

Foglight® for SAP ASE 7.1.0

Release Notes

Developed and tested for Foglight Management Server 7.1.0

September 2023

These release notes provide information about the Foglight® for SAP ASE 7.1.0 release.

Topics:

- [Welcome to Foglight for SAP ASE](#)
- [New in this release](#)
- [Resolved issues and enhancements](#)
- [Known issues](#)
- [System requirements](#)
- [Product licensing](#)
- [Getting started with Foglight for SAP ASE](#)
- [About us](#)

Welcome to Foglight for SAP ASE

Foglight® for SAP ASE enables Foglight to monitor SAP ASE database systems. The cartridge monitors database resource utilization for capacity planning, problem determination, and trend analysis, in both real-time and historical time.

These Release Notes cover the resolved issues, known issues, workarounds, and other important information about the 7.1.0 release of Foglight for SAP ASE. Review all sections before starting the installation.

New in this release

Version 7.1 of Foglight for SAP ASE contains the following new features and updates:

Security Enhancements

- Updated Java JRE used by Foglight to version 17.0.8
- Updated third-party libraries
- Add the ability to remove literals from queries collected. Supported for selected database cartridges. check relevant release notes.

Foglight Agent Manager Enhancements

- FglAM HA partitions will now automatically fail back to the highest priority FglAM

User Experience Enhancements

- Revised the header across all foglight dashboards to include new breadcrumbs, timeframe selector, and reports
- Open source and No-SQL database menus are now conveniently located under the “Databases” menu on the left for easy navigation
- Change the location of the “Pin” button for the left navigation bar
- Improve Query Insight layout to allow change of width between the two parts of the screen

Resolved issues and enhancements

The following table provides information about the resolved issues and enhancements for Foglight for SAP ASE 7.1.0:

Issue ID	Resolved issue	Domain
FOG-6325	Allow configuration of charset in RS agent	Foglight for SAP RS
FOG-5670	Add debug messages for loadIniFile function	Foglight for SAP RS

Known issues

The following is a list of issues known to exist at the time of release.

Sybase_RS Agent

Table 1. Sybase_RS Agent related known issues

Issue ID	Known issue
CR-0130361	<p>The Sybase_RS agent does not launch on AIX 5.2.</p> <p>Workaround: Since the Sybase_RS agent has the ability to perform most of its monitoring remotely, implement the following workaround:</p> <ol style="list-style-type: none"> 1 Choose another server which has the Sybase software (either ASE or Replication Server) installed. 2 Set up the interfaces file so it has the Sybase Replication Server entry and entries for all of the other associated Sybase Servers (RSSD server, Primary Data Server, Replicate Data Server etc.) being monitored. 3 Configure an instance of the Sybase_RS agent on this server (the server selected in step 1) to monitor the Replication Server running on the AIX 5.2 server. <p>NOTE: Since the Sybase_RS agent is monitoring the Sybase replication server remotely, the tables related to the replication server error log (<i>RS_ErrorlogDetail</i> and <i>RS_ErrorlogSummary</i>) do not post any data.</p>
CR-0168297	<p>Memory leak on Windows platform.</p> <p>Workaround: This is a Sybase Open Client API issue and a case is currently open with Sybase.</p>
CR-0230496	<p>The <i>RS_PartitionStatus</i> rule does not auto-clear after the partition is reset from Offline to Online.</p> <p>Workaround: This rule event must be manually cleared because we do not report partition online statuses which could possibly result in a data overload within the Foglight database.</p>

Table 1. Sybase_RS Agent related known issues

Issue ID	Known issue
CR-0230497	<p>Latency and Synchronizing Servers. Invalid latency values reported in the <i>RS_Latency</i> table.</p> <p>Workaround: In order to report accurate latency values, all Replication Servers, Primary, and Replicate data servers within an ID server domain must be synchronized.</p>
CR-0231424	<p>The <i>RS_ConnectionStatus</i> rule does not trigger an alarm, even when the rule conditions are met.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
PR-063489	<p>The <i>RS_Latency_Graph</i> view has an incomplete view label.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
PR-063860	<p>The agent properties do not display the Agent/DCM versions after the agent starts successfully.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
PR-068260	<p>Unusual table names appear in the Data Browser view for the Sybase_RS agent. The <i>RS_ThreadSummary</i> and <i>RS_PartitionSpaceUsedTrend</i> table names should be listed as the table name followed by the identity columns. Only their identity columns appear in the table's hierarchy. For example, the <i>RS_PartitionSpaceUsedTrend</i> table should be listed as: <i>RS_PartitionSpaceUsedTrend /apps/sybase/sybase1253/data/sq2 104 sq2 /apps/sybase/</i>. Instead, this table is listed as: <i>/apps/sybase/sybase1253/data/sq2 104 sq2 /apps/sybase/</i>.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
PR-068923	<p>The '\n' character appears in the <i>RS_ErrorLogMsg</i> rule message.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
PR-069037	<p>Some of the graphical views display incorrect view legends.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>
SDB-353 SDB-352	<p>On the Databases dashboard, the Up Since and Workload Info columns are not populated for Sybase_RS agent entries. That is because the Sybase_RS agent is not a database monitoring agent. This is an expected behavior.</p>

