



Adaptive Server[®] Anywhere SNMP Extension Agent User's Guide

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Message Format Libraries, SAFE, SAFE/PRO, SDF, Secure SQL Server, Secure SQL Toolset, Security Guardian, SKILLS, smart.partners, smart.parts, smart.script, SQL Advantage, SQL Anywhere, SQL Anywhere Studio, SQL Code Checker, SQL Debug, SQL Edit, SQL Edit/TPU, SQL Everywhere, SQL Modeler, SQL Remote, SQL Server, SQL Server Manager, SQL Server SNMP SubAgent, SQL Server/CFT, SQL Server/DBM, SQL SMART, SQL Station, SQL Toolset, SQLJ, Stage III Engineering, Startup.Com, STEP, SupportNow, Sybase Central, Sybase Client/Server Interfaces, Sybase Development Framework, Sybase Financial Server, Sybase Gateways, Sybase Learning Connection, Sybase MPP, Sybase SQL Desktop, Sybase SQL Lifecycle, Sybase SQL Workgroup, Sybase Synergy Program, Sybase User Workbench, Sybase Virtual Server Architecture, SybaseWare, Syber Financial, SyberAssist, SybMD, SyBooks, System 10, System 11, System XI (logo), SystemTools, Tabular Data Stream, The Enterprise Client/Server Company, The Extensible Software Platform, The Future Is Wide Open, The Learning Connection, The Model For Client/Server Solutions, The Online Information Center, The Power of One, TotalFix, TradeForce, Transact-SQL, Translation Toolkit, Turning Imagination Into Reality, UltraLite, UltraLite.NET, UNIBOM, Unilib, Uninull, Unisep, Unistring, URK Runtime Kit for UniCode, Versacore, Viewer, VisualWriter, VQL, Warehouse Control Center, Warehouse Studio, Warehouse WORKS, WarehouseArchitect, Watcom, Watcom SQL, Watcom SQL Server, Web Deployment Kit, Web.PB, Web.SQL, WebSights, WebViewer, WorkGroup SQL Server, XA-Library, XA-Server, and XP Server are trademarks of Sybase, Inc. or its subsidiaries.

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About This Manual

| | |
|----------|---|
| Subject | This book covers material related to running and configuring the Adaptive Server Anywhere SNMP Extension Agent. |
| Audience | This manual is for Adaptive Server Anywhere users who wish to use the Adaptive Server Anywhere SNMP Extension Agent on Windows 2000, Windows XP, or Windows Server 2003 (32-bit versions). It is to be used in conjunction with other manuals in the documentation set. |

SQL Anywhere Studio documentation

The SQL Anywhere Studio documentation

This book is part of the SQL Anywhere documentation set. This section describes the books in the documentation set and how you can use them.

The SQL Anywhere Studio documentation is available in a variety of forms: in an online form that combines all books in one large help file; as separate PDF files for each book; and as printed books that you can purchase. The documentation consists of the following books:

- ◆ **Introducing SQL Anywhere Studio** This book provides an overview of the SQL Anywhere Studio database management and synchronization technologies. It includes tutorials to introduce you to each of the pieces that make up SQL Anywhere Studio.
- ◆ **What's New in SQL Anywhere Studio** This book is for users of previous versions of the software. It lists new features in this and previous releases of the product and describes upgrade procedures.
- ◆ **Adaptive Server Anywhere Database Administration Guide** This book covers material related to running, managing, and configuring databases and database servers.
- ◆ **Adaptive Server Anywhere SQL User's Guide** This book describes how to design and create databases; how to import, export, and modify data; how to retrieve data; and how to build stored procedures and triggers.
- ◆ **Adaptive Server Anywhere SQL Reference Manual** This book provides a complete reference for the SQL language used by Adaptive Server Anywhere. It also describes the Adaptive Server Anywhere system tables and procedures.
- ◆ **Adaptive Server Anywhere Programming Guide** This book describes how to build and deploy database applications using the C, C++, and Java programming languages. Users of tools such as Visual Basic and PowerBuilder can use the programming interfaces provided by those tools. It also describes the Adaptive Server Anywhere ADO.NET data provider.
- ◆ **Adaptive Server Anywhere SNMP Extension Agent User's Guide** This book describes how to configure the Adaptive Server Anywhere SNMP Extension Agent for use with SNMP management applications to manage Adaptive Server Anywhere databases.
- ◆ **Adaptive Server Anywhere Error Messages** This book provides a complete listing of Adaptive Server Anywhere error messages together with diagnostic information.

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- ◆ **SQL Anywhere Studio Security Guide** This book provides information about security features in Adaptive Server Anywhere databases. Adaptive Server Anywhere 7.0 was awarded a TCSEC (Trusted Computer System Evaluation Criteria) C2 security rating from the U.S. Government. This book may be of interest to those who wish to run the current version of Adaptive Server Anywhere in a manner equivalent to the C2-certified environment.
 - ◆ **MobiLink Administration Guide** This book describes how to use the MobiLink data synchronization system for mobile computing, which enables sharing of data between a single Oracle, Sybase, Microsoft or IBM database and many Adaptive Server Anywhere or UltraLite databases.
 - ◆ **MobiLink Clients** This book describes how to set up and synchronize Adaptive Server Anywhere and UltraLite remote databases.
 - ◆ **MobiLink Server-Initiated Synchronization User's Guide** This book describes MobiLink server-initiated synchronization, a feature of MobiLink that allows you to initiate synchronization from the consolidated database.
 - ◆ **MobiLink Tutorials** This book provides several tutorials that walk you through how to set up and run MobiLink applications.
 - ◆ **QAnywhere User's Guide** This manual describes MobiLink QAnywhere, a messaging platform that enables the development and deployment of messaging applications for mobile and wireless clients, as well as traditional desktop and laptop clients.
 - ◆ **iAnywhere Solutions ODBC Drivers** This book describes how to set up ODBC drivers to access consolidated databases other than Adaptive Server Anywhere from the MobiLink synchronization server and from Adaptive Server Anywhere remote data access.
 - ◆ **SQL Remote User's Guide** This book describes all aspects of the SQL Remote data replication system for mobile computing, which enables sharing of data between a single Adaptive Server Anywhere or Adaptive Server Enterprise database and many Adaptive Server Anywhere databases using an indirect link such as e-mail or file transfer.
 - ◆ **SQL Anywhere Studio Help** This book includes the context-sensitive help for Sybase Central, Interactive SQL, and other graphical tools. It is not included in the printed documentation set.
 - ◆ **UltraLite Database User's Guide** This book is intended for all UltraLite developers. It introduces the UltraLite database system and provides information common to all UltraLite programming interfaces.

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- ◆ **UltraLite Interface Guides** A separate book is provided for each UltraLite programming interface. Some of these interfaces are provided as UltraLite components for rapid application development, and others are provided as static interfaces for C, C++, and Java development.

In addition to this documentation set, PowerDesigner and InfoMaker include their own online documentation.

Documentation formats SQL Anywhere Studio provides documentation in the following formats:

- ◆ **Online documentation** The online documentation contains the complete SQL Anywhere Studio documentation, including both the books and the context-sensitive help for SQL Anywhere tools. The online documentation is updated with each maintenance release of the product, and is the most complete and up-to-date source of documentation.

