

Quest Spotlight® on SAP® ASE 2.11.0

Getting Started Guide



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Legend

-  **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Contents

Installation	5
Installation Requirements	5
Privileges Required for User ID	5
Monitoring Tables for SAP ASE 15 or later	5
System Requirements	5
Install or Upgrade Spotlight® on SAP ASE	6
Silent Install of Spotlight® on SAP ASE	6
Uninstall Spotlight® on SAP ASE	7
Removing Database Objects	7
Register Spotlight® on SAP ASE	7
Configuration	8
Create Temporary Database	8
The Spotlight Program Group	8
Access Spotlight® on SAP ASE	9
Connect to Adaptive Server Instance	9
Creating a Spotlight User and a Connection	9
Using the “sa” Login	9
Using a non-“sa” Login	10
Making the connection	10
Using Spotlight with a limited access login account	13
For Pre-ASE v12.5.0.3	13
For ASE v12.5.0.3 and later	13
nonsasetup.exe Dialog Box	13
Troubleshoot Spotlight® on SAP ASE	15
Problems connecting to an Adaptive Server instance	15
Welcome to Spotlight® on SAP ASE	17
Features of Spotlight® on SAP ASE	17
Easy Installation	17
Touchless architecture	17
Audio and visual alerts	17
Server performance visualization	17
Comprehensive information about problem areas	18
Corrective suggestions	18
Smart monitoring	18
Smart graphics	18
Smart threshold management	18
SoWin SoUNIX Integration	19

History Browser	19
Spotlight Concepts	19
Metrics	19
Thresholds	19
Severities	19
How metrics, thresholds and severities work together	19
Using Spotlight® on SAP ASE	21
The Main Spotlight® on SAP ASE Window	21
Spotlight® on SAP ASE Alarms	24
Spotlight® on SAP ASE Drilldowns	26
About us	28
Contacting Quest	28
Technical support resources	28

Installation

Installation Requirements

Before beginning the installation, review this section to ensure required privileges are set and system requirements are met.

Privileges Required for User ID

You must have the System Administrator (sa) user ID and password for the Adaptive Server you want to diagnose, or have a DBA setup a user ID by running the setup utility before you can use Spotlight to diagnose the Adaptive Server. All metrics are available to sa users. Non sa users can be set up to monitor a SAP Adaptive Server with a non sa setup utility shipped with the Spotlight® on SAP ASE. Nearly all metrics and features are available to non sa users.

Monitoring Tables for SAP ASE 15 or later

If an Adaptive Server 15 or later does not have the monitoring tables installed script, Spotlight cannot use the MDA API. Spotlight notifies you of this condition and breaks the connection to the Adaptive Server. You can install these table using the INSTALLMONTABLES script that is shipped with Adaptive Server.

System Requirements

Operating System	Windows Vista (32-bit or 64-bit) Note: Recommended for monitoring local databases only. Windows 7 (32-bit or 64-bit) Windows 8 (32-bit or 64-bit) Windows 8.1 (32-bit or 64-bit) Windows Server 2012 Windows Server 2012 R2 Windows 10 (32-bit or 64-bit) Windows Server 2016 Note: We recommend using an Administrator account to run Spotlight® on SAP ASE.
Memory	512 MB RAM (minimum); 1 GB (recommended)

Hard Disk Space	100 MB of free hard-disk space
Other requirements	.NET 3.5 SP1
Database Server	SAP ASE 15.0.2, 15.0.3, 15.5, 15.7, 16

Install or Upgrade Spotlight® on SAP ASE

To install Spotlight on SAP ASE Getting Started Guide

1. Run the Spotlight® on SAP ASE installation program from the CD or the download file.
2. At the Welcome screen of the setup wizard, click **Next**.
3. Select **Simple** for the Installation Type. Click **Next**.

Note: The simple installation option is recommended. If a pre-existing Spotlight installation is installed, it is updated automatically. Selecting the Advanced option allows you to install into a separate directory structure from any other Spotlight installations.

By default, Spotlight® on SAP ASE is installed into the following directory:

```
C:\Program Files\Quest Software\Spotlight
```

4. Select **I accept the license agreement**.
5. Click **Next**.
6. Click **Finish**.

Silent Install of Spotlight® on SAP ASE

To silently install Spotlight® on SAP ASE:

Execute this command:

```
Spotlight_SAP_ASE_version.msi /qn
```

Where

```
/qn = quiet, no UI
```

To install it in a directory different from the default product directory

```
Spotlight_SAP_ASE_version.msi /qn
```

```
INSTALLDIR=destination_folder
```

Where

```
INSTALLDIR=destination_folder
```

 allows you to specify the directory path.

