HP Service Manager

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For the supported Windows® and Linux® operating systems

Service Level Management help topics for printing

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Contents

Service Level Management overview

Service management best practices describe the goals for Service Level Management (SLM) as follows:

The goal for SLM is to maintain and improve IT Service quality, through a constant cycle of agreeing, monitoring and reporting upon IT Service achievements and instigation of actions to eradicate poor service – in line with business or cost justification. Through these methods, a better relationship between IT and its Customers can be developed.

HP Service Manager supports these goals by providing a service management best practices compliant application framework with a built-in workflow that incorporates service management best practices. The primary Service Level Management goal is to ensure the delivery of services within agreed Service Level Targets (SLTs), including the following:

- Availability of the Configuration Item, which includes planned and unplanned outages
- Response time, which tracks the amount of time it takes for the incident, service desk interaction, or change request to advance to the next state (For example, the amount of time required for an incident record status to change from Open to Work in Progress.)

Configuring Service Level Targets and the various types of service agreements are the tools that Service Level Management uses to accomplish these goals.

Availability

Availability describes the amount of time a Configuration Item (CI) is able to perform its role or function in the infrastructure. The usual metric for reporting availability is a percentage of time that the CI is in service during agreed hours. Service Level Management gathers availability data from change requests, change tasks, and incidents.

Service Level Management

You can use Service Level Management (SLM) to improve the quality of services that you provide to customers. You can also use Service Level Management to quantify the financial benefits in reduced incidents, outages, and time invested in system failures and downtime. Service Level Management collects performance information automatically to track service guarantees. Service Level Management enables you to achieve the following results:

- Ensure compliance with availability and response time targets set in the Service Level Agreements, Operational Level Agreements, and Underpinning Contracts.
- Report performance information to track the effectiveness of managed services

  Tip: You can view achievements by assignment group or by customer; overall Service Level Agreement achievement levels; or breaches by category, group, or priority.

- Detect and track failures of service goals
- Generate Service Level Agreement alerts for Change Management
- Quantify costs associated with planned and unplanned service outages

Note: Service Level Management uses the Service Level Targets (SLTs) data from other HP Service Manager applications. Before you configure Service Level Management, you must implement SLTs for the applicable applications.

Service Level Management drivers

The impetus for a robust Service Level Management system is the improvement in the quality of service, reduced number of incidents, and increased customer satisfaction. Over time, you can quantify the financial benefits in reduced incidents, outages, and time invested in system failures and downtime. The time and money recovered can be invested in improved customer relationships, more sophisticated monitoring, better training, and improved business efficiency.

The following Service Manager applications provide input to the Service Level Management process:

- Change Management (changes and change tasks)
- Incident Management (incidents and incident tasks)
- Problem Management (problems and problem tasks)
- Request Fulfillment (requests and request tasks)
- Service Desk (interactions)
- Items from the Service Catalog

The output of Service Level Management is data that drives incident queue prioritization, generates immediate response for breaches, and monitors the ongoing status.

Service agreements overview

Service agreements come in three types. A Service Level Agreement (SLA) describes the agreed level of service between service providers and customers. It defines service goals and responsibilities for Configuration Items (CIs). An SLA is an external document between the IT department and its customer. An Operational Level Agreement (OLA) is an internal document describing the level of service among the departments within an organization. An Underpinning Contract (UC) is an external document describing the level of service between an organization and a third-party vendor/supplier. While all agreements are equal, UCs and OLAs are created to support the implementation of an SLA.

These service agreements define the following aspects of service management:

- Availability, which describes the availability of a CI within a specified time frame.
- Response, which describes the performance targets.

Service agreements are monitored automatically to continuously recalculate availability and response metrics. HP Service Manager applications provide availability and response metrics to Service Level Management. For example, Service Level Management summarizes outage information from incidents and change requests to determine the performance of service guarantees for affected CIs.

Service Manager integrates service agreement support into Change Management (changes and tasks), Incident Management (incidents and tasks), Problem Management (problems and tasks), Request Fulfillment (requests and tasks) and Service Desk. Administrators can use these metrics to help prioritize incident resolution, schedule tasks, and escalate incidents when the service agreement is in jeopardy.

Why are service agreements important?

Service agreements manage performance tracking information and provide system feedback on service agreements among departments within a company. You can use this information to quantify the level of service you receive within your organization or with outside vendors/suppliers, and to determine if resources are available when you need them. It is important to know when an outage occurs so that the provider responds as agreed.

Service Level Management collects performance information automatically to track service targets. If you can detect the breach of a service target, it is easier to protect yourself from future occurrences and limit the economic impact.

Working with service agreements

There are several tasks that relate to service agreements:

- Accessing Service Level Agreements from other applications
- Assigning Service Level Targets to an application record
- Assigning a default SLA or OLA to a service desk interaction, incident, problem, request, or change
- Assigning an SLA to a contact or company
- Creating and updating an SLA
- Creating reports
- Creating dashboards
- Creating Operational Level Agreements
- Creating Underpinning Contracts
- Linking service contracts
- Monitoring availability and response performance
- Recalculating performance
- Tracking outages
- Working with clocks

Operational Level Agreements

Service guarantees exist between IT and other departments in the organization to track hardware or software asset availability and response performance. For example, the IT department might guarantee that a department server will be available 98% of the time and that 99% of the time IT will respond to an outage involving that device within one hour, or that a change will be complete by a specified time.

An Operational Level Agreement (OLA) is a service agreement that describes these guarantees, tracks compliance, and calculates the potential economic impact of outages within the organization. Most organizations use OLAs to:

- Focus on discrete performance metrics, such as hardware availability.
- Add metrics for service desk performance, technician response time, and customer satisfaction.
- Assess the economic impact of outages on the enterprise.
- Publish satisfaction statistics to the internal user community.

The OLA produces metrics through links to the contact records of all responsible personnel, including problem owners. An administrator must ensure that the contact records of all affected personnel have valid HP Service Manager IDs.

The out-of-box examples show how to define OLAs for internal services, such as Change Management or Problem Management.

Service Reviews

To ensure optimum service provisioning, it is imperative that you periodically review all service agreements and take appropriate corrective actions if needed. To achieve this, every agreement has fields to specify the Review Date of the agreement, the Next Service Review Date, and the frequency with which the service review should take place.

Generally, actual Service Level Agreements should be reviewed at least once per year with the signatories of the agreement. This is to ensure that the agreement is still valid, business requirements have not changed, or organization capabilities have note been extended or increased.

Additionally, service reviews, which are distinct from the agreement review, should occur more frequently. Service reviews are often held quarterly, and use quantifiable data to ensure that all agreements are fulfilled, whether between your organization and your customer (e.g. Service Level Agreements), within the various departments of your organization (e.g. Operational Level Agreements) or between your organization and a third party (e.g. Underpinning Contracts).

Service reviews produce the following two types of output:

- Service improvement plans (SIPs)
- Service quality plans (SQPs)

Service improvement plans are usually the result of regularly monthly meetings and are limited in scope. They usually describe short term fixes. In contrast, service quality plans are usually long term strategies to provide better service over months or years. For example, an organization may find that their employees require more comprehensive technical training, the results of which become apparent much later.

Note: SQPs and SIPs are stored in Service Manager as knowledge documents of the corresponding subcategory.

Service Level Agreement components

A Service Level Agreement (SLA) has few required fields. You must specify this information:

- Type that identifies an SLA as either a Service or Customer SLA
- Customer name
- Title (name) of the SLA
- Date when the SLA begins
- Date when the SLA expires

The optional information describes Service Level Targets, a linked contract (if applicable), and related agreements.

An SLA produces metrics through a link to a department or company record. An administrator must ensure that department records specify which SLA governs the department, and that company records specify which SLA governs the company.

Details tab

The **Details** tab is a repository for additional notes, a record of verbal agreements, or comments that relate to the Service Level Agreement.

Linked service contracts

You can create a connection between a Service Level Agreement (SLA) and a service contract. The SLA tracks response and availability objectives. The service contract tracks which services, such as service desk interactions or incidents, are consumed and which services remain.

Service contract information in an SLA is informational; however, it is important during the SLA selection process to populate information in an application record.

Link a service contract to a Service Level Agreement

Applies to User Roles:

System Administrator, Administrator

Service contracts describe the type of service available to a customer. You create a connection between a Service Level Agreement (SLA) and a service contract to track which services are used as part of the SLA.

To link a service contract to an SLA:

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record.
4. Click the **Service Contract** list and choose the service contract to link to the Service Level Agreement.
5. Click **Save**.
6. Click **OK**.

Service Level Agreement alerts

The Service Level Agreement (SLA) include the following three out-of-box alerts:

- SLA 50%
- SLA 75%
- SLA - Objective 30 minutes from expiration

These alerts trigger standard notifications when SLA deadlines approach a pre-defined threshold. Administrators can change these out-of-box settings or create new ones that apply your business rules to SLA alerts.

Alert levels

You can set alerts at these three alert levels:

- You can add or edit SLA alerts for a Service Level Target (SLT). Select the Service Criteria tab or Process Criteria tab of the SLT record and go to the Escalations section. Double-click an existing alert to edit the alert, or insert the cursor in an empty row to add an existing alert to the individual SLT.

- You can specify alerts in an SLM Integration record in the slamodulecontrol table. Click **Service Level Management** > **Administration** > **Configure Application**. Click **Search** to display a list of existing SLM Integration records.
- You can define alerts for all Service Targets in the SLA Control record. Double-click an existing alert to edit the alert, or click in an empty row to add an existing alert to all Service SLTs.

Standard alerts and Service Level Agreements

Standard alerts have components that enable you to reference Service Level Agreements (SLAs) if you create new alerts or modify out-of-box alerts.

Expression	References
$L.slo.expiration	Service Level Target (SLT) expiration date and time
$L.slo.name	SLT name
$L.slo.id	SLT unique identifier
$L.slo.condition	SLT condition
$L.slo.record.active	Active condition of the record
$L.slo.allowed	Amount of time until a breach occurs

Service Level Agreement performance and reporting

You can use HP Service Manager dashboards to gather service information, or use any standard report package to customize your reports. When using reporting, you can see achievements by assignment group or by customer; overall Service Level Agreement (SLA) achievement levels; or breaches by category, group, or priority.

Use the data that you gather to plan service improvements. For example, knowing which SLAs are breached more often than others enables you to identify the point of failure. If you can identify a pattern of response failure, such as time of day or day of the week, you can add coverage at critical points of failure, or implement other preventive measures that interrupt the failure pattern.

Tracking availability failures through reports can also show performance patterns, such as equipment failures, peak overload periods, or under-performing external vendors/suppliers.

Process metrics

Each service desk interaction, change request, incident, or problem record displays metric information when you enable the Service Level Agreement (SLA) component to work with these applications. Thereafter, each new service desk interaction, change request, incident, or problem record has an SLT section that identifies the related SLA and shows the Service Level Target (SLT) performance metrics.

The process information includes:

- Status
  - Achieved
  - Running
  - Breached
  - Suspended
  - Inactive
- SLT Name
- Agreement Name
- Agreement ID
- From
- To
- Expiration
- Total Elapsed Time

Response time data

Service Level Targets (SLTs) measure response time guarantees in the case of an outage. Service Level Management gathers the following information about response times from SLT records and stores it in the Service Level Agreement (SLA):

- Application name
- Initial state

- Final state

When you view the SLA, Service Level Management displays a complete list of all process and service SLTs and their current status. Service Level Management gathers response data from service desk interactions, change requests, change tasks, incidents, problems, problem tasks, requests and request tasks.

Service metrics

Service Level Management enables you to view Service Level Agreement (SLA) performance from an overall perspective and target individual devices and response types. Service Level Management collects different types of metrics:

- Overall performance of all SLAs by month and year.
- Availability of a resource for a specified time:
  - Availability of all SLAs by month and year
  - Availability of one SLA by year
  - Availability of components named in one SLA by month and year
  - Availability of a single device by year
  - Outage history of a single device by month and year

Each SLA displays the current status of its named Service Targets. You can view the status, required availability, current availability, and the next expiration date and time. Service Level Management gathers service metrics from change requests, tasks, and incidents.

Availability data

Service Level Targets (SLTs) measure Configuration Item (CI) availability, such as a server or an application. Service Level Management gathers the following information about availability from SLT records and stores it in the Service Level Agreement (SLA):

- Availability (uptime) objectives
- Affected CI

- Current performance
- Expiration date and time for the objective

When you view the SLA, Service Level Management displays a complete list of all availability and response SLTs and their current status. Service Level Management gathers availability data from change requests, tasks, and incidents.

Researching response and availability results

The slaresponse table contains summary records with response time information collected from sloresponse records. Includes the number of affected and breached records, mean, median, and standard deviation data.

The slamonthly table contains one record with a summary of monthly outage information for each Configuration Item (CI). You can trace the input data for each response or availability record whenever you view a record in the sloresponse or slamonthly table.

The slamonthlyag table contains one record with a summary of monthly outage information for each Service Level Agreement.

Recalculating Service Level Agreement data

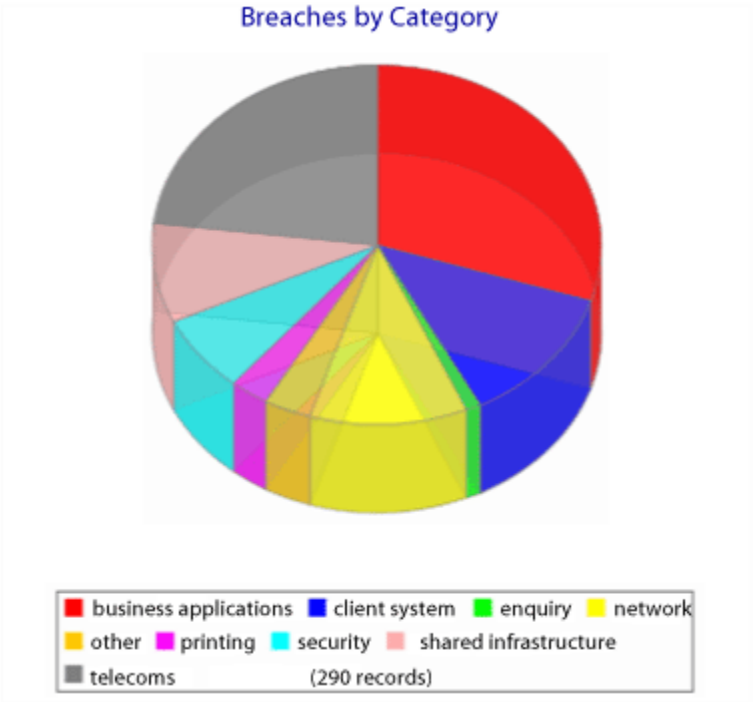
Service Level Management enables you to view Service Level Agreement (SLA) performance from an overall perspective, and targets individual devices and response types. The Regen SLM Partials function recalculates Service Level Management response and availability data for a specified month and year.