To access the online documentation on Windows operating systems, choose Start ► Programs ► SQL Anywhere 9 ► Online Books. You can navigate the online documentation using the HTML Help table of contents, index, and search facility in the left pane, as well as using the links and menus in the right pane.

To access the online documentation on UNIX operating systems, see the HTML documentation under your SQL Anywhere installation.

- ◆ **PDF books** The SQL Anywhere books are provided as a set of PDF files, viewable with Adobe Acrobat Reader.

The PDF books are accessible from the online books, or from the Windows Start menu.

- ◆ **Printed books** The complete set of books is available from Sybase sales or from eShop, the Sybase online store at <http://eshop.sybase.com/eshop/documentation>.

Documentation conventions

This section lists the typographic and graphical conventions used in this documentation.

Syntax conventions

The following conventions are used in the SQL syntax descriptions:

- ◆ **Keywords** All SQL keywords appear in upper case, like the words ALTER TABLE in the following example:

ALTER TABLE [*owner*.]*table-name*

- ◆ **Placeholders** Items that must be replaced with appropriate identifiers or expressions are shown like the words *owner* and *table-name* in the following example:

ALTER TABLE [*owner*.]*table-name*

- ◆ **Repeating items** Lists of repeating items are shown with an element of the list followed by an ellipsis (three dots), like *column-constraint* in the following example:

ADD *column-definition* [*column-constraint*, . . .]

One or more list elements are allowed. In this example, if more than one is specified, they must be separated by commas.

- ◆ **Optional portions** Optional portions of a statement are enclosed by square brackets.

RELEASE SAVEPOINT [*savepoint-name*]

These square brackets indicate that the *savepoint-name* is optional. The square brackets should not be typed.

- ◆ **Options** When none or only one of a list of items can be chosen, vertical bars separate the items and the list is enclosed in square brackets.

[**ASC** | **DESC**]

For example, you can choose one of ASC, DESC, or neither. The square brackets should not be typed.

- ◆ **Alternatives** When precisely one of the options must be chosen, the alternatives are enclosed in curly braces and a bar is used to separate the options.

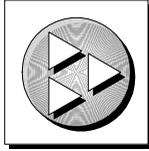
[**QUOTES** { **ON** | **OFF** }]

If the QUOTES option is used, one of ON or OFF must be provided. The brackets and braces should not be typed.

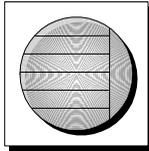
Graphic icons

The following icons are used in this documentation.

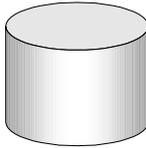
- ◆ A client application.



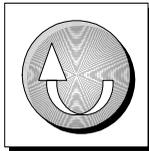
- ◆ A database server, such as Sybase Adaptive Server Anywhere.



- ◆ A database. In some high-level diagrams, the icon may be used to represent both the database and the database server that manages it.



- ◆ Replication or synchronization middleware. These assist in sharing data among databases. Examples are the MobiLink Synchronization Server and the SQL Remote Message Agent.



- ◆ A programming interface.



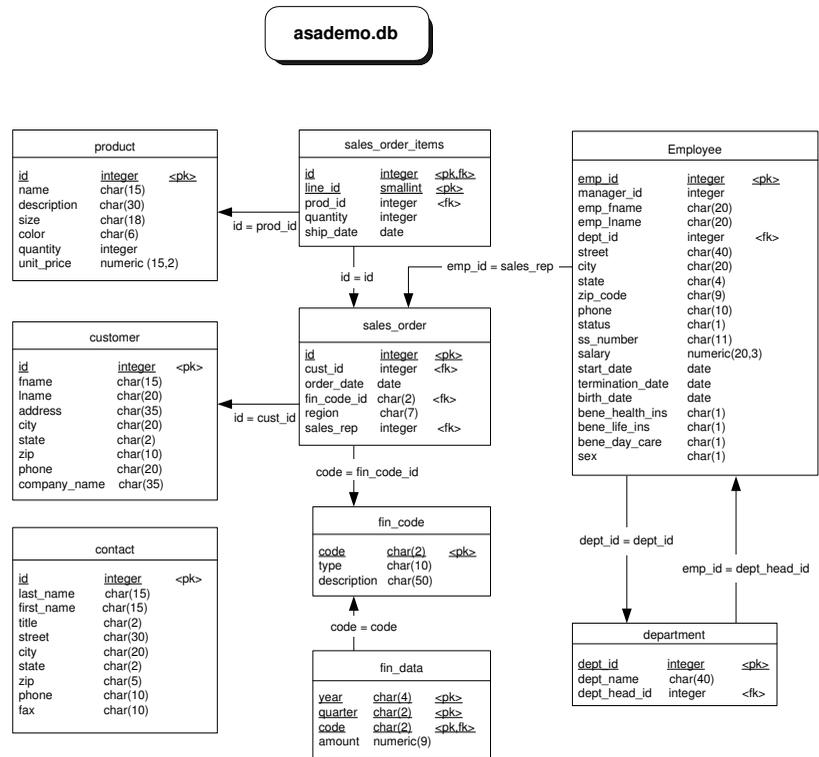
The Adaptive Server Anywhere sample database

Many of the examples throughout the documentation use the Adaptive Server Anywhere sample database.

The sample database is held in a file named *asademo.db*, and is located in your SQL Anywhere directory.

The sample database represents a small company. It contains internal information about the company (employees, departments, and finances) as well as product information and sales information (sales orders, customers, and contacts). All information in the database is fictional.

The following figure shows the tables in the sample database and how they relate to each other.



Finding out more and providing feedback

We would like to receive your opinions, suggestions, and feedback on this documentation.

You can provide feedback on this documentation and on the software through newsgroups set up to discuss SQL Anywhere technologies. These newsgroups can be found on the *forums.sybase.com* news server.

The newsgroups include the following:

- ◆ [sybase.public.sqlanywhere.general](#)
- ◆ [sybase.public.sqlanywhere.linux](#)
- ◆ [sybase.public.sqlanywhere.mobilink](#)
- ◆ [sybase.public.sqlanywhere.product_futures_discussion](#)
- ◆ [sybase.public.sqlanywhere.replication](#)
- ◆ [sybase.public.sqlanywhere.ultralite](#)
- ◆ [sybase.public.sqlanywhere.qanywhere](#)

Newsgroup disclaimer

iAnywhere Solutions has no obligation to provide solutions, information or ideas on its newsgroups, nor is iAnywhere Solutions obliged to provide anything other than a systems operator to monitor the service and insure its operation and availability.

iAnywhere Solutions Technical Advisors as well as other staff assist on the newsgroup service when they have time available. They offer their help on a volunteer basis and may not be available on a regular basis to provide solutions and information. Their ability to help is based on their workload.

You can e-mail comments and suggestions to the SQL Anywhere documentation team at iasdoc@iAnywhere.com. Although we do not undertake to reply to e-mails at that address, you can be sure we will read your suggestions with interest.

PART I

USING THE ADAPTIVE SERVER ANYWHERE SNMP EXTENSION AGENT

This part describes how to set up and configure the Adaptive Server
Anywhere SNMP Extension Agent.