Uninstall Spotlight® on SAP ASE

To uninstall from Windows Add or Remove Programs

1. Select **Start | Control Panel**.
2. Select **Add or Remove Programs**.
3. Select **Spotlight® on SAP ASE**.
4. Click the **Change/Remove** button.
5. Follow the directions on the screen.

Removing Database Objects

If you plan to permanently remove Spotlight and would like to remove the database objects that Spotlight® on SAP ASE installs in the Adaptive Server, run the following SQL commands from within a client utility such as ISQL:

```
use sybsystemprocs
go
exec sp_sls_cleanup
go
drop procedure sp_sls_cleanup
go
drop procedure sp_sls_cleanup_125
go
drop procedure sp_sls_cleanup_m
go
```

Register Spotlight® on SAP ASE

To enter a License for Spotlight® on SAP ASE

1. Select **Start | Programs | Quest Software | Spotlight | Spotlight® on SAP ASE**.
2. Select **Help | About Spotlight**.
3. Click **View/change product license** under Spotlight® on SAP ASE under the Installed Products tab.
4. Click **Change this license**.
5. Enter the license number.
6. Click **OK**.
7. Click **Close**.

Configuration

Create Temporary Database

Spotlight® on SAP ASE relies on a temporary database and will use tempdb, the default temporary database, if you do not setup a temporary database for Spotlight to use. To prevent Spotlight from influencing the performance of the tempdb, it is recommended that you create a new temporary database and setup a dedicated user that uses this temporary database.

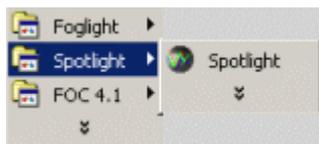
1. Create a new database device with 10MB size. It is best to create the new device on a physical disk which is different from the disk used by the existing tempdb.
2. Create a new temporary database which uses the newly created database device (8MB for data and 2MB for log).
3. Create a new user and bind to the newly created temporary database.

e.g. sp_tempdb bind, lg, sosyb, DB, sosybtempdb

Note: The device size is an initial recommended size and is based on our recommended monitoring table configuration parameters setting. You may need to increase the device size when those parameters sizes are increased.

The Spotlight Program Group

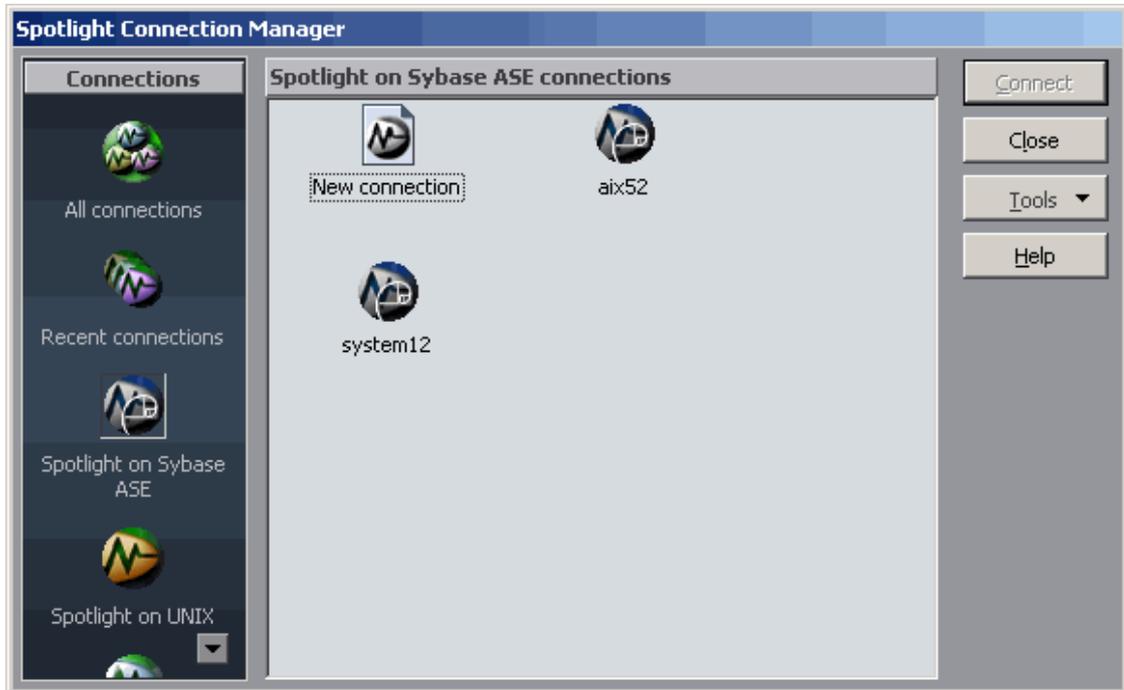
The Spotlight installation creates a program group called **Spotlight** on the **Windows** Start menu. Unless you change the default locations during installation, this group is located in **All Programs | Quest Software**.