Service Level Agreement dashboards

You can display statistical metrics using a dashboard. For example, you can show the current status of incidents that contain Service Level Target (SLT) statistics:

- SLTs that meet expectations
- Breached SLTs
- SLTs pending expiration

You can filter the criteria to show categories, assignment groups, total loss of service, historical achievement, or any other relevant statistical information.



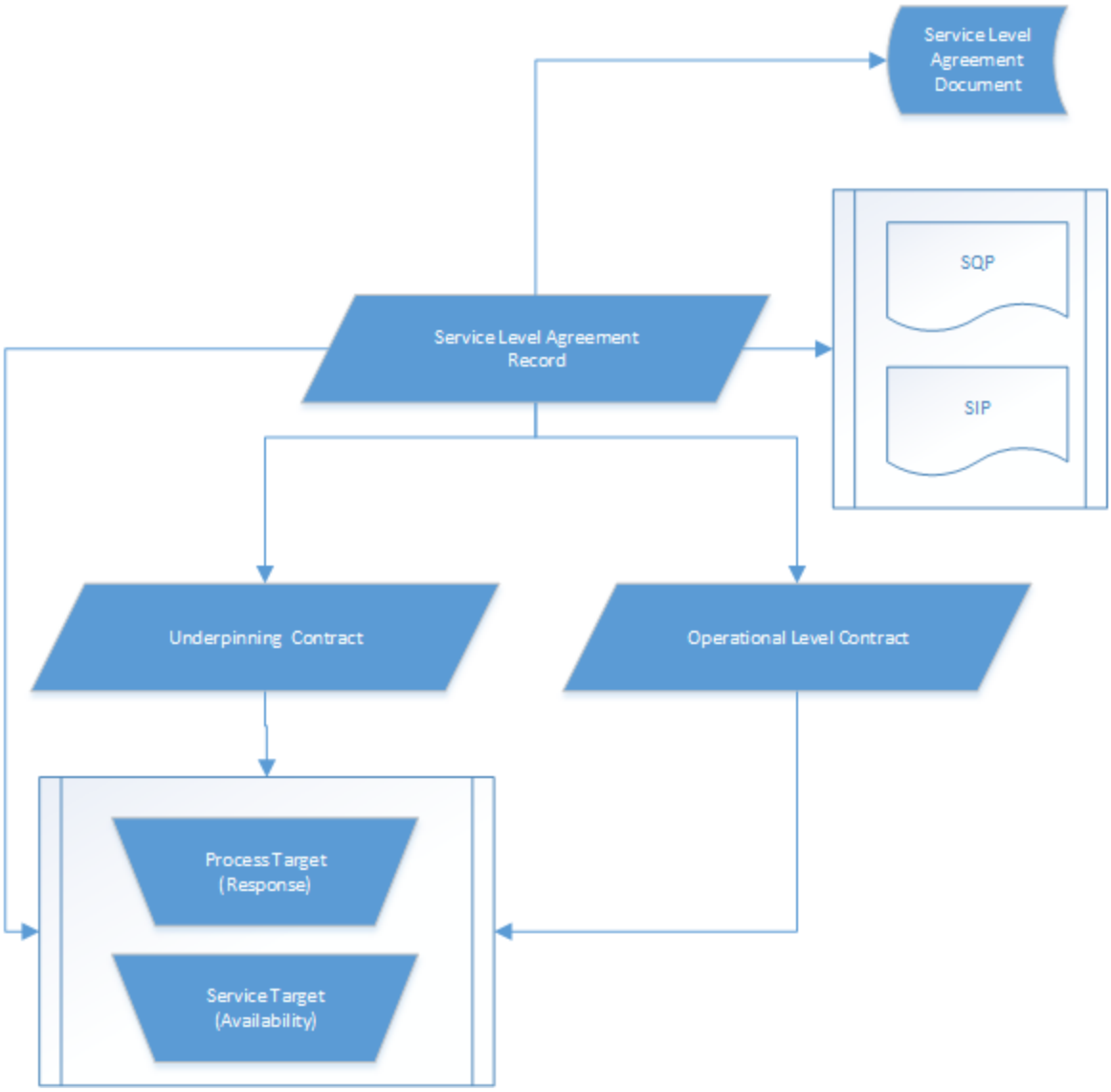
For customized reports, use any reporting package to design the report and specify which data appears in the report.

Service Level Agreement reports

Service Level Management produces metrics that you can view within summary records. For example, a Process Service Level Target (SLT) record displays a monthly performance summary. You can also create simple dashboards to display data visually. For customized reports, use any standard reporting package.

Structure of a service level agreement

The following diagram illustrates the relationship of the various components of Service Level Agreements (SLAs) in Service Manager:



In this diagram, the centerpiece is the Service Level Agreement record. The Service Level Agreement contains several components:

- The official Service Level Agreement document, which is usually a scanned and signed document held in the record as an attachment.
- Underpinning Agreements, which are the supporting agreements of the following types:
  - Underpinning Contract: An agreement between your organization and another party outside of your organization.
  - Operational Level Agreement: An agreement with another department of your organization (for example, an agreement between Level I and Level II Support).

- Specific Service Level Targets to measure response and availability.
- Service agreement start and end dates.
- The date of the last review, the date of the next review, and the frequency with which that review should occur.
- For Service Level Requirements (SLRs, which become Service Level Agreements after the review stage) of the “Service” type, an additional tab for Subscriptions appears. This allows you to see what individuals have subscribed to the SLA.

Note: OLAs and UCs follow the same structure, except that those agreements do not have underpinning agreements.

Response time

Response time in HP Service Manager measures whether or not the status of an incident, service desk interaction, or change request advances to the next state within the amount of time specified in the Service Level Agreement (SLA). For example, response time specifies how soon work is assigned after the initial incident report, or how soon an incident must be resolved. If the time specified in the SLA elapses without a change in status, the SLA is breached.

Service Level Targets

Service Level Targets (SLTs) are the goals that you set for response time and availability. Some SLTs define the expectations between customers and the IT organization. For example, the email server must be available 99.9% of all business hours. Other targets fall under the domain of Operational Level Agreements (OLAs) that define expectations among various internal support teams, such as Level I and Level II support.

Process targets set goals for service desk interactions, incidents, change requests, and problems. They define the amount of time required to move the record from one state to another. For example, the status of an incident must change from *Open* to *Work in progress* within 3 hours.

Service targets define the percentage of availability during a month, or the maximum amount of time for a single outage. For example, an email server must be available 99.999% of the time during normal work hours.

Service Level Target catalog

The first step to implement Service Level Management is to create a catalog of pre-defined response and availability service goals called Service Level Targets (SLTs). The catalog contains SLT templates that you can apply to any Service Level Agreement (SLA).

SLT catalog records always contain the SLT name and SLT type (process or service), and may include the following information:

- Configuration Item
- Service and status
- Schedule
- Availability
- Escalations
- Text description

The process to define SLT templates is separate from the process to define a service agreement. Service Level Management stores all SLT templates in the slocatalog table. When you create or edit a service agreement, you can add SLTs from the template catalog, customize them, or you can define new ones.

Application integration

Service Level Management integrates with Change Management (requests and tasks), Incident Management, Problem Management (problems and tasks), Request Fulfillment and Service Desk. This integration enables Service Level Management to collect metric information automatically and monitor the performance of associated service agreements.

HP Service Manager has an out-of-box configuration record in the **slamodulecontrol** table for each application. You can modify these records instead of creating new records.

You can disable Service Level Management by clearing the **Enable SLM in this Application** option.

Linking application records to service agreements

When you enable an application to work with Service Level Management and you create new service desk interactions, incidents, problems, requests, service catalog items, or change records, you can link the application record to a service agreement in the following ways:

- **Customer SLA**

  HP Service Manager automatically assigns a department or company SLA as the Customer SLA to the application record if it exists. This would be an SLA defined for the contact's department or company.

- **Service SLA**

  The SLA for the contact's subscription to a Configuration Item (CI). This is true only if the application record references a Business Service, the contact has a subscription to the service, and the subscription references an SLA.

- **Default SLA**

  If there is no SLA but there is a default SLA specified in the SLA control record, Service Manager automatically assigns the default SLA to the application record.

Calculating response time

HP Service Manager calculates response time with the **sla.state.change** application. To measure response time for an application event, Service Manager uses the out-of-box (or customized) **slamodulecontrol** record for the external application. In addition, the administrator must ensure that the application record has fields that are referenced by the **sla.state.change** application, such as:

- sla.breach
- next.breach
- logical.name.vj.duration
- logical.name.vj.sloavail

For example, to enable process metrics for a module, an administrator must add the **sla**.**breach**, **next.breach**, **logical.name.vj.duration**, and **logical.name.vj.sloavail** fields to the record table before

SLM can be configured for the module. Most of the major tables (probsummary, request, etc) that can use SLM already contain these fields out of box.

Example: Enabling Service Level Agreement alerts

The following example shows you how to generate response Service Level Targets (SLTs) for Change Management requests and to generate alerts for SLTs. At the end of this example, you will be able to complete the following tasks:

- Create a Service Level Agreement (SLA)
- Add a Service Level Target (SLT)

Note: To enable Service Level Agreement alerts for Change Management, you must perform the entire sequence of example tasks. You must be a System Administrator, or have equivalent system privileges, to perform tasks 1 through 7.

Task 1: Ensure the background processes are running

1. Click **Menu Navigation** > **System Status**.
2. If the processes are not running, click **Start Scheduler**.
3. In the **Name** field, double-click **startup** to start all the background processes.

Task 2: Enable the SLM application

1. Click **Service Level Management** > **Administration** > **Edit Control Record**.
2. Select **Enable SLM Application**.
3. Click **Save**.
4. Log off Service Manager, and then log back on for the changes to take effect.

Task 3: Configure Change Management

1. Click **Service Level Management** > **Administration** > **Configure Application**.
2. In the **Table Name** field, type `cm3r`, and then click **Search**.

The SLA module control form for cm3r opens.

3. Select **Run in Foreground**.
4. Click **Save**.
5. Click **OK**.

Task 4: Create an SLA

1. Click **Service Level Management** > **Agreements** > **New Agreement**.
2. Click **Service Level Requirement**.
3. In the **Type** field, select the contract type **Customer**.
4. In the **Customer** field, select a customer name from the list of records.
5. In the **Title** field, type `SLA for change requests`.
6. In the **Effective From** field, choose today's date in the calendar options for the SLA start date.
7. In the **Expiration Date** field, choose a date one year from today in the calendar options for the SLA end date.
8. Add an optional **Description** for the new SLA.
9. Click **Save** or **Save & Exit**.

   You receive a message that states the service level agreement has been added. Service Level Management assigns an Agreement ID number to the record. Make note of the new agreement ID.
10. Log off Service Manager, and then log back on to see that the new SLA is available in the selection lists.

Task 5: Add an SLT

Note: You can add a service level target immediately after you add a service level agreement, or you can add it later.

1. Click **Service Level Management** > **Agreements** > **New Agreement**.
2. Type the **Agreement ID**, and then click **Search**.

   The SLA record opens.
3. In the **Process** tab, click **Add SLT**.
4. In the **Service Area** field, select **Change Requests**, and then click **Next**.
5. Fill in the following fields to add the SLT. Make sure you click **Next**, as required.

Field	Value
SLT Name	**Response SLT for change requests**
Description	Add an (optional) description.
Schedule	**standard**
Priority	**1-Critical**
Category	**Default**
Initial State	**Registration and Categorization**
Final State	**Closure**
Duration Type	**Interval**
Duration	The format should be DDD HH:MM where DDD is the number of days, HH is the number of hours, and MM is the number of minutes. Type `00 01:00`
Alerts	Click **Fill**, and then select **SLA-50%** from the list of records.

6. Click **Finish**.

   You receive a message that states a record has been added to Process Target. Make sure the record is displayed in the **Process** tab.
7. Click **OK**.
8. Log out, and then log in again for your changes to take effect.

Task 6: Select the SLA definition for an ESS user

1. Click **System Administration** > **Base System Configuration** > **Contacts**.
2. In the **Contact Name** field, type the user's name, and then click **Search**.

   The user record opens.
3. Place your cursor in the **Dept Name** field, and then click **Find**.

   The department data form opens.
4. In the SLA field, select an SLA definition. For this example, select **SLA for change requests**.
5. Click **Save**.
6. Click **OK**.

Task 7: Service Desk Agent creates a change from a user interaction

As a Service Desk Agent, you can escalate an interaction to a change record that is linked to the interaction.

To create a change request from a user interaction, follow these steps:

1. Click **Service Desk** > **Interaction Queue** or select **Interaction** from your To Do queue.
2. From the record list, double-click the Open-Idle interaction that you want to escalate to a change.
3. Click **Fill** for the Category field.
4. Double-click **Request for Change** and select the subarea.
5. Click **Escalate**. The Escalation Details wizard appears.
6. Click the list fields to select the Location, Assignment, and Requested End Date for the change.

   Note: A Change Coordinator is automatically assigned based on your selections.
7. Click **Finish**. A notification message with the change number displays above the interaction detail fields and the Service Desk application notifies the original end user of the actions taken.
8. Click **OK**.

Task 8: Change Coordinator goes to the change queue to review the upcoming alerts

After the Service Desk Agent escalates an interaction to a change, the change request moves to the Change Review phase. The Change Coordinator can then review the change request.

The Change Coordinator reviews the SLA and the Response SLT associated with the change. For this example, the duration was 1 hour, and the alert was 50%. The alert is 30 minutes from the time displayed on the Open Time in the **History** section.

1. Click **Change Management** > **Changes** > **Change Queue**.
2. From your To Do queue, select **Change** from the Queue list and **My Open Changes** from the View list.
3. Expand **Phase: Change Review** from the record list, and then click the change request to review it. Determine if it is complete and verify that the change is assigned to the correct support group. If more information is needed or the support group is incorrect, send the request back to the Service Desk Agent.
4. Open the **SLT** section. The new SLA definition is displayed.
5. Select the **Upcoming Alerts** subsection in the **SLT** section. the listed alert should be 30 minutes from the time displayed in Open Time, in the **History** section.

   The duration was one hour and the alert was 50%.

Access Service Level Agreements from Configuration Management

User roles: Coordinator [Configuration Management], System Administrator

You can access Service Level Agreements (SLAs) from Configuration Management in order to view an SLA and the details of its associated Process Targets. If you have System Administrator rights, you can also modify or add SLAs.

To access SLAs from Configuration Management, follow these steps:

1. Click **Configuration Management** > **Resources** > **Agreement Information**.
2. Add optional search criteria, and then click **Search** to generate a record list.
3. Click a record to view it in the Agreement form.

Defining Service Level Targets

You can define two types of Service Level Targets (SLTs) in HP Service Manager. They are process targets (response) and service targets (availability) .

You can add targets in two ways. You can select an existing SLT Catalog template with a pre-defined target, or you can define a customized target that meets the requirements of the individual Service Level Agreement (SLA).

When you create a new SLA, you can access the SLT catalog and select one or more existing template targets that support the SLA. If the existing SLT templates do not meet your requirements, then you can create a customized SLT.