CHAPTER 1

The Adaptive Server Anywhere SNMP Extension Agent

About this chapter This chapter introduces you to the Adaptive Server Anywhere SNMP Extension Agent.

| | | |
|----------|---|-------------|
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| | Introduction to the Adaptive Server Anywhere SNMP Extension Agent | 4 |
| | Understanding SNMP | 6 |
| | Using the Adaptive Server Anywhere SNMP Extension Agent | 10 |

Introduction to the Adaptive Server Anywhere SNMP Extension Agent

If you are running Adaptive Server Anywhere on Windows 2000, Windows XP, or Windows Server 2003 (32-bit versions), you can use the Adaptive Server Anywhere SNMP Extension Agent in conjunction with SNMP management applications to manage your Adaptive Server Anywhere databases. One agent can be used to monitor several different databases running on different database servers running on different machines.

Using the Adaptive Server Anywhere SNMP Extension Agent, you can do the following:

- ◆ retrieve the value of all server and database statistics
- ◆ retrieve the value of all server and database properties
- ◆ retrieve the value of all PUBLIC database options
- ◆ set the value for any PUBLIC database option
- ◆ execute stored procedures
- ◆ generate traps based on property or statistic values

Supplied files

The following files for the Adaptive Server Anywhere SNMP Extension Agent are included in your SQL Anywhere Studio installation:

- ◆ **dbsnmp9.dll** The Adaptive Server Anywhere SNMP Extension Agent. This file is located in *C:\Program Files\Sybase\SQL Anywhere 9\win32*.
- ◆ **iAnywhere.mib** The Adaptive Server Anywhere MIB contains all the OIDs for database server and database properties, statistics, and options that can be accessed using the Adaptive Server Anywhere SNMP Extension Agent.
- ◆ **RDBMS-MIB.mib** This is a generic MIB for relational database management systems and contains OIDs that can be accessed using the Adaptive Server Anywhere SNMP Extension Agent.
- ◆ **SNMPv2-SMI.mib** This MIB is referenced by the Adaptive Server Anywhere and RDBMS MIBs.
- ◆ **SNMPv2-TC.mib** This MIB is referenced by the Adaptive Server Anywhere and RDBMS MIBs.
- ◆ **SYBASE-MIB.mib** The Sybase MIB. This MIB is referenced by the Adaptive Server Anywhere MIB.

- ◆ **asasnmp.ini** This file lists the databases that the Adaptive Server Anywhere SNMP Extension Agent monitors. By default, this file is located in *C:\Program Files\Sybase\SQL Anywhere 9\win32*.

Understanding SNMP

Simple Network Management Protocol (**SNMP**) is a standard protocol used for network management. SNMP allows **managers** and **agents** to communicate: managers send requests to agents, and agents respond to queries from managers. Additionally, agents can notify managers when specific events occur using notifications called **traps**.

SNMP agents handle requests to get and set the values of variables for managed objects. Each variable has a single value, and values are generally strings or integers, although they may also be other types.

Variables are kept in a global hierarchy, and each variable has a unique number under its parent. The full name of a variable (including all its parents) is called the **Object Identifier** (OID). All OIDs that are owned by Sybase begin with 1.3.6.1.4.1.897.

The list of OIDs that an agent supports, including their names, types, and other information are stored in a file called a **Management Information Base** (MIB).

A MIB is a database that stores network management information about managed objects. The MIB is separate from the Adaptive Server Anywhere database you are monitoring using the Adaptive Server Anywhere SNMP Extension Agent. The values of MIB objects can be changed or retrieved using SNMP. MIB objects are organized in a hierarchy with the most general information about the network located at the top level of the hierarchy. The Adaptive Server Anywhere SNMP Extension Agent supports the following MIBs:

- ◆ **Adaptive Server Anywhere MIB** a MIB created specifically for the Adaptive Server Anywhere SNMP Extension Agent. All the OIDs in the Adaptive Server Anywhere MIB begin with 1.3.6.1.4.1.897.2. The Adaptive Server Anywhere MIB lists the OIDs for the statistics, properties, and option values that can be retrieved, and in some cases set, using the Adaptive Server Anywhere SNMP Extension Agent.

☞ For more information about the Adaptive Server Anywhere MIB, see [“The Adaptive Server Anywhere MIB” on page 7](#).

- ◆ **RDBMS MIB** a generic, vendor-independent MIB for relational databases. This MIB contains information about the database servers and databases in your system.

☞ For more information about the RDBMS MIB, see [“The RDBMS MIB” on page 9](#).

The Adaptive Server Anywhere MIB

The Adaptive Server Anywhere MIB was created for the Adaptive Server Anywhere SNMP Extension Agent. It includes all database server statistics and properties, as well as all database statistics, properties, and options. The statistics and properties are all read-only (with a few exceptions), and the database options are all read-write.

By default, the Adaptive Server Anywhere MIB is located in *C:\Program Files\Sybase\SQL Anywhere 9\snmp\iAnywhere.mib*.

☞ For information about the tables in the Adaptive Server Anywhere MIB, see [“Adaptive Server Anywhere MIB Reference” on page 23](#).

☞ For information about setting values in the Adaptive Server Anywhere MIB, see [“Setting values using the Adaptive Server Anywhere SNMP Extension Agent” on page 17](#).

The following hierarchy describes the Adaptive Server Anywhere MIB:

| OID | Name | Description |
|--------------------------|-----------------------|--|
| 1.3.6.1.4.897.2.1.1.n.db | asaServer.asaSrvStat | Returns the value of server statistic <i>n</i> on database <i>db</i> . |
| 1.3.6.1.4.897.2.1.2.n.db | asaServer.asaSrvProp | Returns the value of server property <i>n</i> on database <i>db</i> . |
| 1.3.6.1.4.897.2.2.1.n.db | asaDb.asaDbStat | Returns the value of database statistic <i>n</i> on database <i>db</i> . |
| 1.3.6.1.4.897.2.2.2.n.db | asaDb.asaDbProp | Returns the value of database property <i>n</i> on database <i>db</i> . |
| 1.3.6.1.4.897.2.2.3.n.db | asaDb.asaDbOpt | Returns the value of database option <i>n</i> on database <i>db</i> . |
| 1.3.6.1.4.897.2.3.1 | asaAgent.asaVersion | Returns the version of the Adaptive Server Anywhere Extension Agent. |
| 1.3.6.1.4.897.2.3.2.db | asaAgent.asaDbConnStr | Returns the connection string for database <i>db</i> . |

| OID | Name | Description |
|------------------------|-----------------------|--|
| 1.3.6.1.4.897.2.3.3.db | asaAgent.asaConnected | Returns whether the Adaptive Server Anywhere Extension Agent is connected to database <i>db</i> . Setting this value to 0 causes the Adaptive Server Anywhere Extension Agent to shut down the database ¹ , while setting this value to 1 causes the Adaptive Server Anywhere Extension Agent to attempt to start the database ² . |
| 1.3.6.1.4.897.2.3.4.db | asaAgent.asaStarted | Returns whether database <i>db</i> is running. Setting this value to 0 causes the Adaptive Server Anywhere Extension Agent to shut down the database, while setting this value to 1 attempts to start the database. |
| 1.3.6.1.4.897.2.3.5.db | asaAgent.asaProc | Setting this value to a string <i>proc_name</i> causes the Adaptive Server Anywhere Extension Agent to execute the procedure <i>proc_name</i> in the database. Arguments can be supplied (for example, <i>proc_name</i> ('string', 4)); if no arguments are supplied, parentheses () are appended to the name. Getting the value returns "". |
| 1.3.6.1.4.897.2.4 | asaMetaData | Several virtual tables; each row represents a variable supported by the Adaptive Server Anywhere MIB. |

¹ Note that when stopping a database by setting this variable, the stop is unconditional, meaning that the database will be stopped even if it has active connections.