Access Spotlight® on SAP ASE

To start Spotlight on SAP ASE Getting Started Guide

1. On the Windows taskbar, click **Start | All Programs | Quest Software | Spotlight | Spotlight**.



2. Select **Spotlight® on SAP ASE** in the Connections pane.

Connect to Adaptive Server Instance

Use this procedure to establish a connection with an Adaptive Server. Spotlight® on SAP ASE supports simultaneous connections to multiple servers. This eliminates the need to run concurrent versions of the application. Repeat the following procedure to connect to another server.

Creating a Spotlight User and a Connection

Using the “sa” Login

If the login you use has the “sa_role” and the “sso_role” (both recommended), then all monitoring metrics are available to Spotlight. For more information on a sa account, see [Making the connection](#).

Using a non-“sa” Login

If the “sa_role” login is not used, several metrics in Adaptive Servers prior to version 12.5.0.3 will not be displayed. In addition, you need your

Adaptive Server DBA to run the nonsasetup.exe utility shipped with Spotlight. The DBA needs to run this utility before monitoring the Adaptive Server with Spotlight can begin. This utility:

- Creates some Spotlight stored procedures.
- Checks/changes a few Server configuration parameters related to using ASE’s MDA API (ASE 2.5.0.3 and later).
- Grants the non-sa login some minimal privileges (i.e., “select” on master..sysengines and for the Adaptive Server 12.5.0.3 and later, the “mon_role” is added to the login).

For further information on a non-sa account, see the section titled [Using Spotlight with a limited access login account](#).

Making the connection

To connect to Adaptive Server Enterprise

1. Start Spotlight® on SAP ASE.
2. Open the **Spotlight Connection Manager**.
3. Select Spotlight® on SAP ASE icon in the panel to the left.
4. Double-click the **New Connection** icon.
5. Complete the following fields in the **New Connection** window:

Field	Description
Select Connection Type	Select Spotlight® on SAP ASE from the list.
New Connection Name	Select a short and meaningful name for the new

6. Click OK to open the ASE Properties window.

7. Complete the following fields in the Properties window:

Field	Description
ASE Server	The name of the Adaptive Server that is to be monitored. Spotlight attempts to find the SQL.INI file. If found, and the ASE Server is in that list, Spotlight automatically fills in the Host Name and Port Number.
Host Name	The name of the specified host machine that the Adaptive Server is running on. This corresponds to the host field in the SQL.INI file.
Port	The port that the specified Adaptive Server is listening on. This corresponds to the port field in the SQL.INI file.
Login Name	The login used to connect to the Adaptive Server. Remember that using a login that is the ASE system administration (sa) or an account with the "sa_role" and "sso_role" allows full monitoring of an Adaptive Server and automatically handles all issues for Spotlight to monitor the Adaptive Server. If using a non-sa account, then have a DBA follow the steps in the section Using a non-"sa" Login before attempting to open this connection to the Adaptive Server.
Password	The respective password for the login entered.
Host Connection Details	
Monitor OS	Select this checkbox to monitor the operating system.
Host username	The username you use when logging on to the machine.
Host Password	The password you use when logging on to the machine.
Host Type	Select the type of Spotlight connection to make to the machine. The current set of options are Windows, Unix/SSH or Unix/Rexec. If you are connecting to a UNIX host first make sure that Rexec or SSH is installed.
Domain	If you are connecting to a Windows host, then the domain field is the name of the domain that the specified user belongs to. If no user name is entered in the Host username field, this field should also be left blank.
Host port	If you are connecting to a Unix/SSH host, then enter the port number that Spotlight is to use for its SSH (secure shell) connection to the UNIX host. The default value is 22.

Save password details

Select this checkbox to save passwords whenever you add a new connection.

8. Click **OK**.

Using Spotlight with a limited access login account

For Pre-ASE v12.5.0.3

Any data retrieved from Adaptive Server using the sysmon utility is not available from within Spotlight.