Service Level Target duration types

The types of durations that you can assign to Service Level Targets (SLTs) are as follows:

- **Interval**: The interval identifies a span of time in days or hours. Specify the number of days and hours when the SLT must be met in this format: *ddd hh:mm:ss*.
- **Calculation**: A calculated interval can specify a business checkpoint. For example, Service Level Management has two out-of-box calculated intervals.
  - The End of Business Day is a calculation that depends on the work schedule definition of a typical business day. For one organization, it might be 8:00 a.m. – 5:00 p.m. For another organization, it might be 6:00 a.m. – 10:00 p.m.

    Note: You can time after which any records received are extended until the next day. For example, if business hours at 6:00 PM, you may want to specify that any new records received after 4:00 PM can be resolved the next day.

  - The End of the Business Week is another calculation. For example, the End of the Business Week might be Friday, Saturday, or Sunday.

    Note: You can time after which any records received are extended until the next week. For example, you may want to specify that any new records received after 4:00 PM on Friday can be resolved the next Monday.

- **Duration in Record**: When this option is selected, the system will use the amount of time for the SLT

based on the amount of time (duration) that is specified in the record. Also, when this option is selected, a field appears (**Field in Record**) that prompts the user to enter a valid name in the record where the duration is being referenced.

Note: In addition to simple fixed intervals, this option can support flexible intervals that are calculated from record fields. For example, calculations can be executed using a ruleSet from the workflow.

Service Targets

Service Targets monitor the availability of a Business Service or Configuration Item (CI), such as a service, application, hardware, software, or other infrastructure component. SLTs report any change to the availability of the CI in change requests, changes, tasks, and incidents.

Service Targets require the following information. You can use the SLT wizard or type required information directly into the form.

Field	Content	Comments
Service Level Target ID	Numeric value	Automatically assigned by Service Level Management.
Agreement ID	SLA name	Name of an existing SLA. Required.
Name	Service Target name	Descriptive name for the objective. for example, 95% Availability. Required.
Owner	SLT owner	Optional.
Affected CI	The Configuration Item (CI) related to this objective	Required.
Required Uptime (%)	0.0 – 100.0	Express as a decimal value. Do not use the percentage sign (%). **Required Uptime(%)** or **Max Outage Duration** is required.
Max Outage Duration	Number of days, hours, minutes, and seconds for a deadline (*ddd hh:mm:ss*)	The acceptable amount of time for an outage. **Required Uptime(%)** or **Max Outage Duration** is required.
Schedule	A pre-defined work schedule	Limits availability monitoring to the hours specified by the work schedule. Optional.

Field	Content	Comments
Time Zone	Time zone name	Select the time zone for the work schedule, the CI, or other related component. Optional.
Alerts	Alerts related to the remaining time on the Service Target	Select the out-of-box alerts for 50%, 75%, and 30 minutes until the SLT expires, or create your own. Optional.

Note:

- You can define global alerts for all SLAs, instead of individual SLTs, in the SLA Control record.
- The **Description** describes additional information about customer expectations or the internal requirements of an Operational Level Agreement.
- The **History** tab for an availability SLT record shows the target and actual availability of the CI on a monthly basis.

Process Targets

A Process Target is a rule that describes the maximum amount of time allowable for a response to a business event. For example, if you report a priority 1 incident during business hours, work should be assigned within 15 minutes and a resolution should occur within an hour. A similar rule would be if you make a self-service request, it should be resolved or linked to an incident record within an hour.

Process Target rules contain the following information. You can use the SLT wizard or type required information directly into the form.

Field	Content	Comments
Service Level Target ID	Numeric value	Automatically assigned by Service Level Management.
Agreement ID	SLA name	Name of an existing SLA. Required.
Name	Process Target name	Descriptive name for the target. For example, One hour response. Required.

Field	Content	Comments
Condition	A status or condition value	Service Level Management uses the condition to determine if the SLT applies to the application record. If you use the SLT wizard, choosing filter criteria generates the condition in this field. For example, if the only filtering criteria selected is Severity 1, the SLT applies only to Severity 1 incidents. This expression is the value in the condition field: severity.code in $L.file="1" This expression must be written by using RAD. The criteria list changes depending on the application for service desk interactions, change requests, change tasks, incidents, problems, problem tasks, requests or request tasks. Optional.
Service Area	Application related to the SLT	For example, if you want to apply the response SLT to Change Management, choose Change Requests or Change Tasks. Required.
Initial State	A status or phase value (depending on module configuration)	The initial state when Service Level Management begins measuring the response time. The list changes depending on the application and whether phases are used, such as Request for Change phases. Required.
Final State	A status or phase value (depending on module configuration)	The final state when Service Level Management stops measuring the response time. The list changes depending on the application and whether phases are used, such as Request for Change phases. Required.
Duration Type	Interval is a span of time.	The format is: *ddd hh:mm:ss*, For example, type **3:00** for 3 hours or **3** for 3 days. Required.
	Calculation specifies a checkpoint that supports your normal business operations	For example, choose **End of Business Day** or **End of Business Week**. Required.
Schedule	Shift information	Choose a pre-defined work schedule. If you omit a pre-defined shift, Service Level Management defaults to a 24 x 7 schedule. Optional.

Field	Content	Comments
Time Zone	Choose: Server time zone Technician time zone Customer time zone CI time zone Specific time zone	The response metric depends on the time zone selected. Optional.
Holiday Group	Drop-down list of holiday groups	By default, the response SLT record uses the holiday group defined in the work schedule when calculating an interval. An administrator may select a holiday group independently of the work schedule. If the administrator selects a value from the holiday group drop-down, this value overrides the holiday group value in the work schedule.
JavaScript	Simple to complex JavaScript used to determine the values for work schedule, holiday group, and time zone	Any values set in the JavaScript field override the values that are set in the corresponding holiday group, time zone, or work schedule. **Note:** The best practice is to call a ScriptLibrary record from the JavaScript field rather than to enter the JavaScript directly in the field.
Alerts	Alerts related to the remaining time on the SLT	Select the out-of-box alerts for 50%, 75%, and 30 minutes until the SLT expires, or create your own. Optional.
Suspend Processing	Suspension states	Click **Fill** on a blank row to view a list of states. The list changes depending on the application and whether phases are used, such as Request for Change phases. Optional.

Note:

- You can define global alerts for all SLAs, instead of individual SLTs, in the SLA Control record.
- The **Description** provides additional information about customer expectations or the internal requirements of an Operational Level Agreement.
- The **History** tab for a response SLT record shows the percentage of time that the objective was met and number of breaches on a monthly basis.

Define scheduling information for Process Targets

System administrators can customize the values for work schedule, holiday group, and time zone in a Process Target record. By default, the Process Targets record uses the holiday group defined in the work schedule when calculating an interval. An administrator can select a value for the holiday group independently of the work schedule. When the administrator selects a value for the holiday group, it overrides the holiday group value in the work schedule.

In addition to the holiday group field, a JavaScript field is available for the administrator to use simple to complex JavaScript to determine the values for work schedule, holiday group, and time zone. Any values set in the JavaScript field override the values that are set in the corresponding holiday group, time zone, or work schedule fields.

Note: The best practice is to call a ScriptLibrary record rather than enter the JavaScript directly in the field.

Alert records (file: AlertDef) also leverage the ability to define a holiday group independently of the work schedule. The alert UI has a holiday group field that allows an administrator to select a holiday group. By default, the alert records associated with the Process Target record should use the value $L.holiday in the **Holiday Group** field.The variable, $L.holiday, evaluates to the value of the holiday group in the parent Process Target record.

Sample JavaScript

Create a ScriptLibrary called SLOScheduleInformation with a function called calculateSLOScheduleInformation. This script library can be called from the SLT Javascript field with the code:

```
system.library.SLOScheduleInformation.calculateSLOScheduleInformation();
```

This code modifies `$L.calendar`, `$L.time.zone`, and `$L.holiday` as needed to calculate the correct work schedule, time zone, and holiday group. An example of this code looks like this:

```
function calculateSLOScheduleInformation()
{
	var timeZone = getTimeZoneFromIncident(vars.$L_file);
	var holidayGroup = getHolidayGroupFromTimeZone(timeZone);
	var calendar = getDutyTableFromTimeZoneAndCurrentTime (timeZone,
system.functions.tod());
	vars.$L_calendar=calendar;
	vars.$L.holiday=holidayGroup;
	vars.$L_time.zone=timeZone;
}
function getTimeZoneFromIncident( fIncident )
```

```
{
	//business logic
}
function getHolidayGroupFromTimeZone( timeZone )
{
	//business logic
}
function getDutyTableFromTimeZoneAndCurrentTime( timeZone, currentTime )
{
	//business logic
}
```

Outages

An outage is a temporary loss of service of a Configuration Item. It can be the result of planned maintenance or operational failure.

Outage classes

Outages fall into different classifications:

- Planned (and approved) outages
- Degraded service
  - Partial loss of service
  - Slow response time
  - Intermittent interruptions
- Total loss of service

Availability criteria should specify what the maximum outage threshold is on a monthly basis. For example, you can choose a metric based on the required percentage of up time, or the maximum time allowed for an outage, when you define an availability Service Level Target.

Planned outages

A planned outage is usually the result of a routine maintenance schedule, upgrade action, or faulty equipment replacement. Incidents, change requests, and change tasks can generate outage records. The change request and task records show scheduled downtime. Incident, change request, and change task records have a checkbox to specify if the Configuration Item is out of service.

Note: Some planned outages may fall within pre-defined service windows when the outage does not count against availability metrics.

Automatic outage posting

When you enable Service Level Management to integrate SLA information with other applications, you can configure automatic outage posting to ensure that Service Level Management automatically records when an outage begins and when it ends for the affected Configuration Item.

When you configure an application integration record in the **slamodulecontrol** table, complete the **Service Target Information** section to capture outage data.

If you omit automatic outage posting, HP Service Manager displays the outage start and end times and requests confirmation when you close the application record.

Outage spreading

Although a Service Level Target describes a single Configuration Item (CI), the availability of one CI may also affect the availability of other CIs. For example, if a web server has an outage, the corporate web site also experiences an outage, even though it has no defects. Outage spreading captures data about the related CIs affected by an outage.

An slamodulecontrol application integration record has two settings to configure outage spreading. Select **Spread Outages** to enable outage spreading. When you choose this setting,
Service Level Management displays the **Extend outage spreading to more than one level?** checkbox.

Outage posting in other applications

Service Level Management tracks Configuration Item outages related to incidents, changes, and change tasks. There are two ways to post the outage information:

- If you select **Auto Post Outage Information** in the slamodulecontrol record for an application, Service Level Management automatically uses the time when you open the incident as the outage start and the time when you close the incident as the outage end time.
- If you do not select **Auto Post Outage Information** in the slamodulecontrol record for the probsummary file, Service Level Management displays an Outage Confirmation dialog box when you close the record. The open and close time for the incident is the default start and end time for the outage. You can change the outage start time or the outage end time before you close the record.

Example: Configure and verify planned outages

A planned outage is usually the result of a routine maintenance schedule, upgrade action, or faulty equipment replacement. Incidents, change requests, and change tasks can generate outage records. The change request and task records show scheduled downtime. Incident, change request, and change task records have a checkbox to specify if the Configuration Item is out of service. The following example shows an interaction record that is escalated to an incident record. Once the Service Level Agreement application is enabled and configured to spread outages, the System Down field is checked for the down Configuration Items (CIs). The incident record contains the outage details with outage start and end times.

- For information on ensuring the background processes are running, see the related topics.
- For information on enabling the Service Level Management application, see the related topics.

At the end of this example, you will be able to:

- Configure the Service Level Management application (Task 1)
- Set the outage dependency counters in Configuration Management (Task 2)
- Create an interaction record and escalate it to an incident record (Tasks 3 and 4)
- Verify planned outages, including showing that the Configuration Items (CIs) are down (Tasks 5 and 6)

Task 1: Configure the Service Level Management application.

1. Log on as a System Administrator.
2. Click **Service Level Management** > **Administration** > **Configure Application**.

The SLM Integration Information record opens.

3. In the Table Name field, type **probsummary**, and then click **Search**.

   The SLM module control form for probsummary opens.

4. Go to the **Service Target Information** section of the form.

5. Select the following options:
   - **Spread Outages**
   - **Extend outage spreading to more than one level?**

6. Click **Save**.

7. Click **OK**.

Task 2: Set the outage dependency counters in Configuration Item (CI) relationships.

Set the outage dependency counter for:

- **adv-nam-switch**
- **adv-nam-router**
- **adv-nam-modem**

1. Click **Configuration Management** > **Resources** > **Configuration Item Relationships**.

2. Click **Search**.

3. Select the **adv-nam-switch** CI relationship to set the outage dependency.
   a. Go to the **Outage Dependency** section of the form.

   b. Select the **Outage Dependency** option.

   c. Set the counter to **3** for **This Configuration Item will be considered down if ___ or more of the supporting configuration items are down.**

d. Click **Save**.

e. Click **OK**.

4. Click **Search**.

5. Select the **adv-nam-router** CI relationship to set the outage dependency.
   a. Go to the **Outage Dependency** section of the form.

   b. Select the **Outage Dependency** option.

   c. Set the counter to **1** for **This Configuration Item will be considered down if ___ or more of the supporting configuration items are down.**

   d. Click **Save**.

   e. Click **OK**.

6. Click **Search**.

7. Select the **adv-nam-modem** CI relationship to set the outage dependency.
   a. Go to the **Outage Dependency** section of the form.

   b. Select the **Outage Dependency** option.

   c. Set the counter to **1** for **This Configuration Item will be considered down if ___ or more of the supporting configuration items are down.**

   d. Click **Save**.

   e. Click **OK**.

8. Verify that the System Down field is unchecked in the adv-nam-modem CI record.
   a. Click **Configuration Management** > **Resources** > **CI Queue**.

   b. Click **Search**.

   c. Type **adv-nam-modem** in the CI Name field of the search form, and then click **Search**.

   d. Verify the **System Down** option is unchecked.

   e. Click **Save**.

   f. Click **OK**.

9. Log off Service Manager, and then log back on to Service Manager, for the changes to take effect.

Task 3: Create an interaction and incident for CI adv-nam-switch-hr.

1. Log on as a self-service user and submit an interaction request.
2. Log on as a Service Desk Agent and bring up the interaction request submitted by the self-service user.
3. Click **Service Desk** > **Interaction Queue**.

On the **To Do** queue, select the following:

- **Interactions** in the Queue field
- **Self-Service Interactions** in the View field
- Fill in the following information:

Field	Value
Assignment Group	Network
Service	Intranet/Internet (North America)
Manually enter CI	adv-nam-switch-hr
Category	Incident
Area	Hardware
Subarea	Hardware failure
Impact	1

- Click **Escalate**.
- On the Escalation Details screen, do the following:
  a. Select **advantage/Africa** in the Location field.
  b. Fill in the rest of the required fields.
  c. Click **Submit**.

An Incident record is opened.

Note: If there is already an incident record related to this CI, click **Create New Incident**.

- Log out of Service Manager.

Task 4: Create a separate interaction and incident for CI adv-nam-switch-mar.