² In order to be able to start a database by setting this variable, the DBF parameter must be specified in the connection string (along with DBN if desired and DBKEY if required), and either (a) the UtilDbPwd field must be set in the *asasnmplib.ini* file, or (b) the start database permission on the server (specified with the -gd server option) must be set to **all**.

asaMetaData tables

The Adaptive Server Anywhere MIB includes metadata tables that provide a way to query the Adaptive Server Anywhere Extension Agent to find out which variables are supported.

- ◆ **asaSrvMetaData.asaSrvStatMetaDataTable** lists the database server statistics (variables under `asa.asaServer.asaSrvStat.`)
- ◆ **asaSrvMetaData.asaSrvpropMetaDataTable** lists the database server properties (variables under `asa.asaServer.asaSrv.Prop.`)
- ◆ **asaDbMetaData.asaDbStatMetaDataTable** lists the database statistics (variables under `asa.asaDb.asaDbStat.`)
- ◆ **asaDbMetaData.asaDbpropMetaDataTable** lists the database properties (variables under `asa.asaDb.asaDbProp.`)
- ◆ **asaDbMetaData.asaDbOptMetaDataTable** lists the database options (variables under `asa.asaDb.asaDbOpt.`)

☞ For more information about the information stored in the Adaptive Server Anywhere MIB metadata tables, see [“asaMetaData tables” on page 24](#).

The RDBMS MIB

The RDBMS MIB is a generic and vendor-independent MIB (RFC 1697) for relational database-management system products. The RDBMS MIB uses **virtual tables** to return information on the servers and databases. The base OID is `1.3.6.1.2.1.39`, and there are 9 virtual tables in this MIB. The Adaptive Server Anywhere SNMP Extension Agent supports 8 of these virtual tables.

☞ For descriptions of the supported tables contained in the RDBMS MIB, see [“RDBMS MIB Reference” on page 41](#).

The Adaptive Server Anywhere Extension Agent provides *read-only* access to all of the supported variables in the RDBMS MIB. None of the variables in the RDBMS MIB are writable through the Adaptive Server Anywhere Extension Agent.

A virtual table contains a fixed number of attributes and any number for rows. Elements in the table are retrieved using GET requests by appending the column number and row number to the OID of the table. A **1** must be appended to the table OID, so the OID looks as follows:

table.1.column.rownum

By default, the RDBMS MIB is located in `C:\Program Files\Sybase\SQL Anywhere 9\snmp\RDBMS-MIB.mib`.

Using the Adaptive Server Anywhere SNMP Extension Agent

In order to use the Adaptive Server Anywhere SNMP Extension Agent, you must have SNMP installed on your machine and you must create an *asasnmplib.ini* file that contains information about the databases that are monitored by the Adaptive Server Anywhere SNMP Extension Agent.

Installing SNMP

Before you can use the Adaptive Server Anywhere Extension Agent, you must install SNMP on your machine. By default, SNMP is not installed on Windows 2000 or Windows XP.

❖ To install SNMP

1. Open the Control Panel.
 - ◆ On Windows 2000, from the Start menu choose Settings ► Control Panel.
 - ◆ On Windows XP, from the Start menu choose Control Panel.
2. Double-click Add/Remove Programs.

The Add/Remove Programs dialog appears.
3. In the left pane of the Add/Remove Programs dialog, click Add/Remove Windows Components.

The Windows Components wizard appears.
4. On the first page of the Windows Components wizard, double-click Management and Monitoring Tools.

The Management and Monitoring Tools dialog appears.
5. Select the Simple Network Management Protocol option and then click OK.
6. Click Next.
7. Click Finished when the installation completes.
8. If you are prompted, reboot your computer.

Once you have installed SNMP on your machine, two services should be running on your machine: **SNMP Service** and **SNMP Trap Service**.

❖ **To check that the SNMP services are installed on your computer**

1. Open the Control Panel.
 - ◆ On Windows 2000, from the Start menu choose Settings ► Control Panel.
 - ◆ On Windows XP, from the Start menu choose Control Panel.
2. In the Control Panel, double-click Administrative Tools.
3. Double-click Services.

The services SNMP Service and SNMP Trap Service appear in the list of local services.

If you installed SNMP before you installed SQL Anywhere Studio, you need to stop and restart the SNMP service so it will detect the Adaptive Server Anywhere SNMP Extension Agent. If you installed SQL Anywhere Studio and then installed SNMP, the SNMP service will detect the Adaptive Server Anywhere SNMP Extension Agent automatically.

❖ **To restart the SNMP service (Control Panel)**

1. Open the Control Panel.
 - ◆ On Windows 2000, from the Start menu choose Settings ► Control Panel.
 - ◆ On Windows XP, from the Start menu choose Control Panel.
2. In the Control Panel, double-click Administrative Tools.
3. Double-click Services.
4. Right-click SNMP Service and choose Restart from the popup menu.

This stops and restarts the SNMP service.

❖ **To restart the SNMP service (Command line)**

1. Open a command prompt and execute the following command:

```
net stop snmp
```

This stops the SNMP service.

2. Execute the following command:

```
net start snmp
```

This starts the SNMP service.

Configuring the Adaptive Server Anywhere SNMP Extension Agent

The Adaptive Server Anywhere Extension Agent can monitor one or more databases. The databases to be monitored are stored in the *asasmp.ini* file with the following format:

```
[ASAagent]
TrapPollTime=time in seconds

[DBn]
ConnStr=connection string
UtilDbPwd=utility database password
CacheTime=time in seconds
Trap=trap information
Disabled=1 or 0
```

By default, your SQL Anywhere Studio installation places the *asasmp.ini* file in the *C:\Program Files\Sybase\SQL Anywhere 9\win32* directory.

Once you edit this file, you must restart the SNMP service or reset the Adaptive Server Anywhere SNMP Extension Agent so that the new settings are used by the Agent.

❖ To restart the SNMP service (Control Panel)

1. Open the Control Panel.
 - ◆ On Windows 2000, from the Start menu choose Settings ► Control Panel.
 - ◆ On Windows XP, from the Start menu choose Control Panel.
2. In the Control Panel, double-click Administrative Tools.
3. Double-click Services.
4. Right-click SNMP Service and choose Restart from the popup menu.
This stops and restarts the SNMP service.

❖ To restart the SNMP service (Command line)

1. Open a command prompt and execute the following command:

```
net stop snmp
```

This stops the SNMP service.

2. Execute the following command:

```
net start snmp
```

This starts the SNMP service.

❖ **To restart the Adaptive Server Anywhere SNMP Extension Agent**

1. Using your SNMP management tool, change the value of the `asaAgent.asaRestart` property, `1.3.6.1.4.1.897.2.3.6`, to **1**.

You can obfuscate the contents of the `asasmp.ini` file with simple encryption using the File Hiding utility (`dbfhide`).