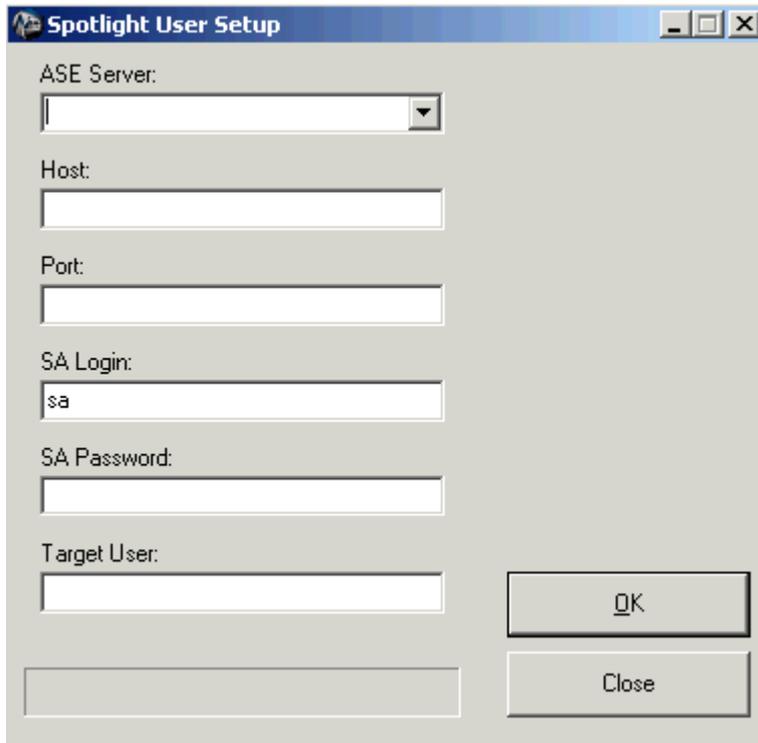
1. Decide on the login to be used by Spotlight.
Note: This executable needs to be run to create some Spotlight stored procedures and to grant permissions on master..sysengines.
2. Request that your DBA run nonsasetup.exe, located in the following path:
<Install Directory>/Quest Software/Spotlight/Plugins/SoSyb
The **nonsasetup.exe** dialog box is shown in the section titled [nonsasetup.exe Dialog Box](#).

For ASE v12.5.0.3 and later

1. Decide on a login for connecting to Adaptive Server from Spotlight.
2. Contact your DBA to run nonsasetup.exe located in the following path:
<Install Directory>/Quest Software/Spotlight/Plugins/SoSyb
Note: This executable needs to be run to create some Spotlight stored procedures, to grant permissions on master..sysengines, to add mon_role to the login account, and to set up ASE's MDA API by turning on and tuning the respective server parameters.

nonsasetup.exe Dialog Box

The **nonsasetup.exe** dialog box is shown below.



The fields in this dialog are defined in the following table:

Field	Description
ASE Server	Name of the ASE Server. A list of defined servers is displayed in the dropdown list. Selecting an existing Adaptive Server automatically fills in the Host and Port fields.
Host	The name of the specified host machine that the Adaptive Server is running on. This corresponds to the host field in the SQL.INI file.
Port	The port that the specified Adaptive Server is listening on. This corresponds to the port field in the SQL.INI file.
SA Login	Defaults to "sa". Keep the "sa" or enter a login that has the "sa_role" and "sso_role" granted to it.
SA Password	Password required to log onto the specified server in sa. This application requires an SA connection to correctly install and establish permissions.
Target User	Login of the non-sa user for whom privileges will be established. Not specifying a target user still installs procedures and sets up the server for Spotlight monitoring.

Troubleshoot Spotlight® on SAP ASE

Problems connecting to an Adaptive Server instance

If you have trouble connecting to an Adaptive Server instance using Spotlight, check that you can do the following:

- Attempt to connect to the Adaptive Server using another ASE Open Client application such as ISQL using the same credentials as defined in the properties of Spotlight.
- Make sure the host computer that Spotlight is installed on has proper network access.