1. Log on as a self-service user to submit an interaction request.
2. Log on as a Service Desk Agent and bring up the interaction request submitted by the self-service user.
3. Click **Service Desk** > **Interaction Queue**.
4. On the **To Do** queue, select the following:
   - **Interactions** in the Queue field
   - **Self-Service Interactions** in the View field
5. Fill in the following information:

Field	Value
Assignment Group	Network
Service	Intranet/Internet (North America)
Manually enter CI	adv-nam-switch-mar
Category	Incident
Area	Hardware
Subarea	Hardware failure
Impact	1

6. Click **Escalate**.
7. On the Escalation Details screen, do the following:
   a. Select **advantage/Africa** in the Location field.
   b. Fill in the rest of the required fields.

c. Click **Submit**.

An Incident record is opened.

Note: If there is already an incident record related to this CI, click **Create New Incident**.

8. Log out of Service Manager.

Task 5: Verify "System Down" is checked for CIs selected on incidents opened earlier.

1. Log on as a System Administrator.
2. Click **Configuration Management** > **Resources** > **Search CIs**.
3. Type **adv-nam-modem** in the CI Name field, and then click **Search**.
4. Select the CIs selected on the records opened previously, as well as the CIs "adv-nam-switch," "adv-nam-router," and "adv-nam-modem". These CIs appear in red.
5. Verify that each of the CIs has the "System Down" checkbox selected.
6. Click **Cancel** and **Back** until you get back to the main menu.

Task 6: See outage details with confirmation for the outage start and end times.

1. Log on as a System Administrator.
2. Click **Incident Management** > **Search Incidents**.
3. Type an incident record ID number in the Incident ID field, and then click **Search**.

   The incident record opens.
4. Click **Fill** in the Closure Code field to select an applicable closure code.
5. Type a solution in the Solution field.
6. Click **Close Incident**.

7. In the Confirm Outage Information form, update or accept the specified outage start and end times, and then click **OK**.

   The status of the incident record is updated to Closed.

8. Click **OK**.

Service Level Management data

Service Level Management contains Service Agreements and Service Contract functionality. Each of these functions requires many supporting tables to manage information about:

- SLAs
- Service Level Targets
- Service Contracts
- Parts detail
- Labor detail
- Currency

Service agreement tables and applications

Service agreements use several tables to store and manage data.

To view a table, use the Database Manager utility (**Tailoring** > **Database Manager**) or the Database dictionary (**Tailoring** > **Database Dictionary**).

Table name	Description	Comments
outage	Contains one record for each planned or unplanned outage. These records may be merged together, linked to outageevent records, or they can be split or deleted when Service Level Management recalculates an outage event.	

Table name	Description	Comments
outagedetail	Contains one record for each outage and includes downtime information.	
outageevent	Contains one record for each planned or unplanned outage.	
sla	Contains one record for each service agreement (SLA, OLA, or UC).	
slaactive	Contains one slaactive record for each enabled application record that has an associated service agreement. Slaactive records contain response time and Service Level Target information. Each record includes the current state and time, and an array of past state changes and times.	
slacontrol	Contains only one record with settings that enable the Service Level Management application, check or override service hours, specify the default SLM, and identify standard availability alerts.	There are no default values; you must edit the record to enable any feature or setting.
slamodulecontrol	Contains one out-of-box record for each HP Service Manager application that can integrate with Service Level Management.	Records in the table do not automatically enable application integration. You must select or clear the **Enable SLMs in this application** checkbox in each record to enable or disable SLM integration with each Service Manager application.
slamonthly	Contains a summary of monthly outage information for affected Configuration Items.	
slamonthlyag	Contains one record for each SLM with a summary of monthly response information.	
slaprofile	Contains one record for each user profile.	

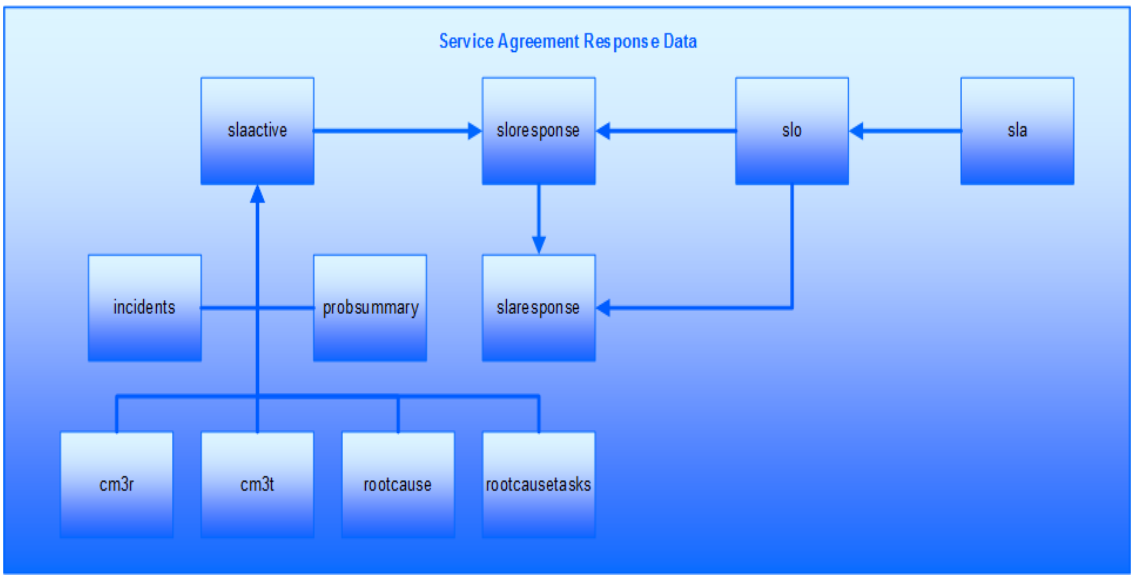
Table name	Description	Comments
slaresponse	Contains records with response time information collected from sloresponse records. Includes the number of affected and breached records, mean, median, and standard deviation data.	
slo	Contains one record for each response time Service Level Target (SLT). Each record contains an agreement.id field that identifies the parent service agreement.	
sloavail	Contains one record for each Service Target. Each record contains the agreement.id field that identifies the parent service agreement.	
slocatalog	Contains one record for each Process Target or Service Target.	
sloresponse	Contains one record for each enabled application record that has an associated SLT. Sloresponse records describe response time metrics, including a breach flag for missed targets.	One application record can have multiple associated sloresponse records that display as a virtual join in the application record.

Service agreement response data

Service Level Management captures Service agreement (Service Level Agreement, Operational Level Agreement, Underpinning Contract) information from application records, such as problems or service desk interaction records. The responses are summarized in the slaresponse table.

- Integrated applications:
  - The slaactive table contains one record for each application record that has an associated service agreeement.
- Service agreement and SLT information:
  - The sla table contains one record for each service agreement.
  - The slo table contains one record for each Process Target. Each record contains an agreement.id field that identifies the parent service agreement.

- Summary information:
  - The sloresponse table contains one record for each enabled application record that has an associated SLT. Sloresponse records describe response time metrics, including a breach flag for missed objectives.
  - The slaresponse table contains summary records with response time information collected from sloresponse records. Includes the number of affected and breached records, mean, median, and standard deviation data.

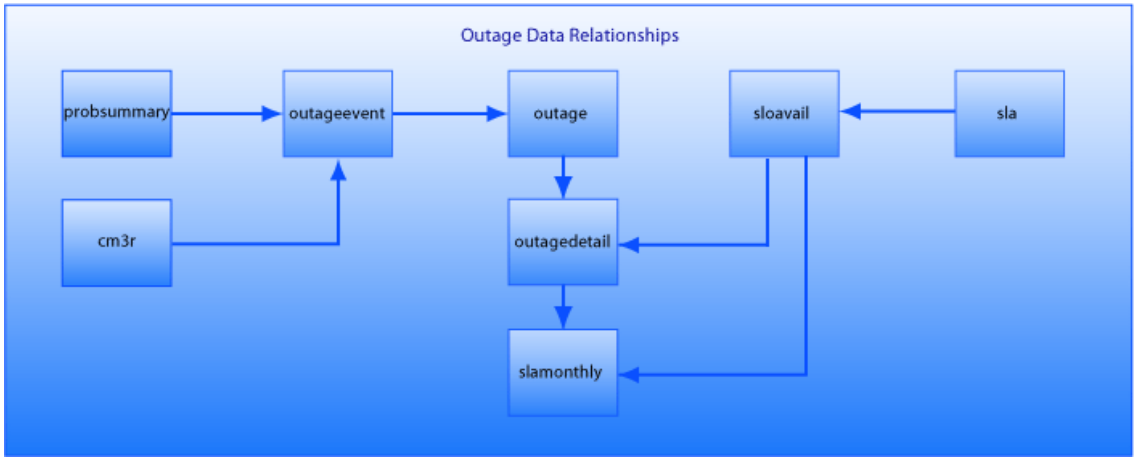


Service agreement outage relationships

Service Level Management captures outage information and Service Level Target (SLT) information, which produces an outage summary for each Configuration Item (CI).

- Outage information:
  - The outageevent table contains one record for each planned or unplanned outage.
  - The outage table contains one record for each planned or unplanned outage. These records may be merged together, linked to outageevent records, or they can be split or deleted when Service Level Management recalculates an outage event.

- SLT information:
  - The sla table contains one record for each Service Level Agreement (SLA).
  - The sloavail table contains one record for each availability SLT. Each sloavail record contains an agreement.id field that identifies the parent SLA.
- Summary information:
  - The outagedetail table contains one record for each outage and includes downtime information.
  - The slamonthly table contains a summary of monthly outage information for affected Configuration Items.



Service Contract tables

Service Contracts use several tables to store and manage data.

To view a table, use the Database Manager utility (**Tailoring** > **Database Manager**) or the Database dictionary (**Tailoring** > **Database Dictionary**).

Table name	Description	Comments
cmlabor	Contains detail data about the labor performed.	
cmparts	Contains detail data about the parts used.	

Table name	Description	Comments
contract	Contains contract data.	Contains software, lease, support, warranty, and maintenance contracts.
contractcategory	Defines the type of contract.	
contractdecide		
contractexpense	Contains expense information.	
contractitem	Defines expense allocation by item.	
contractlease	Contains lease contract data.	
contractmaintenance	Contains maintenance contract data.	
contractsoftware	Contains software contract data.	
contractsupport	Contains support contract data.	
contracttemplate	Defines contract templates for different types of contracts.	
contractterms	Defines payment terms.	
contractwarranty	Contains warranty contract data.	
curconvert	Contains one record with the exchange rate from one monetary unit to another.	For example, one record that describes the exchange rate of one USD to one other monetary unit. In this case, for 185 monetary units, there would be 186 records.
currency	Contains one record for each monetary unit by international currency code.	For example, EUR (Euro) or USD (US dollar).

Table name	Description	Comments
expline	Contains expense line data.	
payment	Contains payment data.	

Expense line records

An expense line record is an itemized accounting of expenses incurred by the provider while servicing a contract. Expense line records are generated by Service Level Management as services are rendered. Service Level Management automatically calculates the money spent for each part or service in the currency of the contract.

Currency conversion records

Service Level Management has a currency conversion utility for Service Contracts that automatically converts national currencies, depending on exchange rates at the time the contract is granted. You can enter daily exchange rates into the curconvert table to ensure accurate rate conversions. Service Level Management is compliant with European Union currency regulations, and has out-of-box records pre-defined with the fixed inter-European exchange rates.

Currency definition records

The currency table contains currency definition records that define currency codes for most of the international currencies. Each record specifies whether the monetary unit has the European Union Currency (Euro) as its root.

Labor Performed Detail records

The Labor Performed Detail records describe the details of where and how labor was performed on components for service records and billing purposes.

Parts Detail records

Parts Detail records define the details of used parts, including device type, part number, model number, and the location of the asset.

Service Contracts overview

Service Contracts describe the type of service available to a customer and usually describe the hours, available services, and costs for special services. For example, a Service Contract might specify 24x7 Service Desk availability, or limit requests for service to 8am–5pm, Monday–Friday. Weekend requests might have a billable hourly rate, or there could be other service hour combinations specified in the Service Contract.

Service Level Agreements measure how often these contractual obligations were met or breached by the Service Desk.

Service Contract administration

Service Contracts are financial agreements that describe which services are available, how services in a contract are to be rendered, and the financial impact when you use available services.

Administrative tasks include creating new contracts with the Contract wizard, assigning service level agreements to a department or company, editing the Service Contract Control record, defining response level objectives, and integrating a service level agreement with applications.

Service Contract control record

The Service Contract control record contains options that enable you to use service contracts, specify currency denomination and basic unit, and enable other aspects of contract management.

Tip: If necessary, press **Ctrl** + **H** in the Windows client or press **F1** in the Web client to view help from each field in the control record.

Service Contract entitlement records

When a customer contacts a client company and requests service, it is important to determine whether the customer is entitled to additional service. If the contract provides for five service desk interactions, and the customer has five interactions completed, service may be denied.

Because the precise nature of language and rules varies from contract to contract, the process of determining which contract applies at a given time is complex and difficult to generalize. The entitlement determination process identifies the contract and the Service Level Agreement that applies to the current situation. HP Service Manager uses entitlement records to verify that:

- The referenced contract permits service at this time.
- The contact has not exceeded the allocated number of service desk interactions.
- The contact has not exceeded the contracted number of incidents.

Service Manager checks all of this information automatically from the incident, service desk interaction, or change request if the Service Contract application is enabled. The Service Contract entitlement information appears in each contract on the Details and Rules tabs.

Checklist: Service Contract Management

Before you create individual Service Contracts, you must ensure that related information is also available by configuring each of the following records.

Tip: If necessary, press Ctrl+H in the Windows client or F1 in the Web client to view help for each field.

Record	Access path
Control record	Click **Service Level Management** > **Service Contracts** > **Edit Control Record**
Currency exchange rate	Click **System Administration** > **Base System Configuration** > **Conversion Rates**
Currency definition	Click **System Administration** > **Base System Configuration** > **Currencies**
Labor performed detail	Click **Service Level Management** > **Supporting Data** > **Labor Performed Detail**
Part usage detail	Click **Service Level Management** > **Supporting Data** > **Parts Usage Detail**

Working with service contracts

The Contract Management application integrates information and tracking into the Service Desk. Unlike Service Level Agreements, which describe how services in a contract are to be rendered, service contracts are financial agreements that define the services to be provided and the financial implications of using those services.

Service contracts

Service contracts are the principal records that determine which services are used and which services are available. Service Level Management does the following:

- Stores contracts in a structured format for automated analysis, or as the original contract document.
- Uses the Contract wizard to determine the contract thresholds quickly.
- Charges the customer for costs incurred while working with incidents, handling service desk interactions, or implementing changes to a specific service contract.
- Links discrete incidents and interactions to service contracts to provide up-to-date information about the state of each contract, including its budgeted allocations, and the actual number of interactions and incidents applied against each contract.
- Associates service contracts with time and materials expended through Service Desk, Incident Management, and Change Management to compute the real cost of handling each incident and service desk interaction, as well as to calculate the cost of managing each service contract.