☞ For more information, see “[Hiding the contents of .ini files](#)” [*ASA Database Administration Guide*, page 524].

The ASAAgent section

The ASAAgent section of the `asasmp.ini` file contains a `TrapPollTime` field with information about the Adaptive Server Anywhere Extension Agent. If the `TrapPollTime` field is not required, you can omit the entire section.

TrapPollTime This value specifies the poll frequency for dynamic traps if they are specified. The Adaptive Server Anywhere SNMP Extension Agent polls the values every 5 seconds by default. Setting this value to 0 disables dynamic traps. This field is optional.

The DBn section

Each **DBn** section of the `asasmp.ini` file describes a database, how to connect to it, and any dynamic traps that exist for the database. The fields in this section are case sensitive.

The value for *n* is a number that identifies the database. The numbers must start with 1, and numbers cannot be skipped. For example, if the `asasmp.ini` file contained entries for [DB1], [DB2], and [DB4], the [DB4] entry would be ignored because the file is missing the entry for [DB3].

ConnStr The connection string used to connect to the database. You must supply enough information to be able to connect to the database. This field is required.

- ◆ If you want to use an ODBC data source to connect to the database, it must be a *system* data source, not a *user* data source.
- ◆ If you want to use an integrated login, you must map to the SYSTEM account because the SNMP Agent runs as a service. However, this means that anything that runs as a service can then connect to the database without a password. Alternatively, you can change the account that the service runs under and then create an integrated login for that account.
- ◆ The string `ASTART=NO; IDLE=0; CON=SNMP; ASTOP=NO` is prepended to the connection string. This string does the following:
 - prevents the Adaptive Server Anywhere SNMP Extension Agent from trying to autostart a database server
 - disables idle timeout since it is likely that the Adaptive Server Anywhere SNMP Extension Agent will sit idle for some time

-
- names the connection so it can be identified
 - prevents the database from being shut down when the Adaptive Server Anywhere SNMP Extension Agent disconnects

If you specify any of these values in the connection string in the *asasnmp.ini* file, the values in the *asasnmp.ini* file will override the default settings.

UtilDbPwd When setting `asa.agent.asaStarted` to start a database, the Adaptive Server Anywhere SNMP Extension Agent attempts to connect to the database with the `DBF` parameter, which tells the database server where to find the database file. However, if the permission required to start the database is `DBA` (the default for the network server, which can also be set using the `-gd dba` option for both the personal and network servers), then the server will not allow the connection.

To start a database on such a server, the Adaptive Server Anywhere SNMP Extension Agent must connect as a user with `DBA` authority to a database already running on the same server. This can be done by connecting to the utility database. If you specify the utility database password (contained in the server's *util_db.ini* file) in the *asasnmp.ini* file, then to start a database, the Adaptive Server Anywhere Extension Agent connects to the utility database on the same server, executes the `START DATABASE` statement, and then disconnects. This field is optional.

CacheTime When data is retrieved from the database, it can be cached inside the Adaptive Server Anywhere SNMP Extension Agent, so that subsequent retrievals of the same type of data (for example, server properties or database statistics) do not require communication with the database. While caching the data means that you can obtain the data more quickly on subsequent retrievals, the data may be out of date. The `CacheTime` field can be used to change the cache time, or disable the cache by setting the value to 0. By default, the cache time is 30 seconds. When the `CacheTime` parameter is set to 0, the data retrieved is always be up-to-date because data is retrieved from the database for every request. This field is optional.

DBSpaceCacheTime The `rdbmsDbLimitedResourceTable` in the RDBMS MIB contains information about dbspaces. When this information is retrieved from the database, it can also be cached inside the Adaptive Server Anywhere Extension Agent. The default cache time for dbspace information is 600 seconds (10 minutes). This field can be used to change the cache time (or disable the cache by setting the value to 0). This field is optional.

☞ For more information about the `rdbmsDbLimitedResourceTable` table, see [“rdbmsDbLimitedResourceTable” on page 44](#).

Trapf Creates a dynamic trap. The value *t* must be a positive integer

starting at 1. Skipping numbers is not allowed. This field is optional.

Disabled If set to 1, this database entry is skipped by the Adaptive Server Anywhere SNMP Extension Agent. This is useful for temporarily removing one database from the list of databases managed by the Adaptive Server Anywhere SNMP Extension Agent, without renumbering the rest. This field is optional.

☞ For information about creating traps, see “[Creating dynamic traps](#)” on [page 19](#).

Sample *asasmp.ini* file

The following is a sample *asasmp.ini* file for the Adaptive Server Anywhere SNMP Extension Agent.

```
[ASAAgent]
[DB1]
ConnStr=UID=DBA;PWD=SQL;ENG=server1;DBN=sales;DBF=sales.db
Trap1=1.1.5 > 50000
UtilDbPwd=test
[DB2]
ConnStr=UID=DBA;PWD=SQL;ENG=server1;DBN=field;DBF=field.db
UtilDbPwd=test
Disabled=1
[DB3]
ConnStr=UID=DBA;PWD=SQL;LINKS=tcpip;ENG=server2;DBN=hq;DBF=hq.db
UtilDbPwd=test
```

Because there are no parameters specified in the ASAAgent section, the Adaptive Server Anywhere SNMP Extension Agent will poll values every 5 seconds.

The Adaptive Server Anywhere SNMP Extension Agent is monitoring 3 different databases running on two different servers. Database 3 is running on a different machine, so the LINKS connection parameter is required to specify the protocol. A trap is specified for DB1, which fires when the number of bytes sent by the database server is greater than 50 000.

Obtaining values using the Adaptive Server Anywhere SNMP Extension Agent

Using the Adaptive Server Anywhere SNMP Extension Agent, you can retrieve the values of all the following:

- ◆ Database server properties

☞ For a list of the database server property OIDs, see “[Server properties](#)” on [page 29](#).

- ◆ Database server statistics

☞ For a list of the database server statistic OIDs, see “[Server statistics](#)” on page 27.

◆ Database options

☞ For a list of the database option OIDs, see “[Database options](#)” on page 36.

◆ Database properties

☞ For a list of the database property OIDs, see “[Database properties](#)” on page 33.

◆ Database statistics

☞ For a list of the database statistic OIDs, see “[Database statistics](#)” on page 31.

The way you retrieve these values will depend on your SNMP management software.

Examples

The table below provides a description and sample value that could be returned for the following OIDs.

| OID | Explanation | Sample value |
|---------------------------|--|---|
| 1.3.6.1.4.1.897.2.1.1.1.1 | Server statistic ActiveReq on database 1 | 1 |
| 1.3.6.1.4.1.897.2.1.2.1.3 | Server property C2 on database 3 | NO |
| 1.3.6.1.4.1.897.2.2.1.4.1 | Database statistic CacheRead on database 1 | 11397 |
| 1.3.6.1.4.1.897.2.2.2.7.4 | Database property CaseSensitivePasswords on database 4 | OFF |
| 1.3.6.1.4.1.897.2.2.3.5.2 | Database option ANSI_INTEGER_OVERFLOW on database 2 | OFF |
| 1.3.6.1.4.1.897.2.3.1 | Agent version | 9.0.1(1841) |
| 1.3.6.1.4.1.897.2.3.2.1 | Connection string for database 1 | UID=DBA;PWD=SQL; ENG=server1; DBN=sales; DBF=sales.db |

Setting values using the Adaptive Server Anywhere SNMP Extension Agent

The Adaptive Server Anywhere SNMP Extension Agent responds to SNMP get, get-next, and set queries.