The most common problems are listed in the following table:

Symptom	Possible Problem	Likely Problem	Validation
Can't make connection to the ASE	Getting correct account information (login name/password)	N/A	N/A
	Entering the right connection properties (port, hostname, etc.)	N/A	N/A
Spotlight is hanging or the connection appears to be very slow	The Adaptive Server itself is having issues (database or transaction log full, CPU load is high, etc.)	N/A	N/A
No data in the drilldown grids	Entering the wrong case for the Adaptive Server name (12.5.0.3 issues only). After you make a connection to a Adaptive Server on UNIX, case does matter, and this is reflected in a wrong entry being made to the syssservers table for a loopback entry. This, in turn, causes problems with retrieving any MDB-related data.	N/A	From within ISQL, run "select*from master.. syssservers." Look at the row with "loopback" in the "srvname" column. On that row, look at the entry for column "srvnetname." Is that name case correct? If not, issue the following command to correct: "sp_addserver loopback, null, CASE CORRECT ADAPTIVE SERVER NAME"
	The monitoring tables available in Adaptive Server 12.5.0.3 or later are not installed. Run the InstallMonTables script (found in the		From within ISQL, run "select*from master..

Adaptive Server directories).

monState.” If you get an error message that the table is not found, that means that the installmontables script has not been run. You can run the script using the following ISQL utility:

```
"isql -Usa-  
Password -i  
$SYBASE/ASE-  
12_5/scripts/  
installmontables"
```

Welcome to Spotlight® on SAP ASE

Spotlight® on SAP ASE is a powerful diagnostic and problem resolution tool for Adaptive Server Enterprise. Its unique user interface provides you with an intuitive, visual representation of the activity on your database and operating system.

Features of Spotlight® on SAP ASE

The underlying architecture for Spotlight is designed for ease of installation and use, and offers a range of tools to create custom solutions for problem diagnosis.

Easy Installation

Spotlight® on SAP ASE is packaged in a quick and simple installation program.

Touchless architecture

Spotlight® on SAP ASE is a client-only installation. This agent-less architecture has many advantages:

- Increases the speed and ease of installation
- Reduces maintenance and deployment complexity
- Allows monitoring of Adaptive Servers running on any hardware/platform supported by Adaptive Server

Audio and visual alerts

Spotlight alerts you with visual and audible warnings and alarms when performance metrics exceed acceptable thresholds.

Server performance visualization

Spotlight's unique graphical representation allows a database administrator to quickly spot performance problems on an Adaptive Server. Spotlight is tailored to show the process dataflow unique to Adaptive Server and to highlight performance-related details to the administrator.

Comprehensive information about problem areas

Spotlight visually identifies problem areas: active sessions, locks, deadlocks, and disk I/O information providing extensive drilldown capabilities for rapid problem resolution. A range of reports and graphs provides you with detailed information about your server environment for up to 24 hours. This information can be viewed on the screen or printed.

Corrective suggestions

When Spotlight detects a condition that appears to be a potential problem, it not only informs you about it, but advises you what you could look at to diagnose the problem further and suggests actions you can take to correct the situation.

Smart monitoring

Spotlight utilizes a powerful facility called calibration. Calibration allows each Adaptive Server being monitored by Spotlight to have its visual displays and thresholds dynamically adjusted. The adjustments are based on measured activity on the server. This allows Spotlight to represent each server's unique performance characteristics in the context of the server's expected behavior.

Calibration can be turned on for a designated period of time (ideally during a time frame where activity on the Adaptive Server is at typical levels). During this time, Spotlight performs statistical sampling on the metrics being monitored. These statistical values are then utilized by the metric components displayed and the related thresholds.

Smart graphics

Spotlight graphically represents process flows within an Adaptive Server, allowing you to observe activity in real time. The speed of the flows represents true activity levels on the server. Flow speed is dynamically adjusted with Spotlight's statistical sampling process called calibration.

Smart threshold management

Using a variety of methods, Spotlight defines the thresholds at which performance warnings and alarms operate.

- When a metric reaches a specific value (dynamic or fixed)
- When a metric reaches a percentage of maximum value (dynamic or fixed)
- When a metric deviates from the statistically sampled values derived during Spotlight calibration

This allows Spotlight® on SAP ASE to provide you with accurate and meaningful alerts quickly, out of the box. You can customize each threshold level. In addition, custom actions (i.e., email, paging, etc.) can easily be assigned to any alert defined to Spotlight.

SoWin SoUNIX Integration

Spotlight has integrated with SoWin and SoUNIX to enable monitoring of Host CPU usage and related metrics. The Host CPU usage is now clearly visible on the Spotlight Home page. Linkage is provided to other SoWin and SoUNIX products depending on the type of server host that is being monitored.

History Browser

Spotlight monitors historical data within its data repository. This historical data may be accessed through the Spotlight history browser.

Spotlight Concepts

Spotlight uses metrics, thresholds, and severities to determine the performance statistics of a system. Icons, flows, and labels graphically display this information in the main application window.

Metrics

A metric is a measurable value resulting from a request made against the target machine. This query runs each time the main application window is refreshed.