Contract thresholds

Contract thresholds are limits on the number of service desk interactions or incidents that can be opened, and the cost of those services offered under the contract. Contract Management can determine when an interaction or incident exceeds these budgeted thresholds.

Contract overruns

Service Contracts options enable you to view contracts that have reached certain limits. You can query Contract Management for a list of contracts that meet certain search parameters. The following table describes the types of contract overruns.

Option	Description
Expired contracts	Displays all contracts in the system with an expired time limit for service.
Overspent contracts	Displays all contracts in the system with an exceeded budget.
Exceeded incidents	Displays all contracts in the system with an exceeded Incident allocation limit.
Exceeded service desk interactions	Displays all contracts in the system with an exceeded call allocation limit.

Entitlement checking

When a customer contacts a client company and requests service, it is important to determine whether that customer is entitled to additional service. If the contract provides five service requests, and the customer has already reached that limit, service may be denied. Because the precise nature of language and rules varies from one contract to another, determining what the contract covers is complex.

Entitlement checking identifies the contract and a Service Level Agreement (SLA) that apply to the current situation. Service Level Management automatically verifies whether the requested service is within the specified service hours and the service budget.

Expense line records

An expense line record is an itemized accounting of expenses incurred by the provider while servicing a contract. Expense line records are generated by Service Level Management as services are rendered. Service Level Management automatically calculates the money spent for each part or service in the currency of the contract.

Itemizing costs

Contract Management enables you to itemize the cost of fixing a particular incident. Detailed cost data helps the user make informed decisions by answering such questions as:

- What type of incidents are the most expensive to fix?
- What percentage of your costs are parts?
- What percentage of your costs are labor?

View an expense line record

1. Click **Service Level Management** > **Service Contracts** > **Expense Lines**.
2. Click **Search** to generate a record list.
3. Select a record to view in the Expense Lines Information form.

Display a cost table and expense line record

1. Click **Incident Management** > **Search Incidents**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record to view it in the Incident form.
4. Open the Option menu or Context menu.
5. Choose **Show Costs**.
6. Click a button (for example, Parts or Labor) to the right of the Cost table to display the Expense Line records for the cost related to the incident.

Note: An administrator must select the **Enable Service Contracts Application** option in the Service Contracts Control record to provide access to Service Contract information or the Contract wizard.

Handle time costs

The time spent processing a request for service costs a provider money. A 10-minute phone conversation with the customer represents an expense that should be charged back to the customer. A large number of brief service desk interactions consumes a significant amount of a provider's resources. The time spent in service desk interactions is *handle time*.

HP Service Manager integrates Contract Management with Service Desk. When the service desk operator processes a service desk interaction, Service Desk automatically records the elapsed time for the interaction. In Service Desk, accounting for handle time is when a service desk interaction begins, and then terminates when the service desk operator ends the interaction. Handle time is multiplied by the technician's billing rate and recorded as an Expense Line record against the relevant service contract.

Cost assessment

Each time a client company provides a service to a customer, there is real cost incurred from three sources:

- The cost of interacting with the customer. This is the time spent by the service desk operator handling the customer's service request, multiplied by the operator's hourly rate.
- The actual cost of labor associated with fixing an incident. This is the time spent by one or more technicians working on an incident, multiplied by their hourly rate.
- The cost of any parts used in the repair process.

Labor costs

As an Incident record or change request is managed, more than one person might work on the issue. A technician can work on the issue more than once over a period of days or weeks. Contract Management integrates with Incident Management, Change Management, and Request Fulfillment to enable technicians to record the hours they spent working on a change request, Incident record, or request record.

As technicians record their labor in the Incident record, line item, or change request, HP Service Manager automatically translates this information into Expense line records that link to Incident Management, Request Fulfillment, and Change Management.

Labor Performed Detail records

The Labor Performed Detail records describe the details of where and how labor was performed on components for service records and billing purposes.

Parts costs

HP Service Manager integrates Contract Management with Incident Management, Request Management, and Change Management to enable technicians to record any parts they use to resolve an incident. As these parts are recorded, Service Manager:

- Creates Expense Line records against the relevant contract.
- Adjusts the on-hand quantity of parts used.

- Automatically tracks the number of parts in stock and, through Request Management, places replacement part orders when the quantities in stock dip below a user-defined threshold.

Parts Detail records

Parts Detail records define the details of used parts, including device type, part number, model number, and the location of the asset.

Currency records

The currency table contains currency definition records that define currency codes for most of the international currencies. Each record specifies whether the monetary unit has the European Union Currency (Euro) as its root. The curconvert table contains currency exchange rate records.

Service Level Management administration

Service agreements guarantee service between providers and customers. They define availability and response service goals, such as availability of certain Configuration Items (CIs) and response time expectations.

Administrative tasks include configuring the SLA Control record and the application integration records, and defining a catalog of Service and Process Targets.

Service Level Management control record

The Service Level Management control record configures the following settings:

- Enable the SLM application
- Verify that a new service desk interaction occurs during the supported service hours
- Specify if the service desk operator can accept a new interaction outside of the supported service hours
- Choose a default Service Level Agreement (SLA) to apply when no SLA is assigned to the contact or to the contact’s company
- Define alerts that occur if no other application-specific alerts occur first

Tip: If necessary, press Ctrl+H in the Windows client or F1 in the Web client to view help from each field in the SLM control record.

Service Level Management control record options

The following table describes Service Level Management (SLM) control record options.

Option	Description
Enable SLM Application	Integrate Service Level Management with the external application. You must log out and log back in for changes to this record to take effect.
Check Service Hours	Prevent users from opening Incident records outside of the service hours defined in the service agreement. A dialog box advises the operator that service is unavailable.
Allow Override of Service Hours Violation	Permit new Service Desk interactions outside of the hours specified in the service agreement.
Default SLA	Choose the default SLA to apply when no SLA is specified for the contact's department or company.
Default OLA	Choose the default Operational Level Agreement (OLA) to apply when no OLA is specified for the contact's department or company.
Effective Condition	Specifies the condition under which the service agreements are operating (e.g. the"agreed" phase).
Group Table Name	Specifies the default group list for an OLA.
Standard Alerts	List the alerts that occur when the application does not generate specific alerts.

Service Level Agreement links

Service Level Agreements (SLAs) must have links to other system records to ensure they gather the right information at the right time. If users have permission to create a new SLA, they must also have permission to update related records.

Record	Comments
Department record	If the new SLA collects service or process metrics for a department, the SLA field in the department record must identify the new SLA.
Company record	If the new SLA collects service or process metrics for a company, the SLA field in the company record must identify the new SLA.
Contact record	If the service agreement is an Operational Level Agreement, and it collects process metrics related to a problem, the ID field in the contact record for the problem owner must identify that owner.

Linking a service agreement to other records

Depending on the objective, you must link a Service Level Agreement (SLA) to a department, company, or contacts record to ensure that the system gathers the necessary information to track SLM metrics.

Service agreement selection process

Service Level Management assigns a service agreement to a new service desk interaction, change, incident, request or problem by using the following selection process:

- The value in the slamodulecontrol record **Customer Field** is the search argument used to match a contact specified in an SLA candidate.
- The first candidate SLA is the one assigned to the contact's department. The departmental SLA sets expectations for the response time and service entitlements when department personnel request a service.
- If no department SLA exists, the next candidate SLA is the one assigned to the contact's company.
- If no company SLA exists, the next candidate is the default SLA specified by the SLA Control record.
- At any point in the selection process, if the current date and time does not fall within the limits of an SLA candidate, the next SLA candidate is considered. It is a good idea to ensure that the default SLA does not contain highly restrictive date and time limitations and describes general support for all services.

When Service Level Management selects the appropriate SLA, it also populates the new service desk interaction, change, incident, or problem record with the name of any service contract linked to the SLA.

Note: You can override the automatic selection process if you click the list in the SLA field and select a different one.

Example

A new manager (the contact) who requests email setup could expect a response within four business hours, based on whether a response SLA requires that services for managers have a higher priority than services for an intern. If there is no departmental policy that prioritizes this service, the next SLA selection level might be a company-wide response policy that does not prioritize by job description but instead by key services.

The final selection level would be the default SLA that describes general support for all services.

Assigning Service Level Targets to an application record

When you create a new interaction, change request, request, incident, or problem record, you can choose a Customer SLA for the contact or a Customer SLA for the contact and one or more applicable Service SLAs for the contact's subscriptions to a service. Service SLAs only apply if the application record references a Business Service, the contact has a subscription to the service, and the subscription references an SLA. The following describes the system's process for adding SLAs to an application record.

- If one SLA is associated with the application record based on the contact, the Customer SLA is added to the record.
- If the contact has an Individual Subscription for the CI, the Service SLA from that subscription is added to the application record.
- If the contact has a Department Subscription for the CI, the Service SLA from that subscription is added to the application record.
- If the contact has neither, then no Service SLA is added to the application record.

The SLAs should contain all Service Level Targets (SLTs) that define the business rules for all process and service metrics. You can choose as many SLTs as necessary to describe your process and service commitment. If necessary, you can add more SLTs that meet your criteria.

When you view the new record, the SLA section lists the SLTs that apply to the application record.

See the related topics to view the definitions for Customer SLA and Service SLA.

Service Level Target selection process

An administrator assigns one or more Service Level Targets (SLTs) to a new Service Level Agreement (SLA). When Service Level Management evaluates whether the process or service targets objectives are

met, it uses the following logical processes.

Process Targets

Service Level Management examines the condition specified in the SLT filter criteria. This value is a Boolean expression that can include any valid field values from the record. For example, you can create a condition that includes these values:

- Affected Configuration Item
- Category
- Priority
- Risk level
- Company
- Department
- Location

If there is more than one Process Target, Service Level Management uses the strictest SLT as the measurement for responsiveness.

Service Targets

Service Level Management examines the schedule and the required uptime or maximum outage duration specified in the SLT. If there is more than one Service Target, Service Level Management uses the strictest SLT as the criteria.

Service agreement application integration records

HP Service Manager provides an out-of-box record for each application in the slamodulecontrol table that you can modify to enable SLM integration with other applications and associated settings. The name of the primary application table is the name of the application integration record.

Choose this record	To enable this application
cm3r	Change Management requests

Choose this record	To enable this application
cm3t	Change Management tasks
incidents	Service Desk
probsummary	Incident Management
rootcause	Problem Management problems
rootcausetasks	Problem Management tasks

Ensure that you select **Enable SLM in this application** to integrate service agreements with the individual application.

The following table describes Service Level Management application integration control record options.

Option	Description
Table Name	The name of the application table that Agreements are configured for.
Enable SLM in this application	Select this check box to enable Service Level Management (SLM) processing for the indicated table.
Run in Foreground	Select this check box to process Agreement calculations in the foreground for the indicated table. Clear this check box and the Agreement calculations will be scheduled to run as background processes. The Agreement information will not be immediately visible to the technicians.
Process Targets	Select this check box to enable Process Target processing for the indicated table.
Service Targets	Select this check box to enable Service Target processing for the indicated table.
Record ID Field	The field name in the indicated table that is used to store the unique ID of the ticket. For example, values in the Record ID Field contains "Number" if the unique ID is stored in the Number field in the probsummary table.
Agreement ID Field	The field name in the indicated table that is used to store the Agreement ID of the ticket.
Start Time Field	The field name in the indicated table that is used to store the date and time value corresponding to the time when the ticket becomes active (open).

Option	Description
End Time Field	The field name in the indicated table that is used to store the date and time value corresponding to the time when the ticket becomes inactive (closed).
Customer Field	The field name in the indicated table that is used to store the customer name of the ticket. HP Service Manager uses this field when the following behaviors occur: • The customer's time zone is necessary for Agreement calculations. • The Agreement selection process is trying to determine which Agreement needs to be used for the ticket being opened.
Technician Field	The field name in the indicated table that is used to store the name of the technician who is responsible for working on the ticket. HP Service Manager uses this field when the technician's time zone is necessary for Agreement calculations.
Active Condition	Determines whether the record is active or not. This condition only refers to the valid field names in the current record and must use the $L.file variable. For example, the "flag in $L.file=true" condition is valid when it refers to the fields in Incident Management.
Record Group Field Name	The field name in the indicated table that is used to store the name of the ticket group.
Process Target State Field	The field name in the indicated table that is used to store the ticket's current state or status. HP Service Manager uses this field when processing Process Targets.
Use Phases	Select this check box to use phases to measure service levels for the ticket's Process Targets. Clear this check box and HP Service Manager uses the Response State Progression list. When HP Service Manager uses phases for the application that is configured for Agreements, a ticket is processed through the series of phases defined in the Category phase table. The name of the Category phase table is specified in the Object record for the indicated table.

Option	Description
Process Target State Progression	The set of ticket states that are used to measure the process service levels for the ticket's Process Targets. The states must be valid states for the indicated table ans must exist in valid succession. For example, the state of "closed" must exist in the list after the state of "open". For Incident Management, the valid states are defined in the pmstatus table.
Standard Alerts	The Agreement alert(s) to be generated when processing Process Targets for tickets in the indicated table. The definitions for the alert(s) must exist in the AlertDef table. HP Service Manager generates these alerts in addition to those as already defined for the Process targets of the ticket's Agreement.

Option	Description

Use Legacy Unordered Suspend Process	Select this check box to use the legacy unordered suspend state for the record's Response Service Level Targets (SLTs). Clear this check box to use the ordered suspend state.
	
	When HP Service Manager uses the legacy unordered suspend state, if a record moves to a suspend state, the running SLT will be suspended directly without checking the suspend state order in the response states list or phase lists. Otherwise, when Service Manager uses the ordered suspend state, the SLT state will be calculated by comparing the suspend state order with the initial and the final state order in the SLT definition.
	
	Example:
	
	Assume that an Incident has the following SLT definitions:
	
	The initial state is Open, the final state is Working Progress, and the suspend processing for these states are Pending Vendor/Supplier and Pending Change. The corresponding response state progression list in the slamodulecontrol definition for the Incident is as follows:
	
	• Open
	• Pending Vendor/Supplier
	• Working Progress
	• Pending Change
	• Resolved
	• Closed
	
	You create an incident and set the SLT state to Running. In this situation, the following behaviors occur:
	
	• When this check box is selected, the incident is moved to Pending Vendor/Supplier or to Pending Change (which is in the suspend list), and the SLT state will be set to suspended directly without comparing their orders.
	• When this check box is cleared:
	  ▪ If this incident is moved to Pending Vendor/Supplier, which is prior to Working Progress (the final state of SLT), this running SLT will be set to Suspended.
	  ▪ If this incident is moved to Pending Change, which is after Working Progress, the Working Progress state is automatically finished and passed and this SLT

Option	Description
	will be set to Achieved.
CI Fields for Outage Processing	The CI field names that are referenced when processing outages.
CI Fields for Subscription Processing	The CI field names that are referenced when selecting the record's Subscription Agreement(s).
Outage Condition	Determines whether to process outages for the tickets that associate to the specified table. This condition only refers to the valid field names in the current record and must use the $L.file variable. For example, the "nullsub(ci.down in $L.file, false)=true" condition is valid when refers to the fields in Change Management.
Outage Start Field	The field name in the indicated table that is used to store the start date or time of the outage for the CI(s) in the ticket.
Outage End Field	The field name in the indicated table that is used to store the end date or time of the outage for the CI(s) in the ticket.
Auto Post Outage Information	Select this check box to automatically post outage information to the outage table for the CIs in the ticket being closed. Clear this check box and HP Service Manager will prompt the operator who closes the ticket to verify the start and end time of the outage before posting the outage information.
Spread Outages	Select this check box to generate outages for the child CIs of the ticket's primary CIs. HP Service Manager uses the information in the deviceparent table to determine which CIs are affected.
Extend outage spreading to more than one level	Select this check box to generate outages for any child CIs of the ticket's primary CIs that exist after the first level in the parent-child hierarchy. HP Service Manager uses the information in the deviceparent table to determine which CIs are affected. **Note:** This option is available only when the **Spread Outages** option is selected.