Sybase_MDA Agent

Table 2. Sybase_MDA Agent related known issues

Issue ID	Known issue
CR-0147037	<p>The <i>EngineSummary</i> Table shows intermittent negative values for <i>cpu_busy_pct</i>.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0203573	<p>There are an excessive number of messages in the Foglight Management Server log. If the Sybase_MDA agent attempts to collect from a database where the user does not have a login or permission to access the data, then an error message will be written to the client log file with details on how to resolve the issue. If the agent continues running without the user permission level being modified, this results in several messages being written to the client FMS log file each collection cycle.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future server release.</p>

Table 2. Sybase_MDA Agent related known issues

Issue ID	Known issue
CR-0230499	<p>The <i>RS_Latency_Graph</i> view has an incomplete view label.</p> <p>Workaround: Expected Sybase behavior.</p>
CR-0230598	<p>The Sybase_MDA agent does not work on Windows. The agent has trouble automatically running the <i>rapsinstall2*.sql</i> scripts under Foglight 5 due to the use of a relative directory path name.</p> <p>Workaround: To work around this, manually run <i>rapsinstall2.sql</i> for any monitored ASE and then manually run <i>rapsinstall2_ase15.sql</i> for any ASE of version 15.X. This is applicable to Windows 2000 and Windows 2003 only.</p> <p>For example, to manually run <i>rapsinstall2.sql</i>:</p> <pre>c: c:\>cd Program files\Quest Software\Foglight c:\> Program files\Quest Software\Foglight> cd config\Sybase\scripts...> isql -Usa -P<Password> -S<SERVERNAME> -i .\rapsinstall2.sql -o rapsinstall2_out.txt</pre> <p>If the ASE of interest is version 15.X, also do this:</p> <pre>...> isql -Usa -P<Password> -S<SERVERNAME> -i .\rapsinstall2_ase15.sql -o rapsinstall2_ase15_out.txt</pre>
CR-0230645	<p>The agent parameter Exclusion list name is not the same as in Foglight 4.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0230847	<p>The Agent Version and Stored Procedures Version fields are blank.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0230878	<p>The <i>SYBM_ASE_Availability</i> view does not show the name of the Sybase server.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0231131	<p>Data for <i>UsersBlocked</i> view gets displayed in <i>UsersBlocking</i> view.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0231189	<p><i>UsersBlocking</i> view shows incorrect data.</p> <p>Workaround: There is currently no workaround for this issue.</p>
CR-0231209	<p>Received exception: position beyond end of string from BenchMarkTimes.</p> <p>Workaround: There is currently no workaround for this issue.</p>
PR-070038	<p>The view list includes an extra database name in some of the views.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>
PR-070055	<p>The <i>Cache_Efficiency</i> Rule does not have a property named <i>dcache_name</i>.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>
PR-070213	<p>Two similar views, <i>SYBM_DbSpaceTrendBar</i> and <i>YBM_DiskSpaceTrendBar</i>, do not show data.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>
SDB-414	<p>Excluding databases can only be done by populating the Exclude DBs list manually in the Sybase_MDA agent properties.</p> <p>Workaround: There is currently no workaround for this issue.</p>