The query provides a performance statistic about the system, the number of machines that have at least one server session, and return a value to Spotlight.

Thresholds

Each metric is divided into thresholds. Some metrics may have only one threshold, while others can have many. A threshold is simply a range of values that can be returned by the metric. A threshold cannot belong to more than one metric.

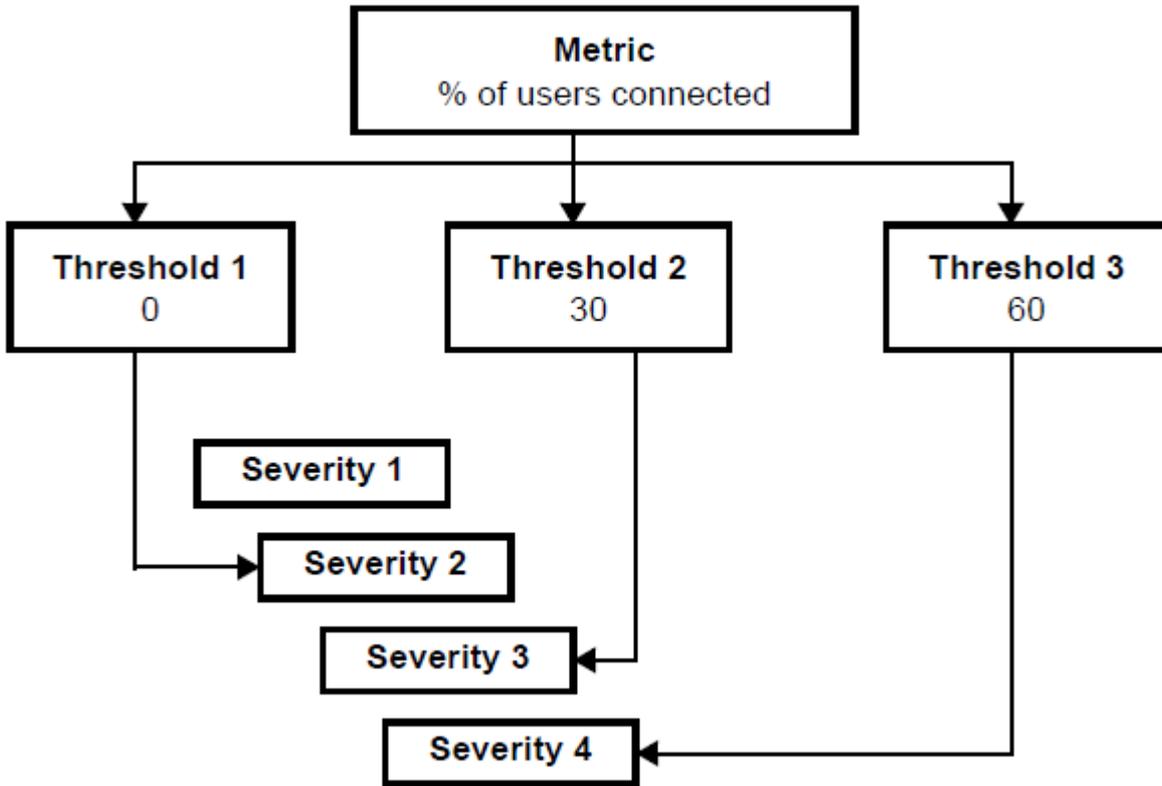
Severities

Each threshold is associated with a severity. The severity determines what action Spotlight is to take when the value returned by a metric falls into the range controlled by a threshold. For example, you may set a severity to display a color, flash a color, emit a sound, or perform an action.

Alarms are attached to severities.

How metrics, thresholds and severities work together

The following diagram shows an example of the relationship between metrics, thresholds, and severities.



In the above example, the query (**% of users connected**) is run against the database, and any values returned can fall into one of three ranges called thresholds. If the query returned the value 20%, the value would fall into the range covered by Threshold 1.

In this example, Threshold 1 is attached to Severity 2. You can choose via the **Spotlight Console Options** window to set the colors of the severity (for example, Severity 2 might be set to display in green). The component that the metric belongs to then changes to green whenever that threshold is exceeded.

Using Spotlight® on SAP ASE

Spotlight® on SAP ASE's unique user interface provides you with an intuitive, visual representation of the activity on a ASE connection.

This chapter describes the elements of the main application window, the alarms and drilldowns available, and a description of the SAP ASE architecture.

The Main Spotlight® on SAP ASE Window

The main Spotlight® on SAP ASE window provides a quick and intuitive view of the activity of a ASE instance.