Prioritizing incidents, problems, requests, and changes

When you enable Service Level Management to work with other applications, the service agreement information added to the incident, problem, requests or change record helps you prioritize tasks by Expiration date and time.

To use SLM information, create a record list of pending incidents, problems, requests, changes, or associated tasks. Sort the record list using the Breached or Expiration date as the sort order. Administrators can escalate or reassign work depending on the amount of time left before the SLA is breached or reassign priority 1 to those records with breached SLAs.

When you view incident, problem, change, or task records, the SLA section shows all pending Service Level Target expiration dates, alerts, and other relevant information.

HP Business Availability Center (BAC)

HP Service Manager offers extended Service Level Management support through integration with HP Business Availability Center (BAC). The scope of the Service Manager part of the integration is as follows:

- Monitor service metrics defined against Configuration Items (CIs) and services.
- Generate events to open, update, or close incidents when metrics fall below accepted thresholds.
- Categorize incidents to match BAC health metrics (availability or performance).
- Associate Service Level Targets (SLTs) to the corresponding category of incidents.

Service Manager event type that manages BAC KPI record status

There is a HP Service Manager event type that manages the status of Business Availability Center (BAC) Key Performance Indicator (KPI) records. Upon receiving the event, the **KPI_pmo** event registration validates the content to determine whether to open, update, or close an incident.

The conditions used to determine the appropriate action are:

- If there no existing incident for that Configuration Item (CI) with either an *availability* or *performance* problem type and the status received is different from OK, then an incident is opened.
- If there is an incident for that CI with either an *availability* or *performance* problem type and the status received is different from OK, then the incident is updated.
- If there is an incident for that CI with either an *availability* or *performance* problem type and the status received is equal to OK (which indicates that the CI is functional again), then the incident is closed.

When an incident is opened, it is categorized as either a *performance* or *availability* type record. The event type populates the KPI metric fields and when the KPI metric fields change, an activity record is created that shows the old and new values for the metric. There are two KPI metric fields: *KPI value* (a numeric field) and *KPI status* which can be Critical, Major, Minor, Warning or OK.

Using a Connect-It scenario to open BAC KPI records with Event Services

Business Availability Center (BAC) alerts are generated as HTTP calls that include vital information about the metric near or at breach. The HTTP call is handled by Connect-It via its XML listener. A Connect-It scenario then opens a record using Event Services in HP Service Manager to track the alert. The scenario can open, update, and close requests.

The following is a URL example of a triggered alert action on a CI named *Sample*, an alert named *URL test improves* and a KPI named *Availability*.

```
http://www.testurl.com?ciname=Sample&alertname=URL+test+improves&triggertime=GMT%5
B-07%3A00%5D+5%2F10%2
F07+5%3A09+AM&prevstatus=Critical&currstatus=OK&kpiname=Availability&kpivalue=100.0
```

The following table explains how the parameter values are mapped between BAC and Service Manager.

Name	BAC Parameter value	Service Manager value
CI name	Sample	Sample
Alert name	URL+test+improves	Description
Trigger time	GMT%5B-07%3A00%5D+5%2F10%2F07+5%3A09+AM	N/A
Previous status	Critical	N/A
Current Status	OK	Used to determine the appropriate Response SLT
KPI Name	Availability	Problem type = Availability or Performance
KPI value	100.0	Stored in the new KPI.value field

Opening an incident from a BAC KPI record

Service Manager will open a new incident if the following conditions are met when the system receives an event from the Business Availability Center (BAC) integration:

Condition	Requirements
There is not an open incident on the same event	Service Manager searches for an open incident with the same CI name and KPI Name (the Service Manager Problem Type). The system will only open a new incident if it does not find an open incident matching these conditions.
All mandatory BAC alert fields have values	The following BAC alert fields must have values: • CI Name (ciname) • KPI Name (kpiname) • Current Status (currstatus) The system will only open a new incident if these fields have values. The event produces an error if one of these required fields is empty.
The current status has a value other than OK.	If the Current status is **OK**, there is no need for Service Manager to open an incident since the issue has been solved. The system will only open a new incident if the current status has some other value. The event produces an error if the current status has a value of **OK**.

When Service Manager opens an incident for a BAC alert, it uses the BAC alert name field to fill the Incident Description (action) and Incident Title (brief.description) fields. If the alert name field is empty, Service Manager sets the Incident Description and Incident Title to "KPI incident". In addition, all BAC alert incidents have an opened by value of "EXTERNAL" (opened.by = "EXTERNAL").

Service Manager uses the following default values when opening a new incident for a BAC alert:

Incident field	Default value
Category	shared infrastructure
Area	enterprise
Subarea	applications
Problem Type (problem.type)	The value of the KPI Name in the BAC alert
KPI.status	The value of Current Status in the BAC alert
KPI.value	The value of KPI value in the BAC alert
Urgency (severity)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")

Incident field	Default value
Initial Impact Assessment (initial.impact)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")
Primary Assignment Group (assignment)	Defaults to the value specified for the Service Manager Product Type (the default value is "SOFTWARE")
Contact (contact.name)	Defaults to the value specified for the CI
Field Manufacturer (vendor)	Defaults to the value specified for the CI
Site Category (site.category)	Defaults to the value specified for the CI

Updating an incident from a BAC KPI record

Service Manager will update an existing incident if the following conditions are met when the system receives an event from the Business Availability Center (BAC) integration:

Condition	Requirements
There is a matching open incident on the same event	Service Manager searches for an open incident with the same CI name and KPI Name (the Service Manager Problem Type). The system will only update an existing incident if it finds an open incident matching these conditions.
All mandatory BAC alert fields have values	The following BAC alert fields must have values: • CI Name (ciname) • KPI Name (kpiname) • Current Status (currstatus) The system will only update an existing incident if these fields have values. The event produces an error if one of these required fields is empty.
The current status has a value other than OK	If the Current status is OK, there is no need for Service Manager to update an incident since the issue has been solved. The system will only update an existing incident if the current status has some other value. The event produces a message if the current status has a value of OK.

When Service Manager updates an existing incident for a BAC alert, it appends the BAC alert name field to the end of the Incident Description (action) field. In addition, Service Manager adds the entry "Alert status update" to the update.action field of the Journal Updates section.

Service Manager uses the following default values when updating an existing incident for a BAC alert:

Incident field	Default value
Category	shared infrastructure
Area	enterprise
Subarea	applications
Problem Type (problem.type)	The value of the KPI Name in the BAC alert
KPI.status	The value of Current Status in the BAC alert
KPI.value	The value of KPI value in the BAC alert
Urgency (severity)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")
Initial Impact Assessment (initial.impact)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")
Primary Assignment Group (assignment)	Defaults to the value specified for the Service Manager Product Type (the default value is "SOFTWARE")
Contact (contact.name)	Defaults to the value specified for the CI
Field Manufacturer (vendor)	Defaults to the value specified for the CI
Site Category (site.category)	Defaults to the value specified for the CI

Closing an incident from a BAC KPI record

Service Manager will close an existing incident if the following conditions are met when the system receives an event from the Business Availability Center (BAC) integration:

Condition	Requirements
There is a matching open incident on the same event	Service Manager searches for an open incident with the same CI name and KPI Name (the Service Manager Problem Type). The system will only close an existing incident if it finds an open incident matching these conditions.
All mandatory BAC alert fields have values	The following BAC alert fields must have values: • CI Name (ciname) • KPI Name (kpiname) • Current Status (currstatus) The system will only close an existing incident if these fields have values. The event produces an error if one of these required fields is empty.
The current status has a value of OK.	If the Current status has a value other than **OK**, there is still work to be done on the incident. The system will only close an existing incident if the current status is **OK**, indicating that the issue has been solved. The event can only update the incident if the current status has a value other than **OK**.

When Service Manager closes an existing incident for a BAC alert, it adds the text "KPI Status for *<CI Name>* back to OK" to the Solution (resolution) field. In addition, Service Manager sets the Fix Type (fix.type) to "Permanent" and the Closure Code (resolution.code) to "User Closure".

Service Manager uses the following default values when closing an existing incident for a BAC alert:

Incident field	Default value
Category	shared infrastructure
Area	enterprise
Subarea	applications
Problem Type (problem.type)	The value of the KPI Name in the BAC alert
KPI.status	The value of Current Status in the BAC alert
KPI.value	The value of KPI value in the BAC alert
Urgency (severity)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")

Incident field	Default value
Initial Impact Assessment (initial.impact)	Defaults to the value specified for the Service Manager Product Type (the default value is "2 - High")
Primary Assignment Group (assignment)	Defaults to the value specified for the Service Manager Product Type (the default value is "SOFTWARE")
Contact (contact.name)	Defaults to the value specified for the CI
Field Manufacturer (vendor)	Defaults to the value specified for the CI
Site Category (site.category)	Defaults to the value specified for the CI

SLTs that monitor BAC KPI metrics

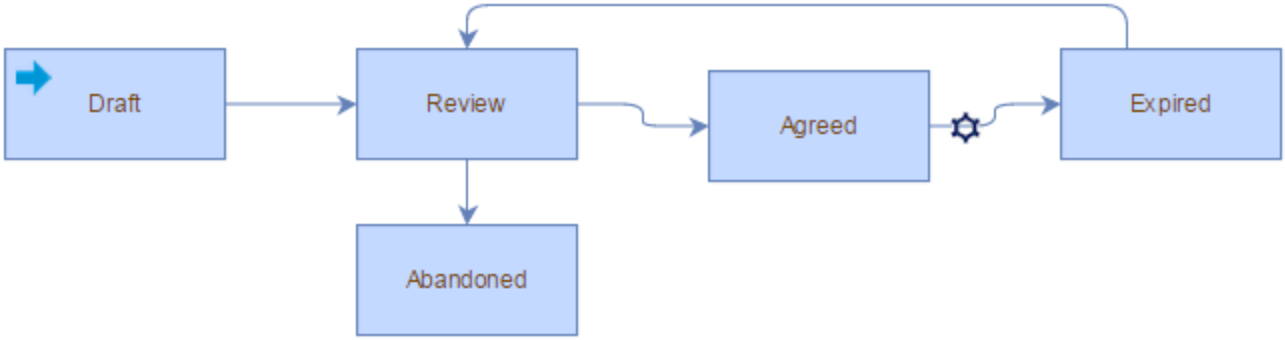
HP Service Manager includes several Response Time SLTs that monitor Business Availability Center (BAC) Key Performance Indicator (KPI) metrics. When an incident is opened in the BAC KPI categorization, it will have Response Time SLTs assigned that are based on the KPI type and value.

There are BAC KPI based SLTs available in the SLT Catalog that can be added to other SLAs if desired. They include the following:

Name	Problem type	Description
KPI Availability - Critical	Availability	SLT for Availability KPI incidents with status of Critical. This Response SLT is set to close in 2 hours.
KPI Availability - Major	Availability	SLT for Availability KPI incidents with status of Major. This Response SLT is set to close in 6 hours.
KPI Availability - Warning	Availability	SLT for Availability KPI incidents with status of Warning. This Response SLT is set to close in 12 hours.
KPI Performance - Critical	Performance	SLT for Performance KPI incidents with status of Critical. This Response SLT is set to close in 2 hours.
KPI Performance - Major	Performance	SLT for Performance KPI incidents with status of Major. This Response SLT is set to close in 6 hours.
KPI Performance - Warning	Performance	SLT for Performance KPI incidents with status of Warning. This Response SLT is set to close in 12 hours.

Service Level Management agreement workflow and tasks

Process Designer is used to manage service agreements. You can use Process Designer to create a workflow, rules, and transitions to control the behavior of the various types of service agreements.



The following table illustrates the default service agreement workflow phases and shows what can be done in each in phase:

Workflow Phase	Common Tasks
Draft	"Create a new Service Level Agreement" "Create an Operational Level Agreement" "Create an Underpinning Contract" "Add Service Level Targets" "Attach a file to a service agreement"
Review	"Review a service agreement" "Create an SQP or SIP" "Edit a Service Level Agreement" "Edit Service Level Targets" "View service agreement metrics"

Workflow Phase	Common Tasks
Agreed	
Expired	
Abandoned	

Other Activities	Tasks
"Defining Service Level Targets"	"Add Service Level Targets" "Delete Service Level Targets" "Edit Service Level Targets" "Define Service Targets" "Define Process Targets" "Use the Service Level Target wizard"

Create a new Service Level Agreement

To create a Service Level Agreement (SLA), follow these steps:

1. Click **Service Level Management** > **Agreements** > **New Agreement**.
2. Click **Service Level Requirement**.
3. In the **Type** field, select the contract type that identifies it as either a Service or Customer SLA.
4. In the **Customer** field, select from the list of records to choose a customer name.
5. In the **Title** field, type a descriptive name for the SLA.
6. In the **Effective from** field, choose a date in the calendar options for the SLA start date.
7. In the **Expiration Date** field, choose a date in the calendar options for the SLA end date.
8. In the **Next Review Date** field, choose a date for the first review of the SLA.
9. In the **Service review Frequency** field, choose the time period for the review.

10. Add an optional **Description** for the new SLA.
11. Click **Save**. The agreement is now in the "Draft" phase and an Agreement ID number added to the record.
12. Click the **Process Targets** or **Service Targets** tabs. You can add, edit, or remove Service Level Targets on these tabs.
13. The following steps are optional:
    a. Click the **Agreed By** tab, and specify the appropriate signatories to the agreement.
    b. Click the **Attachments** tab, and add upload any formal documents between the two parties signing the contract.
    c. Click the **Underpinning Agreements** tab and review the underpinning contracts and operational level agreements.

    Note: All operational level agreements and underpinning contracts are listed in the **Underpinning Agreements** tab.
14. Click **Save**.

After you create a new SLA, ensure that you link the new SLA to a department, company, or contacts record.

Note: When you create a new SLA, you must log out and log in again to view the new SLA on the drop-down selection lists.

Create an Operational Level Agreement

To create an operational level agreement (OLA), follow these steps:

1. Click **Service Level Management** > **Agreements** > **New Agreement**.
2. Click **Operational Level Agreement**.
3. In the **Title** field, type a descriptive name for the OLA.
4. In the **Effective from** field, choose a date in the calendar options for the OLA start date.