Sybase Dashboards

Table 3. Sybase Dashboard related known issues

Issue ID	Known issue
FOM-978	<p>Some collection data might not be displayed in the following dashboards when monitoring SAP ASE 15.7.</p> <ul style="list-style-type: none">• Global View - Workload• Quick View - Total Wait Events• Homepage - Devices - DB Space - DB Segment• Top Activity - System Wait Events• Top Activity - Spinlocks• Top Activity - Execution Time• Top Activity - Top Hash - Server Statistics - Waits• Buffer Pools - Data Cache Spinlocks• Databases - DB Spaces - Segment• Databases - Table Spaces• Databases - Table Performance
SYFOG-123	<p>Lots of data are not synchronized in the FMS Federator.</p> <p>NOTE: SAP ASE cartridge does not support Federation.</p>
SDB-407	<p>Sybase reports are only be accessible by those Foglight users whose accounts include the Sybase Admin role.</p>
N/A	<p>Roles mechanism. To view the new Sybase dashboards, a user must have the minimum privileges of:</p> <ul style="list-style-type: none">• Foglight Operator• Sybase Administrator <p>To activate or deactivate agents from the Sybase dashboards, the user must have Foglight administrator privileges.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>
N/A	<p>On the <i>Top Activity</i> dashboard, SQL Details tab, long SQL statements are displayed across multiple table rows.</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>
N/A	<p>When creating a new agent, the <i>Server Configuration</i> collection and <i>Space Trending</i> collection are updated only after one hour (until then, data is not available).</p> <p>Workaround: There is currently no workaround for this issue. It will be fixed in a future release.</p>

Upgrade

A direct upgrade to Foglight for SAP ASE 7.1.x is only available from version 5.9.7.24 or later. Customers that are running older versions of the product must first upgrade to version 5.9.7.24 and then upgrade to version 7.1.x.

Foglight for SAP ASE 7.1.x requires:

- Management Server version 7.1.x.
- Agent Manager version 7.1.x

System requirements

Before installing Foglight for SAP ASE, ensure that your system meets the following minimum hardware and software requirements:

System requirements

To learn about the system requirements for these components, refer to the *Foglight Release Notes* and *Foglight System Requirements and Platform Support Guide*.

Hardware requirements

For the hardware requirements of Foglight Cartridge for SAP ASE, refer to the [Supported platforms](#) table.

For the Foglight Management Server hardware requirements, refer to the *Foglight System Requirements and Platform Support Guide*.

Software requirements

Recommended SAP ASE Configuration

The values below are minimum requirements for the given parameters:

Value	Requirement
sp_configure 'number of locks'	50000
sp_configure 'number of open objects'	2500
sp_configure 'number of open indexes'	1500
sp_configure 'number of open partitions'	1000
sp_configure 'permission cache entries'	50

Supported platforms

Foglight for SAP ASE supports to monitor the following platforms:

- Supported SAP versions:
 - Adaptive Server Enterprise: 15.x through 16
 - Replication Server: 15.0, 15.1, 15.2, 15.7, 16.0

NOTE: Version 5.9.5.10 allows remote monitoring, hence Supported Platforms are the same as the FglAM supported platform list. Refer to the *Foglight System Requirements and Platform Support Guide* for the supported platforms.

Product licensing

Foglight includes a licensing capability that restricts access to those features that are defined in the license. Any Management Server installation requires a license that grants access to server-specific parts of the browser interface and the features associated with them. Foglight cartridges are also license-protected. While some cartridges are covered by the base Foglight license (such as Foglight Agent Manager cartridges and the Foglight for Infrastructure), others may require an additional license.

Foglight for SAP ASE is covered by the base Foglight license that allows cartridges to be installed.

To activate a trial or a purchased commercial license:

- 1 On the navigation panel, under Dashboards, click *Administration > Setup > Manage Licenses*.
- 2 Click **Install**.
- 3 In the **Install License** dialog box, click **Browse**.
- 4 In the file browser that appears, specify the location of the license file.
- 5 In the **Install License** dialog box, click **Install License**.

Getting started with Foglight for SAP ASE

Contents of the release package

The Foglight for SAP ASE 7.1.0 release package contains the following:

- Foglight for SAP ASE cartridge:
 - *DB_Sybase-7_1_0.car*
- Product documentation, including:
 - *Foglight for SAP ASE User and Reference Guide* (PDF and online help)
 - *Foglight for SAP ASE Release Notes* (this document)

Installation instructions

Upgrade

SAP ASE cartridges former to 5.7.5.40 cannot be upgraded to the current SAP ASE cartridge version (7.1.x).

Workaround: upgrade the FMS to 7.1.x and install the latest SAP ASE cartridge

History data

To maintain cartridge history, do not remove the legacy cartridge. For the same reasons as mentioned above, the history data in the legacy cartridge is not accessible from the new cartridge. Also, as mentioned in the workaround

above, both legacy and new SAP ASE cartridges can be installed side by side. Hence legacy history will be available via the legacy cartridge.

Monitoring the SAP ASE instance

Same SAP ASE instance can be monitored by both Legacy SAP ASE agent and new SAP ASE agent (5.9.7.20), if unique FglAM and unique SAP ASE user account are used for each account.