You can set any database option, some server properties, and one database property using the Adaptive Server Anywhere SNMP agent.

When setting database options, the Adaptive Server Anywhere SNMP agent executes the statement:

```
SET OPTION PUBLIC.opt = 'value'
```

When setting database and server properties, the `sa_server_option` system procedure is used.

The way you set these values depends on your SNMP management software.

☞ For the OIDs and information about the options and properties that can be set with the Adaptive Server Anywhere SNMP Extension Agent, see “The Adaptive Server Anywhere MIB” on page 24.

Executing stored procedures using the Adaptive Server Anywhere SNMP Extension Agent

The Adaptive Server Anywhere MIB includes an OID that allows you to execute a stored procedure using the Adaptive Server Anywhere SNMP Extension Agent. In order to execute the stored procedure, the user that the Adaptive Server Anywhere SNMP Extension Agent uses to connect must have one of the following:

- ◆ execute permission on the procedure
- ◆ be the owner of the procedure
- ◆ have DBA authority

Any result sets or return values generated by the procedure are ignored.

To execute a stored procedure using the Adaptive Server Anywhere SNMP Extension Agent, set the value of `asaAgent.asaProc` (OID 1.3.6.1.4.1.897.2.3.5.db, where *db* is the database number in the *asasmp.ini* file) to a string that is the name of a stored procedure. Optionally, you can supply arguments to the procedure; if no arguments are supplied, parentheses () are appended to the procedure name.

For example, setting the value of `asaAgent.asaProc` to the string `"pchin.updatesales('param1', 2)"` calls the `updatesales` stored procedure owned by user `pchin`.

The way you set the value of this OID to the procedure name will depend on your SNMP management software.

☞ For more information, see [“The Adaptive Server Anywhere MIB” on page 7](#).

Using traps

A **trap** is an OID that is sent by an SNMP agent when a particular event occurs. Traps are initiated by the SNMP agent and can be detected by SNMP management software, which can then either deal with the event directly or query the SNMP agent for more information.

In order to receive traps, you must configure the SNMP service. The SNMP service will receive the trap information and then forward it on somewhere; however, by default, this is nowhere, so any trap listeners you have running will not detect anything. The following steps show how to configure your SNMP Service to send traps to your current machine.

❖ To configure the SNMP service

1. Right-click My Computer and choose Manage from the popup menu.
The Computer Management dialog appears.
2. In the left pane, double-click Services and Applications.
3. In the left pane, double-click Services.
4. Locate SNMP Service in the list of services in the right pane, right-click it and choose Properties from the popup menu.
The SNMP Service property sheet appears.
5. Click the Traps tab.
6. On the Traps tab, click Add.
The SNMP Service Configuration dialog appears.
7. In the SNMP Service Configuration dialog, type **localhost** in the text box and then click Add.
8. Click OK to close the Service property sheet.

Adaptive Server
Anywhere SNMP
Extension Agent traps

The Adaptive Server Anywhere SNMP Extension Agent sends a trap whenever a connection is dropped by the database server. The OID of this trap is 1.3.6.1.2.1.39.2.1.

The only other traps sent by the Adaptive Server Anywhere agent are dynamic traps.

☞ For more information about dynamic traps, see [“Creating dynamic traps” on page 19](#).

Creating dynamic traps

A **dynamic trap** is a trap that is sent by the Adaptive Server Anywhere Extension Agent when a simple expression involving the value of a particular property, statistic, or option is true. Dynamic traps are created in the *asasmp.ini* file. The format of the trap information in the *asasmp.ini* file entry is as follows:

```
Trap<trapnum>=[1.3.6.1.4.1.897.2.]<oid>[.<dbnum>] <op> <value>
```

trapnum is the dynamic trap number. It must start at 1 and be sequential.

oid is the OID of the property, statistic, or option. OIDs in either the Adaptive Server Anywhere MIB or the RDBMS MIB are supported. If the OID given is an invalid Adaptive Server Anywhere or RDBMS OID, the Adaptive Server Anywhere MIB prefix (1.3.6.1.4.1.897.2.) is prepended.

☞ For a list of OIDs in the Adaptive Server Anywhere MIB, see [“Adaptive Server Anywhere MIB Reference” on page 23](#).

☞ For a list of OIDs in the RDBMS MIB, see [“RDBMS MIB Reference” on page 41](#).

dbnum is the database number. This field is optional, but if specified, it must match the database number of the [DBn] section of the *asasmp.ini* file.

op must have one of the following values:

- ◆ = or == (equality)
- ◆ !=, <>, or >< (inequality)
- ◆ <= or =< (less than or equal)
- ◆ >= or => (greater than or equal)
- ◆ < (less than)
- ◆ > (greater than)

Note

Only equality or inequality are supported for string values.

value is the value to use in the expression. String values may be enclosed in single or double quotes; these quotes will not be included in the value. If you want the beginning or closing quotation marks to be included in the string, you must double them. Note that single quotes occurring within the string should not be doubled.

You can specify as many trap fields as you wish in the *asasmp.ini* file. The OID used for the trap will be 1.3.6.1.4.1.897.2.4.1, and the data sent with the trap will indicate the trap number of the trap that was sent.

You can specify as many Trap fields as you wish in the *asasmp.ini* file. The OID used for the trap will be 1.3.6.1.4.1.897.2.4.1, and the data sent with the trap includes the following:

- ◆ the trap number (starts at 1 for the first dynamic trap sent by the Adaptive Server Anywhere SNMP agent)
- ◆ the database index
- ◆ the database name trap index (from the *asasmp.ini* file)
- ◆ the variable name
- ◆ the variable value (this is the current value of the variable, not necessarily the threshold value)

Dynamic trap behavior

Once a dynamic trap is triggered, the trap is not be sent again until the condition that caused it to be triggered changes to FALSE and then back to TRUE again.

For example, if you have a dynamic trap set using 1.1.11.1 >= 5120, then the trap is triggered when the server's cache size reaches 5 MB (= 5120 KB) and the dynamic trap is disabled, so no more traps are sent. The only way the trap is re-enabled is if the cache size later drops below 5 MB. You would then be notified if the cache size grew to 5 MB again.

Trap examples

| Trap information | Description |
|---|--|
| Trap1=1.1.5 > 10000 | Trap sent when the number of bytes sent from the server is greater than 10 000 |
| Trap2=1.3.6.1.2.1.39.1.4.1.4.14.1 >= 10485760 | Trap sent if the size of the transaction log file is larger than 10 MB |

PART II

ADAPTIVE SERVER ANYWHERE SNMP EXTENSION AGENT REFERENCE

This section lists the OIDs supported by the Adaptive Server Anywhere SNMP Extension Agent. It lists the contents of the tables in the Adaptive Server Anywhere MIB and the RDBMS MIB.

CHAPTER 2

Adaptive Server Anywhere MIB Reference

About this chapter

This chapter contains descriptions of the tables in the Adaptive Server Anywhere MIB.