5. In the **Expiration Date** field, choose a date in the calendar options for the OLA end date.
6. In the **Next Review Date** field, choose a date for the first review of the OLA.
7. In the **Service review Frequency** field, choose the time period for the review.
8. Add an optional **Description** for the new OLA.
9. Click the **Assignment Group** tab. Specify the appropriate group for this OLA.
10. Click **Save**. Note that an Agreement ID number was added to the record.
11. Click the **Process Targets** or **Service Targets** tabs. You can add, edit, or remove Service Level Targets on these tabs.
12. The following steps are optional:
    a. Click the **Agreed By** tab, and specify the appropriate signatories to the agreement.
    b. Click the **Attachments** tab, and add upload any formal documents between the two parties signing the contract.
13. Click **Save**.

Note: After you create a new OLA, you must log out and log in again to view the new OLA on the drop-down selection lists.

Create an Underpinning Contract

To create an underpinning contract (UC), follow these steps:

1. Click **Service Level Management** > **Agreements** > **New Agreement**.
2. Click **Underpinning Contract**.
3. In the **Title** field, type a descriptive name for the UC.
4. In the **Effective from** field, choose a date in the calendar options for the UC start date.
5. In the **Expiration Date** field, choose a date in the calendar options for the UC end date.
6. In the **Next Review Date** field, choose a date for the first review of the UC.
7. In the **Service review Frequency** field, choose the time period for the review.

8. Add an optional **Description** for the new UC.
9. Click the **Assignment Group** tab. Specify the appropriate group for this UC.
10. Click **Save**. Note that an Agreement ID number was added to the record.
11. Click the **Process Targets** or **Service Targets** tabs. You can add, edit, or remove Service Level Targets on these tabs.
12. The following steps are optional:
    a. Click the **Agreed By** tab, and specify the appropriate signatories to the agreement.
    b. Click the **Attachments** tab, and add upload any formal documents between the two parties signing the contract.
13. Click **Save**.

Edit a Service Level Agreement

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Click **Search** to generate a record list.
3. Select the agreement that you want to edit.
4. Add or change information on the form. If necessary, press Ctrl+H to view help for each field.
5. Click **Save**.

Review a service agreement

In the Review phase of a service agreement, follow these steps:

1. Navigate to the agreement you want to review.
2. Verify that following fields or tabs are filled in appropriately:
   - **Effective From**
   - **Expiration Date**

- **Next Agreement Review Date**
- **Service Review Frequency**
- **Next Service Review Date**
- **Agreed by** (on the Agreed By tab)
- **Assignment Groups** (Operational Level Agreements only)
- **External Assignment Groups** (Underpinning Contracts only)

3. Verify that following optional fields are filled in appropriately:
   - **Service Contract**
   - **Service Hours**
   - **Owner**
   - **Owner Group**
   - **Next Service Review Date**
4. If this is a new agreement, verify that appropriate SLTs exist for the agreement under the **Process Targets** and **Service Targets** tabs.
5. If this is an existing agreement that is back in the review phase, navigate to the **Improvement Plans** tab and then click to view any service improvement plans (SIP) or service quality plans (SQP) that may exist. If no improvement plan exists, you may need to create one, depending on your organization's service review process.

Attach a file to a service agreement

Applies to User Roles:

System Administrator, administrator (SLA)

The Attachments tab stores links to the documents associated with the service agreement. For example, you can attach text or graphic files that contain signatures, invoices, related contracts, or any other reference materials.

To attach a file to a service agreement:

1. Click **Service Level Management** > **Agreements** > **Search agreements**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record.
4. Do the following on the **Attachments** tab:
   - *For Web tier clients:* click **Add File**, browse to the file, and then click **OK**.
   - *For Windows clients:* right-click in the attachment space, and then click **Add**. Browse to the file, and click **Open**.

   Service Manager attaches the file to the service agreement.
5. Click **Save**.

Create an SQP or SIP

To create a service quality plan (SQP) or service improvement plan (SIP) to a Service Level Agreement, follow these steps:

1. Navigate to the SLA for which you want to create or add an SQP or SIP.
2. Navigate to the **Improvement Plans** tab and then click the **Create Improvement Plan** button.
3. Enter a title in the **Title** field.
4. Add a summary, tags, and expiration date as appropriate.
5. In the **Document Subtype** drop down, select **Service Improvement Plan** or **Service Quality Plan** as appropriate.
6. To save your plan and associate the plan with the SLA, click **Save Draft**.

Note: After completing step 6, the plan follows the normal Knowledge Management document workflow and you should follow those procedures to publish or index the KM document as needed.

Define Service Targets

Applies to User Roles:

System Administrator, Administrator

You define a Service Target to monitor the availability of a Configuration Item (CI), such as a service, application, hardware, software, or other infrastructure component.

To define a Service Target, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Service Targets**
2. Fill in all the required fields for the new service level target.
3. Click **Add**.
4. Click **OK**.

Define Service Targets in the SLT Catalog

You can also use the wizard in the SLT Catalog to create a Service Target.

To define an Service Target by using the SLT Catalog, follow these steps:

1. Click **Service Level Management** > **Agreements** > **SLT Catalog**.
2. Click **More** or the More Actions icon, and then select **Create SLT using Wizard**.
3. In the **SLT Type** field, select **Service**, and then click **Next**.
4. Continue providing the applicable information and clicking **Next** for each wizard form until you have created a Service Target.

   You receive a message that states the new service level target catalog record is added.

Define Process Targets

Applies to User Roles:

System Administrator, Administrator

You define a Process Target to specify the maximum allowable amount of time for a response to a business event.

To define a Process Target, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Process Targets**
2. Fill in all the required fields for the new service level target.
3. Click **Add**.
4. Click **OK**.

Define Service Level Targets in the SLT Catalog

You can also use the wizard in the SLT Catalog to create a Process Target.

To define aProcess Target by using the SLT Catalog wizard, follow these steps:

1. Click **Service Level Management** > **Agreements** > **SLT Catalog**.
2. Click **More** or the More Actions icon, and then select **Create SLT using Wizard**.
3. In the **SLT Type** field, select **Process**, and then click **Next**..
4. Continue providing the applicable information and clicking **Next** for each wizard form until you have created a Process Target.

   You receive a message that states the new service level target catalog record is added.

Add Service Level Targets

Applies to User Roles:

System Administrator, Administrator

You can create a new Service Level Target (SLT) or select an existing SLT from the SLT catalog. SLTs are for either availability or response time.

To add a Service Level Target to a service agreement:

1. Click **Service Level Management** > **Agreements** > **Search Agreements**
2. Add optional search criteria and then click **Search**.
3. Select a target record.

4. In the **Process Targets** tab or **Service Targets** tab, do the following to add an SLT using the SLT wizard. This adds a new SLT. You can also select an SLT from the catalog, in which case you will not need to complete steps a through d.

   a. Click **Add SLT** Service Level Management starts the SLT wizard.

   b. In the **SLT Name** field, type the name of the new service level target.

   c. In the **Description** field, type the description of the new service level target.

   d. Click **Next** to advance through the wizard. Depending on the type of service level target, the SLT wizard collects information about:
      - Schedule
      - Affected CI
      - Availability criteria
      - Filter criteria
      - Initial and final states
      - Duration type
      - Alerts

5. Click **Save**.

6. Click **OK**.

To add a SLT directly, follow these steps:

1. Click **Service Level Management** > **Administration** > **Process Target** or **Service Target**.

2. Add information to the Process or Service Target form.

3. Click **Add**.

Edit Service Level Targets

Applies to User Roles:

System Administrator, Administrator

To edit a Service Level Target (SLT) from a service agreement, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Click **Search**.
3. Click the **Process** or **Service** tab.

   There are two methods to edit an existing SLT. Method One is for an SLT that was created with the SLT wizard. If you choose Method One but the SLT was created directly, Service Level Management automatically switches to Method Two.

   Method One (the SLT Wizard)
   - Click **Edit SLT**.
   - When Service Level Management displays a list of SLTs, double-click an SLT to launch the SLT Wizard.
   - Click **Next** through the wizard to change settings in the SLT.

   Method Two (Manual editing)
   - Double-click an SLT from the **Process Targets** or **Service Targets** table.
   - The Service Level Targets form displays the SLT information. Add or change information on the form. If necessary, press Ctrl+H in the Windows client or F1 in the Web client for each field. Method Two works for all SLTs.

4. Click **Save**.
5. Click **OK**.

To edit SLT records directly, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Process Targets** or **Service Targets**.
2. Click **Search**.
3. Select an existing SLT.
4. The Service Level Targets form displays the SLT information. Add or change information on the form. If necessary, press Ctrl+H in the Windows client or F1 in the Web client for each field.

5. Click **Save**.
6. Click **OK**.

Delete Service Level Targets

Applies to User Roles:

System Administrator, Administrator

Process or Service Targets can be deleted if for some reason they are no longer needed; however, once one is deleted its associated history is lost.

To remove a Service Level Target from a service agreement, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record.
4. In the **Process** tab or **Service** tab, do the following:
   a. Click **Remove SLT**.
   b. Double-click an SLT from the record list. Service Level Management deletes the SLT and returns to the original SLA.
5. Click **Save**.
6. Click **OK**.

To delete an SLT directly:

1. Click **Service Level Management** > **Administration** > **Process** or **Service**.
2. Add optional search criteria and then click **Search**.
3. Select a target record.

   The Service Level Targets form displays the SLT information.
4. Once you make sure that these are the service level targets that you want to delete, click **Delete**.

5. To confirm the deletion, click **Yes**.
6. Click **OK**.

Use the Service Level Target wizard

Applies to User Roles:

System Administrator, Administrator

You can use the Service Level Target (SLT) wizard to build a catalog of pre-defined SLTs that you can add to new or existing service agreements.

To add a new SLT by using the wizard, follow these steps:

1. Click **Service Level Management** > **Agreements** > **SLT Catalog**.
2. Click **More** or the More Actions icon, and then select the **Create SLT using Wizard** option.
3. In the **SLT Type** field, select **Process** or **Service**, and then click **Next**.
4. Continue providing the information the wizard requests, and then click **Next** until you have provided all of the information needed to create an SLT.
5. Click **Finish**.

To add new SLTs to an existing service agreement, follow these steps:

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Click **Search**.
3. Select an existing service agreement.
4. Select the **Process Targets** tab or **Service Targets** tab.
5. Click **Add SLT**.
6. Type a name in the **SLT Name** field.
7. Type a **Description** of the service level objective and then click **Next**.
8. Use the **Fill** function to choose an **Affected CI**.

Note: Click **Search** to add optional search criteria and search through a specific list of CI records, or use the **Fill** function to choose from the list of CI records.

9. Click **Next** to provide other required information.
10. Click **Finish**.

Access service agreements from other applications

Applies to User Roles:

If a user has rights to view an interaction, incident, change request, change request task, request, or problem record, the user can also view the Service Level Target (SLT) section for the record.

To access service agreements from other applications:

1. Follow the steps to search for a service desk interaction, change request, change request task, incident, request, problem, or problem task record.
2. Select your target record.
3. Open the **SLT** section to display the name of all the service agreements and targets.
4. Click one of the following subtabs to view related information.
   - **Process Targets**
   - **Uptime Objectives**
   - **Max Duration Objectives**

Notes:

- If you create a new service agreement, you must log out and log in again to view the new service agreement in the selection lists.
- You cannot view service agreement information in related application records unless:
  - The SLM Control record has **Enable Application** selected.
  - There is an slamodulecontrol record for the affected application that has **Enable SLM** selected.

View service agreements from Configuration Management

1. Click **Configuration Management** > **Resources** > **SLM Information**.
2. Click **Search**.
3. Select a service agreement.
4. If you make changes, click **Save**.
5. Click **OK**.

Service Level Management administration tasks

Service Level Management administration covers these areas of responsibility:

Service Level Administration Activities	Common Tasks
"Service Level Management data"	"Recalculate availability and response time" "Research overall results" "Research process metrics" "Research service metrics" "View service agreement metrics"
"Service Contract administration"	"View an expired service contract" "View a service contract" "Link a service contract to a Service Level Agreement" "Create a new service contract" "Delete a service contract" "Edit a service contract" "Edit the Service Contract control record" "View an overspent service contract"
"Service Level Management administration"	"Edit the Service Level Management control record" "Assigning Service Level Targets to an application record"
"Outages"	"Change outage start and end times" "Disable outage spreading" "Enable outage spreading" "Enable automatic outage posting" "Disable automatic outage posting"

Create a new service contract

1. Click **Service Level Management** > **Service Contracts** > **Service Contracts**.
2. Type the name of the new service contract in the **Reference Name** field.
3. Complete the required information in the Service Contract form, adding applicable information in the following tabs:
   - General Information
   - Details
   - Rules
   - Named Users
   - Comments
   - Additional Services
4. Click **Add**.
5. Click **OK**.

To use an existing contract to create a new contract:

1. Click **Service Level Management** > **Service Contracts** > **Service Contracts**.
2. Add optional search criteria, and then click **Search**.
3. Select the target record.
4. Clear the **Reference Name** field and type the new name of the new service contract.
5. Add or change information on the form to select the applicable information in the following tabs:
   - General Information
   - Details
   - Rules
   - Named Users

- Comments
- Additional Services

6. Click **Add**.

   Caution: Make sure that you do not click Save because doing so will replace the existing contract with the new contract you are attempting to add.

7. Click **OK**.

Delete a service contract

1. Click **Service Level Management** > **Service Contracts** > **Service Contracts**.
2. Add optional search criteria, and then click **Search** to generate a record list.
3. Select a target record to view in the Service Contract form.
4. Make sure this is the record you want to delete, and then click **Delete**.
5. To confirm the record deletion, click **Yes**.
6. Click **OK**.

Edit a service contract

1. Click **Service Level Management** > **Service Contracts** > **Service Contracts**.
2. Click **Search** to generate a record list.
3. Select a contract record to view in the Service Contract form.
4. Add or change information on the form. If necessary, press Ctrl+H to view help for each field.
5. Click **Save**.
6. Click **OK**.

Edit the Service Contract control record

Applies to User Roles:

System Administrator

The Service Contract control record specifies whether or not to enable service contract management in the applications and also specifies the default values used for calculating the statistics the system maintains for managed service contracts.

To edit a Service Contract control record, follow these steps:

1. Click **Service Level Management** > **Service Contracts** > **Edit Control Record**.
2. Select or clear any Contract Management options.

Option	Description
Enable Service Contracts Application	Enables Service Contract Management in Incident Management, Request Management, and Service Desk.
Default Rate	Specifies the default labor rate for the application.
Currency Code	Specifies the currency code for all contracts and conversions.
Problem Parts	Calculates the cost of parts from the Parts & Labor tab in an incident record.
Calculate Incident Labor	Calculates the cost of labor from the Parts & Labor tab in an incident record.
Calculate Service Labor	Calculates the cost of labor from the time.spent field in an incident record.
Calculate Change Management Parts	Calculates the cost of parts from the Parts & Labor tab in a change request.
Calculate Change Management Labor	Calculates the cost of labor from the Parts & Labor tab in a change request.
Calculate Request Management Labor	Calculates the cost of labor from the Parts & Labor tab in a change request.