ASP enhancements

- Changes in agent startup parameter (ASP) values no longer require the agent to be deactivated and reactivated for the change to take effect.
- Changes in agent startup parameter (ASP) values such that frequency and max rows are defined on a per-collection basis. Edit the Collection Details list to define the frequency and max rows of each collection.

Sybase open client

SAP ASE cartridge 7.1.0 does not require Sybase Open Client to be installed.

Installation

After installing the cartridge, update the SAP ASE account for Foglight by manually downloading and running the scripts `DB_Sybase_FirstRun_Scripts` located under *Foglight > Dashboards > Administration > Agents > Cartridges > Components for Download*.

- 1 Run script `rapsAdmin.sql` as **sa** user. This script creates only two helper stored procedures:
 - `sp_fgl_addgrant` and `sp_fgl_adduser`
 - `isql -Usa -Ppassword -SserverName -i rapsAdmin.sql -o rapsAdmin.out`
- 2 Run these scripts to complete the upgrade and to display the correct information on the new dashboards. For script execution instructions, see “*Configuring Sybase Login Privileges*” in the *Foglight for Sybase User and Reference Guide*. Failed to upgrade the user account will result in broken agent instances.
- 3 Once you have installed the cartridge, deploy the agent package. For complete information, see “*Deploying agent packages to monitored hosts*” in the *Foglight Administration and Configuration Help*. After upgrading the cartridge and starting the agent, the Agent log will display the database version, cartridge version, EBF level, and so on.
 - When you start using a new SAP ASE user or when the SAP ASE cartridge is upgraded with a new version, the stored procedures will be automatically reinstalled.
 - For RS cartridge you need to configure the path to the `sql.ini` file in the ASP with all the servers participating in the RS Agent. You can take the `sql.ini` file which exists in the Replication Server as an example.
 - When creating a new agent, it is recommended to clone all the default lists to new lists which will be used only for this agent – in the same way you did with the legacy cartridge.

Post Installation Instructions

After installing the Cartridge for SAP ASE, perform the configuration steps below:

To create a new SAP ASE user, run the following scripts as **sa** user (use your username and password).


```
exec sp_addlogin 'username' , 'password' , sybsemproc  
exec sp_fgl_adduser 'username' , 'foglightGroup'  
Grant mon_role to 'username'
```

NOTE: The new user should have only one role: mon_role.

Viewing the Cartridge for SAP ASE:

On the navigation panel, under Dashboards, click *Administration > Cartridges > Cartridge Inventory*. For details specific to the installation of the cartridge agents, see the following sections.

Sybase Adaptive Server Prerequisites: Sybase_MDA Agent

Install Sybase_MDA

The first pre-requisite is that the Sybase_MDA feature be installed on the respective ASE. This feature is not automatically installed on all versions of Sybase ASE. A check the DBA can run is the query: "select * from master..monState".

If the monitoring tables are not installed in your Adaptive Server (12.5.4 or later), have the Sybase DBA for the respective ASE follow the steps to install the tables listed in the [Addendum](#) at the end of this section.

For versions 15.x, there is no need for loopback and installmontables.

Configure Sybase_MDA

The Sybase_MDA feature has numerous parameters to both turn on and turn off specific metrics and determine the amount of memory the ASE will set aside for these metrics.

Performance monitoring how has the ability to enable the user to set the per_object_statistics flag to off.

Configure ports

Callback collections require communication between the Foglight Management Server and the Sybase server. Ensure that the port used by the Sybase host server is open between the Sybase host and the Foglight Management Server.

Sybase 'mon_role' assigned

The Sybase login defined in the Foglight agent property for the respective agent must have the "mon_role" assigned. This is also applicable to the 'sa' login.

Command to execute via ISQL or other client tool:

```
grant role mon_role to <logon_name>
```

Sybase Adaptive Server Pre-requisites: Sybase_RS Agent

The Sybase_RS agent requires separate common logins to be created for the Replication Server, the RSSD data server, the Primary data server, and the Replicate data server.

- Replication Server - Create a user with no special permission for each Replication Server being monitored.
- RSSD data server - Create a login for RSSD data server. Create a user with the same login name for the RSSD database. This user should be a member of the rs_systabgroup.
- Primary data server - Create a login with the replication_role in each Primary data server. Create a user with the same login name for the Primary database.
- Replicate data server - Create a login in each Replicate data server. Create a user with the same login name for the Replicate database. This user should have selected permission for the rs_lastcommit table.

