or unavailable? Should the service target ever pause if the incident it is monitoring is pending information from the requester? These attributes are part of defining measurements for the service target.
- 4.4 Define milestones and actions—What proactive steps should be taken if an incident or other request is close to missing its goal? Proactively identify the processes to follow for notifying the assignees about the service target goal for the request, reminding them as they get closer to that goal, and escalating to their manager if progress is not being made.
- 4.5 Create agreement—After the service target is defined, it should be placed inside an agreement so that it can be monitored over various time periods and according to compliance goals.
- 4.6 Categorize the agreement as SLA, OLA, or underpinning contract.
- 4.7 Define the compliance target—How often does this agreement need to be met? For example, 98% of the time?
- 4.8 Add service targets—One or more service targets can be added to the agreement and weighted based on their importance.
- 4.9 Define review periods—How often does the compliance target need to be met? On a daily, weekly, monthly, or quarterly basis? Select one or more review periods.

- 4.10 Define milestones and actions—If compliance is at risk or is breached, what steps should be taken to prevent the business from being negatively impacted and to avoid penalties? Perhaps notifying the service level manager is appropriate here, or defining the steps to create an incident to track the compliance issue is appropriate.
  - If there are calls to other applications, the process continues with step 4.12.
- 4.11 Roll up into contract—The service level manager associates the agreement with the appropriate contract. If it is an OLA, it is associated with a contract for the IT organization. If it is an SLA for a particular customer or line of business, the agreement is associated to the contract defined for that customer. If it is a underpinning contract, then associate it with a contract created to represent the relationship between IT and the external vendor.
- 4.12 Calls to initiate actions in other applications—If the actions that have been defined make calls to other applications (such as Incident Management), the system will perform those steps when the milestone takes place.
  - This concludes the process for implementing agreements and service targets, and associating them with contracts. The process continues with Stage 2.



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