Option	Description
Calculate Request Management Parts	Calculates the cost of parts from the Parts & Labor tab in a change request.

3. Click **Save**.
4. Click **OK**.
5. Restart the Service Manager server for your changes to take effect.

View a service contract

1. Click **Service Level Management** > **Service Contracts** > **Service Contracts**.
2. Click **Search** to generate a record list.
3. Select a contract record to view in the Service Contract form.

View an exceeded interaction allocation service contract

1. Click **Service Level Management** > **Service Contracts** > **Exceeded Call Allocation**.
2. Click **Search** to generate a record list.
3. Select a contract record.

View an exceeded incident allocation service contract

1. Click **Service Level Management** > **Service Contracts** > **Exceeded Incidents**.
2. Click **Search** to generate a record list.
3. Select a contract record to view in the Service Contract form.

View an expired service contract

1. Click **Service Level Management** > **Service Contracts** > **Expired Contracts**.
2. Click **Search** to generate a record list.
3. Select a contract record to view in the Service Contract form.

View an overspent service contract

1. Click **Service Level Management** > **Service Contracts** > **Overspent Contracts**.
2. Click **Search** to generate a record list.
3. Select a contract record to view in the Service Contract form.

Create a Labor Performed Detail record

1. Click **Service Level Management** > **Configuration** > **Labor Performed Detail**.
2. Type or select data for each field.

   Note: If you want to edit an existing record, click **Search** to locate the target record.
3. Click **Add**.

   The **ID** field displays a new record number.
4. Click **Save**.
5. Click **OK**.

Create a Parts Detail record

1. Click **Service Level Management** > **Configuration** > **Part Usage Detail**.
2. Type or select data for each field.

   Note: If you want to edit an existing record, click **Search** to locate the target record.
3. Click **Add**.

   The **ID** field displays a new record number.
4. Click **Save**.
5. Click **OK**.

View a Labor Performed Detail record

1. Click **Service Level Management** > **Configuration** > **Labor Performed Detail**.
2. Click **Search** to generate a record list.
3. Click the record you want to view in the Labor Performed Detail form.
4. Edit the record as required.
5. Click **Save**.
6. Click **OK**.

View a Parts Detail record

1. Click **Service Level Management** > **Configuration** > **Part Usage Detail**.
2. Click **Search** to generate a record list.
3. Click the record you want to view in the Parts Detail form.
4. Edit the record as required.

5. Click **Save**.
6. Click **OK**.

Enable automatic outage posting

1. Click **Service Level Management** > **Administration** > **Configure Application**.
2. Click **Search**.
3. Select an existing record.
4. Service Level Management populates the Service Target Information section to generate outage data correctly. You can change the out-of-box field names to match your field names.
   - **Configuration Item** fields identify the item to be tracked.
   - **Outage Condition** is the signal to gather service metrics. For example, when a Configuration Item is unavailable, the condition is

     `nullsub(ci.down in $L.file, false)=true`. However, the condition for other tables may vary.
   - **Outage Start** and **Outage End** fields specify when the outage begins and ends for manual or automatic outage posting.
5. Select the **Auto Post Outage Information** checkbox.
6. Click **Save**.
7. Click **OK**.

Disable automatic outage posting

1. Click **Service Level Management** > **Administration** > **Configure Application**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record.

4. In the Service Target Information section, clear the **Auto Post Outage Information** checkbox.

   This disables the option to automatically post outage information.

5. Click **Save**.

6. Click **OK**.

Change outage start and end times

User roles: System Administrator, Incident Analyst, Incident Coordinator, Incident Manager, Service Desk Agent, Service Desk Manager

The outage times track the amount of time a Configuration Item (CI) is unavailable. You cannot update outage time for a closed incident record. Whenever you update the outage times for an incident, you must also update the Activities section of the incident record.

To change an outage start and end times:

1. Cick **Incident Management** > **Search Incidents**

2. Add optional search criteria and then click **Search**.

3. Select a target record with outage information.

4. In the Incident Details section, set new date and time values in the **Outage Start** and **Outage End** fields.

5. Click **Save & Exit**.

Enable outage spreading

1. Click **Service Level Management** > **Administration** > **Configure Application**.

2. Add optional search criteria, and then click **Search**.

3. Select a target record.

4. In the Service Target Information section, select **Spread Outages**.

5. In the Service Target Information section, you can also select **Extend outage spreading to more than one level?**
6. Click **Save**.
7. Click **OK**.

Disable outage spreading

1. Click **Service Level Management** > **Administration** > **Configure Application**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record.
4. In the Service Target Information section, clear the **Spread Outages** checkbox.

   This disables the spread outages option.
5. Click **Save**.
6. Click **OK**.

Edit the Service Level Management control record

Applies to User Roles:

System Administrator, Administrator

The Service Level Management (SLM) control record specifies the basic configuration options for the service agreements in HP Service Manager.

To edit the SLM control record options, follow these steps:

1. Click **Service Level Management** > **Administration** > **Edit Control Record**.
2. Select or clear any service agreement options.

Option	Description
Enable SLM Application	Integrate Service Level Management with Incident Management, Problem Management, Request Management, and Service Desk. You must log out and log back in for changes to this record to take effect.
Check Service Hours	Prevent users from opening Incident records outside of the service hours defined in the service agreement. A dialog box advises the operator that service is unavailable.
Allow Override of Service Hours Violation	Permit new service desk interactions outside of the hours specified in the service agreement.
Default SLA	Choose the default SLA to apply when no SLA is specified for the contact's department or company.
Default OLA	Choose the default Operational Level Agreement (OLA) to apply when no OLA is specified for the contact's department or company.
Effective Condition	Specifies the condition under which the service agreements are operating (e.g. the"agreed" phase).
Group Table Name	Specifies the default group list for an OLA and UC.
Standard Alerts	List the alerts that occur when the application does not generate specific alerts.

3. Click **Save**.
4. Click **OK**.

Link an SLA to a contact record

Applies to User Roles:

System Administrator

To link an SLA to a contact record, follow these steps:

1. Click **System Administration** > **Base System Configuration** > **Contacts**.
2. Click **Search**.
3. Select the contact record for the problem owner.
4. Click **Fill** to choose the **HP Service ManagerID** for the problem owner.
5. Click **Save**.
6. Click **OK**.

Link an SLA to a company record

Applies to User Roles:

System Administrator

To link an SLA to a company record, follow these steps:

1. Click **System Administration** > **Base System Configuration** > **Companies**.
2. Click **Search**.
3. Select the company record to update.
4. Click the drop-down list to choose the **SLA** for the company.
5. Click **Save**.
6. Click **OK**.

Recalculate availability and response time

1. Click **Service Level Management** > **Administration** > **Regen SLM Partials**.
2. Choose the **Month**.
3. Choose the **Year**.

4. Click **Proceed**.
   When you view metrics in a service agreements, Service Level Management recalculates the availability and response data for the month and year that you selected.

View service agreement metrics

1. Click **Service Level Management** > **Agreements** > **Search Agreements**.
2. Click **Search**.
3. Select a service agreement.
4. Select the Process tab or Service tab to view current metrics for all Service Level Targets.

Research overall results

1. Click **Service Level Management** > **Metrics** > **Overall Metrics**.
2. Add optional search criteria, and then click **Search** to generate a list of all SLM monthly aggregate records.
3. Select a target record.
4. To view service metrics:
   a. Click **Service Target** to display the parent Outage Detail record.
   b. Click **View Outage Events** to display the parent Outage Event record.
   c. Click **View Record** to view the parent request for a change record.
5. To view process Metrics:
   a. Click **View Process Target Details** to display the parent SLT process record.
   b. Click **View Details** to display the parent service agreement Time Activity record.

Research service metrics

1. Click **Service Level Management** > **Metrics** > **Service Metrics**.
2. Add optional search criteria, and then click **Search** to generate a list of all SLM monthly aggregate records.
3. Select a target record.
4. Click **View Details** to display the parent Outage Detail record.
5. Click **View Outage Events** to display the parent Outage Event record.
6. Click **View Record** to view the parent request for a change record.

Research process metrics

1. Click **Service Level Management** > **Metrics** > **Process Metrics**.
2. Add optional search criteria, and then click **Search** to generate a list of all SLM response records.
3. Select a target record.
4. Click **View Details** to display the parent process target record.
5. Click **View Details** to display the parent service agreement process Time Activity record.

Assign a Service Level Agreement to a department

Applies to User Roles:

System Administrator

Service Level Management assigns an SLA to a new service desk interaction, change, incident, or problem according to a prescribed selection process. As part of this process, Service Level Management uses the SLA specified for the contact's department if there is one available.

To assign a default SLA to a department:

1. Click **System Administration** > **Base System Configuration** > **Departments**.
2. Add optional search criteria and then click **Search**.
3. Select the department record to update.
4. In the **SLA** field, select the SLA to assign to the department.
5. Click **Save**.
6. Click **OK**.

Assign a Service Level Agreement to a company

Applies to User Roles:

System Administrator

Service Level Management assigns an SLA to a new service desk interaction, change, incident, or problem according to a prescribed selection process. As part of this process, Service Level Management uses the default SLA specified for the contact's company if no department Service Level Agreement (SLA) exists for the contact.

To assign a default SLA to a company:

1. Click **System Administration** > **Base System Configuration** > **Companies**.
2. Add optional search criteria and then click **Search**.
3. Select the company record to update.
4. In the **Default SLA for Company** field, select from the list to assign the SLA to the company.
5. Click **Save**.
6. Click **OK**.

Assign a default Service Level Agreement

Applies to User Roles:

administrator (SLA profile), System Administrator

Service Level Management assigns a default Service Level Agreement (SLA) when there is no SLA specified for the contact's department or company.

1. Click **Service Level Management** > **Administration** > **Edit Control Record**.
2. In the **Default SLA** field, choose the default service level agreement to apply when no agreement is specified for a contact's department or company.
3. Select or clear any other Service Level Agreement options.
4. Click **Save**.
5. Click **OK**.

Display a cost table and expense line record

1. Click **Incident Management** > **Search Incidents**.
2. Add optional search criteria, and then click **Search**.
3. Select a target record to view it in the Incident form.
4. Open the Option menu or Context menu.
5. Choose **Show Costs**.
6. Click a button (for example, Parts or Labor) to the right of the Cost table to display the Expense Line records for the cost related to the incident.

Note: An administrator must select the **Enable Service Contracts Application** option in the Service Contracts Control record to provide access to Service Contract information or the Contract wizard.

View an expense line record

1. Click **Service Level Management** > **Service Contracts** > **Expense Lines**.
2. Click **Search** to generate a record list.
3. Select a record to view in the Expense Lines Information form.

Service Level Management security

The following sections explain the Service Level Management security roles, security areas, and rights.

Service Level Management security areas

The security areas for Service Level Management are Service Level Management and Service Level Management Configuration. These areas contain the default security rights and settings for the Service Level Management module. The security right settings will be inherited by any new roles created in an area when no other settings are specified for that security role.

These security areas are used to set permissions to operators to provide access to particular area of Service Level Management. The following table lists the areas and the relevant Service Level Management menu items the operators can access.

Area	System Navigator menu items for this area
Service Level Management	This area contains the default security rights and settings for SLM. The rights will be copied to new roles created for this area.However, the settings will only be inherited if there are no settings specified on the Role.
Service Level Management Configuration	This area contains the default security rights and settings for SLM configuration. The rights will be copied to new roles created for this area. However, the settings will only be inherited if there are no settings specified on the Role. **Note:** When you set the security rights for a security role in the Service Level Management Configuration area: • The **View** right is to view the settings defined in the **Administration** menu and the **Configuration** menu. • The **Update** right is to update the values of existing settings defined in the **Administration** menu and the **Configuration** menu. • The **New** and **Delete** rights are to create and delete a setting in the **Configuration** menu. • The **Admin** right is to add, edit, or delete the settings in the **Administration** > **Settings** menu.

Default rights

The default rights defined in areas will be inherited when you create new security roles. The following table shows the out-of-box default rights defined in the Service Level Management or Service Level Management Configuration areas.

Area Name	View	New	Update	Delete/Close	Expert	Admin
Service Level Management	TRUE	FALSE	Never	Never	FALSE	FALSE
Service Level Management Configuration	FALSE	FALSE	Never	Never	FALSE	FALSE

Default settings

The default settings defined in areas will be inherited when you create new security roles. In an out-of-box system, none of the default settings is checked or set in the Service Level Management or Service Level Management Configuration areas.

Service Level Management security roles and settings

The out-of-box security roles for the Incident module include the following:

- SLM Manager

Mapping between previous security profiles and current PD security roles

The following table lists the mapping relationship between previous Service Level Management security profiles and current PD security roles in the Service Level Management module.

Security Profile	Security Role/Area
DEFAULT	DEFAULT/Service Level Management
administrator	administrator/Service Level Management
sysadmin	sysadmin/Service Level Management

Field mapping between security profiles and PD security rights/settings

Note: In the following two tables, AND and OR relate to whether a mapped security role has the corresponding right. For example, if any of the Service Level Agreement, Response Objectives, or Availability Objective has the "New" security profile setting, then the Process Designer security rights and settings will also be "New."

:For Service Level Agreements, Response Objectives and Availability Objectives

Security profile settings		Process Designer security rights and settings
New	OR	New
Delete	OR	Delete/Close
Update	OR	Update
View	OR	View
Allowed Statuses	AND	Allowed Statuses

SLT Catalog Records

Security profile settings		Process Designer security rights and settings
New Delete Update View	OR	Manage SLT Catalog Records

Settings:

Security profile settings	Process Designer security rights and settings
View Monthly Aggregate Results	View Monthly Aggregate Results
View Monthly Response Time Results	View Monthly Process Time Results
View Response Detail Records	View Process Detail Records

Security profile settings	Process Designer security rights and settings
View SLA Active Records	View SLM Active Records
View Monthly Availability Results	View Monthly Service Results
View Outage Detail Records	View Outage Detail Records
View Outage Event Records	View Outage Event Records

Out-of-box role rights

Based on the mapping rules, the rights and settings in previous security profiles are mapped to the rights and settings in the Service Level Management area specified in the corresponding security roles. See the table below for the out-of-box security rights in the Service Level Management and Service Level Management Configuration areas. This table only lists the new security roles that have different settings with the default rights.

Area Name	Role Name	View	New	Update	Delete/Close	Modify Template	Expert	Admin
Service Level Management	SLM Manager	TRUE	TRUE	Always	Always	TRUE	TRUE	TRUE
	System Administrator	TRUE	TRUE	Always	Always	FALSE	TRUE	TRUE
Service Level Management Configuration	SLM Manager	TRUE	TRUE	Always	Always	TRUE	TRUE	TRUE
	System Administrator	TRUE	TRUE	Always	Always	FALSE	TRUE	TRUE

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