NOTE: Refer to the Sybase_RS "*Setting Connection Details*" topic in the *Managing Sybase Database Systems online help* for more information.

Addendum

Preparation of the ASE version 12.5.4 or later for Foglight Cartridge for SAP ASE

Install MDA

If the monitoring tables are not installed in your Adaptive Server (12.5.4 or subsequent release), have the Sybase DBA for the respective ASE follow these steps to install the tables.

First, a server named "loopback" must be included in sys.servers before installing the scripts for the MDA tables. Proxy tables for the monitoring tables are not created by default when you configure Adaptive Server. The tables are created in the second step using the installmontables script that is included in the Adaptive Server install (located in the \$SYBASE/ASE-12_5/scripts directory).

- 1 Create a loopback server entry in ISQL:

Logon to Ada. and execute:

```
sp_addserver 'loopback', null, <ASE server name> go
```

- 2 Execute the installmontables script located in the \$SYBASE/ASE-12_5/scripts directory (%SYBASE%/ASE-12_5/scripts for Windows) using ISQL:

```
isql -Usa -P<sa password> -S<server name> -n -  
i%SYBASE%/SYBASE_ASE%/scripts/installmontables
```

Adaptive Server Enterprise configuration parameters

Sybase_MDA agent requires the following configuration for it to run correctly and gather the specified data for the Foglight Management Server.

The values shown for the following parameters are the minimum required values that the Foglight Cartridge for SAP ASE 5.9.3.10 needs for proper data collection and reporting. Any of these parameter values could be increased if necessary. (You can copy, paste, and execute the following script into an ISQL or other client session.)

```
sp_configure "statement cache size" <size_of_cache>  
go  
sp_configure "errorlog pipe max messages",1000  
go  
sp_configure "max SQL text monitored",256  
go  
sp_configure "sql text pipe max messages",3000  
go  
sp_configure "statement pipe max messages",3000  
go  
-- Flags  
sp_configure "enable stmt cache monitoring" , 1  
go  
sp_configure "enable literal autoparam" [0|1]  
go  
sp_configure "enable monitoring", 1  
go  
sp_configure "sql text pipe active", 1  
go  
sp_configure "errorlog pipe active", 1  
go  
sp_configure "per object statistics active",1  
go
```

```

sp_configure "statement statistics active",1
go
sp_configure "statement pipe active",1
go
sp_configure "wait event timing",1
go
sp_configure "SQL batch capture",1
go
sp_configure "process wait events",1
go

```

The following tables list proprietary Sybase flags and the Sybase_MDA agent tables dependent upon them. If any of the settings do not have values that fall in the recommended value range, data collection will issue complaints and fail to successfully collect; indicating that some MDA table collection was canceled as a result of the flags being set incorrectly. To prevent these alerts from occurring, use the appropriate Data Management properties to disable the collection that is failing to collect. Below is a listing of Sybase_MDA agent tables and the configuration settings they depend on:

Foglight Table	Sybase MonTable (MDA) Configuration Settings
TopHash	enable stmt cache monitoring = 1 statement cache size = size_of_cache enable literal autoparam = 0 or 1 NOTE: Setting enable literal autoparam to 0 causes Sybase to treat each SQL statement separately; setting it to 1 produces bind variables for each search argument in an SQL statement.
TopSQL	enable monitoring = 1 statement statistics active = 1 per object statistics active = 1 statement pipe active = 1 SQL batch capture = 1 max SQL text monitored > 0 statement pipe max messages > 0 sql text pipe max messages > 0
UsersBlocked	enable monitoring = 1 wait event timing = 1 SQL batch capture = 1 max SQL text monitored > 0
UsersLogCache	enable monitoring = 1 wait event timing = 1 per object statistics active = 1
TopApplications	enable monitoring = 1 wait event timing = 1 per object statistics active = 1

Foglight Table	Sybase MonTable (MDA) Configuration Settings
Index	enable monitoring = 1 wait event timing = 1 per object statistics active = 1
TopUsers	enable monitoring = 1 wait event timing = 1 per object statistics active = 1 SQL batch capture = 1 statement pipe active = 1 max SQL text monitored > 0 sql text pipe max messages > 0

Additional resources

Additional information is available from the following:

- Online product documentation (<https://support.quest.com/technical-documents#F>)
- Foglight Community (<https://www.quest.com/community/products/foglight/>)

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

This release has the following known capabilities or limitations: The server will be enabled for Global Operation, but not localized to any particular locale.

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