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The Adaptive Server Anywhere MIB

The following sections list the OIDs of the statistics, properties, and options that can be retrieved and set using the Adaptive Server Anywhere SNMP Extension Agent. By default,

Agent

The Agent table lists information about the Adaptive Server Anywhere SNMP Extension Agent.

Writable properties are marked with an asterisk (*). The value *n* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Value returned |
|---------------------------------|-----------|---------------|---|
| 1.3.6.1.4.1.897.2.3.1 | String | asaVersion | Agent version |
| 1.3.6.1.4.1.897.2.3.2. <i>n</i> | String | asaDBConnStr | Connection string |
| 1.3.6.1.4.1.897.2.3.3. <i>n</i> | Integer32 | asaConnected* | 1 if the agent is connected, 0 otherwise |
| 1.3.6.1.4.1.897.2.3.4. <i>n</i> | Integer32 | asaStarted* | 1 if the database is started, 0 otherwise |
| 1.3.6.1.4.1.897.2.3.5. <i>n</i> | String | asaProc* | ” “ |
| 1.3.6.1.4.1.897.2.3.6 | String | asaRestart* | 0 |

asaMetaData tables

The following metadata tables are included in the Adaptive Server Anywhere MIB:

- ◆ asaSrvMetaData.asaSrvStatMetaDataTable
- ◆ asaSrvMetaData.asaSrvPropMetaDataTable
- ◆ asaSrvMetaData.asaDbStatMetaDataTable
- ◆ asaSrvMetaData.asaDbPropMetaDataTable
- ◆ asaSrvMetaData.asaDbOptMetaDataTable

asaSrvMetaData.asaSrvStatMetaDataTable

This table contains metadata about the database server statistics.

The value *db* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Value returned |
|--------------------------------|-----------|-------------------|--|
| 1.3.6.1.4.1.897.2.4.1.1.1.1.db | Integer32 | asaSrvStatIndex | <i>db</i> |
| 1.3.6.1.4.1.897.2.4.1.1.1.2.db | Integer32 | asaSrvStatObjType | 1 ¹ |
| 1.3.6.1.4.1.897.2.4.1.1.1.3.db | Integer32 | asaSrvStatType | 1 ² |
| 1.3.6.1.4.1.897.2.4.1.1.1.4.db | OID | asaSrvStatOID | OID of Adaptive Server Anywhere MIB entry ³ |
| 1.3.6.1.4.1.897.2.4.1.1.1.5.db | String | asaSrvStatName | Statistic name |

¹ Values: 1=Server, 2=Database

² Values: 1=Statistic, 2=Property, 3=Option

³ The OID returned does not include the database number. You must append the database number to the OID before it can be used in a query.

asaSrvMetaData.asaSrvPropMetaDataTable

This table contains metadata about the database server properties.

The value *db* is the database number in the *asasnmplib.ini* file.

| OID | Type | Name | Value returned |
|--------------------------------|-----------|-------------------|--|
| 1.3.6.1.4.1.897.2.4.1.2.1.1.db | Integer32 | asaSrvPropIndex | <i>db</i> |
| 1.3.6.1.4.1.897.2.4.1.2.1.2.db | Integer32 | asaSrvPropObjType | 1 ¹ |
| 1.3.6.1.4.1.897.2.4.1.2.1.3.db | Integer32 | asaSrvPropType | 2 ² |
| 1.3.6.1.4.1.897.2.4.1.2.1.4.db | OID | asaSrvPropOID | OID of Adaptive Server Anywhere MIB entry ³ |
| 1.3.6.1.4.1.897.2.4.1.2.1.5.db | String | asaSrvPropName | Property name |

¹ Values: 1=Server, 2=Database

² Values: 1=Statistic, 2=Property, 3=Option

³ The OID returned does not include the database number. You must append the database number to the OID before it can be used in a query.

asaDbMetaData.asaDbStatMetaDataTable

This table contains metadata about the database statistics.

The value *db* is the database number in the *asasnmp.ini* file.

| OID | Type | Name | Value returned |
|--------------------------------|-----------|------------------|---|
| 1.3.6.1.4.1.897.2.4.2.1.1.1.db | Integer32 | asaDbStatIndex | <i>db</i> |
| 1.3.6.1.4.1.897.2.4.2.1.1.2.db | Integer32 | asaDbStatObjType | 2 ¹ |
| 1.3.6.1.4.1.897.2.4.2.1.1.3.db | Integer32 | asaDbStatType | 1 ² |
| 1.3.6.1.4.1.897.2.4.2.1.1.4.db | OID | asaDbStatOID | OID of Adaptive Server Anywhere MIB entry ³ |
| 1.3.6.1.4.1.897.2.4.2.1.1.5.db | String | asaDbStatName | Statistic name |

¹ Values: 1=Server, 2=Database

² Values: 1=Statistic, 2=Property, 3=Option

³ The OID returned does not include the database number. You must append the database number to the OID before it can be used in a query.

asaDbMetaData.asaDbPropMetaDataTable

This table contains metadata about the database properties.

The value *db* is the database number in the *asasnmp.ini* file.

| OID | Type | Name | Value returned |
|--------------------------------|-----------|------------------|---|
| 1.3.6.1.4.1.897.2.4.2.2.1.1.db | Integer32 | asaDbPropIndex | <i>db</i> |
| 1.3.6.1.4.1.897.2.4.2.2.1.2.db | Integer32 | asaDbPropObjType | 2 ¹ |
| 1.3.6.1.4.1.897.2.4.2.2.1.3.db | Integer32 | asaDbPropType | 2 ² |
| 1.3.6.1.4.1.897.2.4.2.2.1.4.db | OID | asaDbPropOID | OID of Adaptive Server Anywhere MIB entry ³ |
| 1.3.6.1.4.1.897.2.4.2.2.1.5.db | String | asaDbPropName | Property name |

¹ Values: 1=Server, 2=Database

² Values: 1=Statistic, 2=Property, 3=Option

³ The OID returned does not include the database number. You must append the database number to the OID before it can be used in a query.

asaDbMetaData.asaDbOptMetaDataTable

This table contains metadata about the database options.

The value *db* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Value returned |
|--|-----------|-----------------|--|
| 1.3.6.1.4.1.897.2.4.2.1.1.1. <i>db</i> | Integer32 | asaDbOptIndex | <i>db</i> |
| 1.3.6.1.4.1.897.2.4.2.1.1.2. <i>db</i> | Integer32 | asaDbOptObjType | 2 ¹ |
| 1.3.6.1.4.1.897.2.4.2.1.1.3. <i>db</i> | Integer32 | asaDbOptType | 3 ² |
| 1.3.6.1.4.1.897.2.4.2.1.1.4. <i>db</i> | OID | asaDbOptOID | OID of Adaptive Server Anywhere MIB entry ³ |
| 1.3.6.1.4.1.897.2.4.2.1.1.5. <i>db</i> | String | asaDbOptName | Option name |

¹ Values: 1=Server, 2=Database

² Values: 1=Statistic, 2=Property, 3=Option

³ The OID returned does not include the database number. You must append the database number to the OID before it can be used in a query.

Server statistics

This table lists the OIDs and names of the database server statistics that can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent.