The Spotlight® on SAP ASE window helps you locate system bottlenecks quickly. Related server statistics are grouped together on panels that are connected by a series of graphical flows and icons. Spotlight® on SAP ASE updates these flows in real time so that you can see how quickly data is moving through the system. The icons change color as their values move through the range of thresholds.

The following graphic shows the main features of the Spotlight® on SAP ASE window. The list following the window identifies and describes each element.



This Window Element...	Shows...
A Users panel	<p>Number of user connections allowed by the current Spotlight® on SAP ASE instance.</p> <p>Number of user processes that may potentially be problematic for system operations. Amount of time a sample SQL statement took to run.</p> <p>Processes running on the Adaptive Server, including those blocked, active, and idle.</p>
B Host panel	This current level of activity for the host CPUs in the machine. The value is the sum of the usage by the system and users.
C Packets sent and received	The current level of activity. As the rate of data transfer increases, so does the speed of the flow. If the statistic represented by the flow moves into another threshold, the flow may change color. The combination of movement and color makes it easy to spot congested areas.
D ASE panel	<p>Date and time Adaptive Server was started.</p> <p>Name of the host machine on which the Adaptive Server is running.</p> <p>Adaptive Server-related tasks (shown in two sections—CPU Busy and Locks).</p> <p>Time spent on server-related tasks.</p> <p>Engines online and configured.</p> <p>Number of times a lock waited longer than the Lock Wait threshold.</p> <p>Number of locks in use.</p>

Number of deadlocks.

E	Server Status	Displays important information about the status of the server that affects Spotlight's ability to perform monitoring.
F	Disk Writes/Disk Reads	Information about how many disk writes and disk reads per second have been completed by the Adaptive Server.
G	Data Cache/ Procedure Cache Searches	Number of searches per second requested from the data cache. Number of stored procedures requested per second.
H	ASE Error Log panel	The ASE Error Log panel displays the number of errors that match the severity levels that have been established for error log entries. Severity levels are defined using the Spotlight® on SAP ASE Error Log Options window.
I	Backup Server panel	Status information for the Backup Server.
J	Memory panel	Information about the following: Memory allocated to the Adaptive Server <ul style="list-style-type: none">• Data cache size• Data cache hit rate• Procedure cache size• Procedure cache hit rate• Metadata cache Open DBs• Metadata cache Open Objects• Metadata cache Open Index
K	Data Cache Writes/ Reads	Number of buffers written from cache to disk, expressed as a rate per second. Number of searches of the data cache that did not find the page in cache and required a disk read.
L	Procedure Cache Reads Disk Storage Panel	The rate at which stored procedures are read from disk. The Disk Storage panel has two main sections— I/O Busy and Databases . The I/O Busy section shows ASE performance of I/O-related tasks (as a percentage) and also the number of I/O disk devices. The Databases section shows: <ul style="list-style-type: none">• Number of databases• Size of the fullest database being monitored.• Percentage of space used by the fullest database, along with a container representing this same data.• Size of the fullest transaction log being monitored• Percentage of space used by the fullest transaction log, along with a container representing this same data.

- Size of the fullest temp DB being monitored.
- Percentage of space used by the fullest temp DB, along with a container representing this same data.

Spotlight® on SAP ASE Alarms

Some of the main alarms that may appear on the Spotlight® on SAP ASE window are shown in the following table. For a full list of alarms, see “Spotlight® on SAP ASE alarms” in the online help.

This alarm...	is raised when...
Backup Server Status	Spotlight detects an error when attempting to connect to the Backup Server. This checking is done by executing a remote server call from the connection to the Adaptive Server that Spotlight has established. Spotlight then dissects return messages from the Backup Server. The Backup Server needs to be started by going to the host machine where the Backup Server is installed and running the appropriate shell or batch files for your environment. You are not be able to back up your database or dump your transaction logs until the respective Backup Server is up and running.
Blocked User	The percentage of processes unable to run (waiting) because another process has a lock on a needed resource has exceeded the defined thresholds.
Connections Used	The number of current user connections approaches the maximum number defined in the configuration variable number of user connections . This value represents the number of connections found in the <i>master..sysprocesses</i> table. If the number of connections used remains close to the maximum allowed on Adaptive Server, consider increasing the number of connections allowed. There is a cost in memory associated with increasing this value (approximately 146K per connection, depending on the Adaptive Server version).
CPU Busy	The percentage of time that the Adaptive Server’s CPU was performing Adaptive Server related tasks has crossed a defined threshold.

Database Status	<p>Raised at the following levels when Spotlight detects that the status of any database for the Adaptive Server is in one of the following states:</p> <ul style="list-style-type: none"> • Informational: Read Only, Database being Recovered, Database being upgraded. • Low: DBO use only, Single user mode, Offline, Offline until recovery completes • Medium: Database created for load. • High: Suspect Database, Suspect pages.
Data Cache	The rate of searches requested from the data cache (expressed as searches per second) exceeds normal levels.
Data Cache Hit Rate	The data cache hit rate for the server falls below the ranges defined by the thresholds on this component.
Deadlocks	<p>The number of server-side deadlocks detected on an Adaptive Server goes above normal volumes.</p> <p>Deadlocks become more common as lock contention increases.</p>
Disk Reads	The rate of disk I/O for reads on an Adaptive Server (displayed as a rate per second) goes above normal levels.
Disk Writes	The rate of disk I/O for writes on an Adaptive Server (displayed as a rate per second) goes above normal levels.
Engines Offline	This alarm is raised when Spotlight determines an engine is offline.
Error Log	<p>Spotlight detects one or more lines written to the Error Log that match the configured patterns defined within Spotlight.</p> <p>This alarm is only available with Adaptive Server version 12.5.0.3 and later. ٣</p>
Fullest Database	When any database exceeds the usage limits defined in the thresholds.
Fullest TempDB	When any tempdb exceeds the usage limits defined in the thresholds.
Fullest Transaction Log	When any database's transaction log exceeds the usage limits defined in the thresholds.
Host CPU Busy	<p>This alarm is raised when the percentage of time that the Adaptive Server's Host CPU has been performing tasks exceeds the defined thresholds.</p> <p>By drilling down to the associated SoWin or SoUNIX plug ins, you may be able to identify and correct the cause of the high CPU usage.</p>
I/O Busy	<p>The percentage of time that the Adaptive Server's CPU was performing Adaptive Server I/O-related tasks has crossed a defined threshold.</p> <p>If values are consistently high, it is likely that response time and throughput could benefit from additional devices or better distribution of I/O among multiple devices.</p>
Locks Waiting	The number of locks waiting to be granted is above normal levels.
Locks Used	The number of locks used is above normal levels.

Open Databases Percent	The percentage of open databases for the server (based on the number available) increases above the ranges defined by the thresholds on this component.
Open Indexes Percent	The percentage of open indexes for the server (based on the number available) increases above the ranges defined by the thresholds on this component.
Open Objects Percent	The percentage of open objects for the server (based on the number available) increases above the ranges defined by the thresholds on this component.
Problem User	Spotlight detects a user that meets or exceeds the performance criteria defined in Spotlight as being of concern. If this alarm is being raised too often, consider lowering the amount of activity level thresholds defined in Spotlight.
Procedure Cache	The rate of searches requested from the procedure cache (expressed as searches per second) exceeds normal levels.
Response Time	The amount of time a sample (or benchmark) SQL statement took to run exceeds normal thresholds.

Spotlight® on SAP ASE Drilldowns

Drilldowns display detailed information about the database that you are diagnosing. Each drilldown contains a series of reports and graphs that provide you with specific information about the components of your database. The statistics that are available help you identify and anticipate performance problems.

Drilldown Icon	Use this drilldown...	to access information about...
	Alarm Log	List of alarms, sorted according to time. Information includes the name of the component that issued the alarm, the date and time at which the alarm was logged, and the severity of the alarm.
	Alarms by Time	List of alarms organized into a Gantt chart.
	CPU Summary	Amount of time the Adaptive Server spends on server-related tasks and the number of engines configured.
	Database Summary	Number of databases. Size of the fullest database, transaction log, and tempdb being monitored.
	Device Summary	Number of physical writes and reads per second completed by the Adaptive Server. Percent of time spent by the Adaptive Server on I/O related tasks. Number of disk devices. Number of physical reads per second by the data cache. Number of stored procedures read from the disk per second.

	Error Log	Error messages for the Adaptive Server you are diagnosing.
	Locks Summary	Locks shows a listing of users and the number of locks they are holding.
	Memory Summary	Memory usage for the Adaptive Server you are diagnosing.
	Network	Number of packets sent and received by the Adaptive Server.
	Spotlight Monitoring Requirements	General Adaptive Server, login, and machine information. Settings for Adaptive Server Enterprise configuration elements. Current Alarm Log, ASE Error Log, and Spotlight Error Log messages.
	User Activity	User connections, problem users, processes running on an Adaptive Server, SQL text capturing, and user wait events.

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