The value *n* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Statistic |
|-----------------------------------|-----------|----------------------------|---------------------|
| 1.3.6.1.4.1.897.2.1.1.1. <i>n</i> | Integer32 | srvStatActiveReq | ActiveReq |
| 1.3.6.1.4.1.897.2.1.1.2. <i>n</i> | Integer32 | srvStatAvailIO | AvailIO |
| 1.3.6.1.4.1.897.2.1.1.3. <i>n</i> | Counter64 | srvStatBytesReceived | BytesReceived |
| 1.3.6.1.4.1.897.2.1.1.4. <i>n</i> | Counter64 | srvStatBytesReceivedUncomp | BytesReceivedUncomp |
| 1.3.6.1.4.1.897.2.1.1.5. <i>n</i> | Counter64 | srvStatBytesSent | BytesSent |
| 1.3.6.1.4.1.897.2.1.1.6. <i>n</i> | Counter64 | srvStatBytesSentUncomp | BytesSentUncomp |
| 1.3.6.1.4.1.897.2.1.1.7. <i>n</i> | Counter64 | srvStatCacheHitsEng | CacheHitsEng |
| 1.3.6.1.4.1.897.2.1.1.8. <i>n</i> | Integer32 | srvStatCachePinned | CachePinned |

| OID | Type | Name | Statistic |
|----------------------------|-------------|------------------------------|-----------------------|
| 1.3.6.1.4.1.897.2.1.1.9.n | Counter64 | srvStatCacheReadEng | CacheReadEng |
| 1.3.6.1.4.1.897.2.1.1.10.n | Counter64 | srvStatCacheReplacements | CacheReplacements |
| 1.3.6.1.4.1.897.2.1.1.11.n | Integer32 | srvStatCurrentCacheSize | CurrentCacheSize |
| 1.3.6.1.4.1.897.2.1.1.12.n | Counter64 | srvStatDiskReadEng | DiskReadEng |
| 1.3.6.1.4.1.897.2.1.1.13.n | Integer32 | srvStatFreeBuffers | FreeBuffers |
| 1.3.6.1.4.1.897.2.1.1.14.n | Integer32 | srvStatJavaGlobFix | JavaGlobFix |
| 1.3.6.1.4.1.897.2.1.1.15.n | Integer32 | srvStatLicensesInUse | LicensesInUse |
| 1.3.6.1.4.1.897.2.1.1.16.n | Integer32 | srvStatLockedHeapPages | LockedHeapPages |
| 1.3.6.1.4.1.897.2.1.1.17.n | Counter64 | srvStatMainHeapBytes | MainHeapBytes |
| 1.3.6.1.4.1.897.2.1.1.18.n | Integer32 | srvStatMainHeapPages | MainHeapPages |
| 1.3.6.1.4.1.897.2.1.1.19.n | Integer32 | srvStatMapPhysicalMemoryEng | MapPhysicalMemoryEng |
| 1.3.6.1.4.1.897.2.1.1.20.n | Integer32 | srvStatMaxCacheSize | MaxCacheSize |
| 1.3.6.1.4.1.897.2.1.1.21.n | Integer32 | srvStatMinCacheSize | MinCacheSize |
| 1.3.6.1.4.1.897.2.1.1.22.n | Counter64 | srvStatMultiPacketsReceived | MultiPacketsReceived |
| 1.3.6.1.4.1.897.2.1.1.23.n | Counter64 | srvStatMultiPacketsSent | MultiPacketsSent |
| 1.3.6.1.4.1.897.2.1.1.24.n | Counter64 | srvStatPacketsReceived | PacketsReceived |
| 1.3.6.1.4.1.897.2.1.1.25.n | Counter64 | srvStatPacketsReceivedUncomp | PacketsReceivedUncomp |
| 1.3.6.1.4.1.897.2.1.1.26.n | Counter64 | srvStatPacketsSent | PacketsSent |
| 1.3.6.1.4.1.897.2.1.1.27.n | Counter64 | srvStatPacketsSentUncomp | PacketsSentUncomp |
| 1.3.6.1.4.1.897.2.1.1.28.n | Integer32 | srvStatPeakCacheSize | PeakCacheSize |
| 1.3.6.1.4.1.897.2.1.1.29.n | Integer32 | srvStatRemoteputWait | RemoteputWait |
| 1.3.6.1.4.1.897.2.1.1.30.n | Integer32 | srvStatReq | Req |
| 1.3.6.1.4.1.897.2.1.1.31.n | Counter64 | srvStatSendFail | SendFail |
| 1.3.6.1.4.1.897.2.1.1.32.n | Integer32 | srvStatTotalBuffers | TotalBuffers |
| 1.3.6.1.4.1.897.2.1.1.33.n | Integer32 | srvStatUnschReq | UnschReq |

Server properties

The following table lists OIDs and names of the database server properties that can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent.

Writable properties are marked with an asterisk (*). The value *n* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Property |
|----------------------------|--------|---------------------------|--------------------|
| 1.3.6.1.4.1.897.2.1.2.1.n | String | srvPropC2 | C2 |
| 1.3.6.1.4.1.897.2.1.2.2.n | String | srvPropCharSet | CharSet |
| 1.3.6.1.4.1.897.2.1.2.3.n | String | srvPropCommandLine | CommandLine |
| 1.3.6.1.4.1.897.2.1.2.4.n | String | srvPropCompactPlatformVer | CompactPlatformVer |
| 1.3.6.1.4.1.897.2.1.2.5.n | String | srvPropCompanyName | CompanyName |
| 1.3.6.1.4.1.897.2.1.2.6.n | String | srvPropConnsDisabled* | ConnsDisabled |
| 1.3.6.1.4.1.897.2.1.2.7.n | String | srvPropConsoleLogFile | ConsoleLogFile |
| 1.3.6.1.4.1.897.2.1.2.8.n | String | srvPropDefaultCollation | DefaultCollation |
| 1.3.6.1.4.1.897.2.1.2.9.n | String | srvPropIdleTimeout | IdleTimeout |
| 1.3.6.1.4.1.897.2.1.2.10.n | String | srvPropIsIQ | IsIQ |
| 1.3.6.1.4.1.897.2.1.2.11.n | String | srvPropIsJavaAvailable | IsJavaAvailable |
| 1.3.6.1.4.1.897.2.1.2.12.n | String | srvPropIsNetworkServer | IsNetworkServer |
| 1.3.6.1.4.1.897.2.1.2.13.n | String | srvPropIsRuntimeServer | IsRuntimeServer |
| 1.3.6.1.4.1.897.2.1.2.14.n | String | srvPropJavaObjectsEnabled | JavaObjectsEnabled |
| 1.3.6.1.4.1.897.2.1.2.15.n | String | srvPropLanguage | Language |
| 1.3.6.1.4.1.897.2.1.2.16.n | String | srvPropLegalCopyright | LegalCopyright |
| 1.3.6.1.4.1.897.2.1.2.17.n | String | srvPropLegalTrademarks | LegalTrademarks |
| 1.3.6.1.4.1.897.2.1.2.18.n | String | srvPropLicenseCount | LicenseCount |
| 1.3.6.1.4.1.897.2.1.2.19.n | String | srvPropLicensedCompany | LicensedCompany |
| 1.3.6.1.4.1.897.2.1.2.20.n | String | srvPropLicensedUser | LicensedUser |
| 1.3.6.1.4.1.897.2.1.2.21.n | String | srvPropLicenseType | LicenseType |
| 1.3.6.1.4.1.897.2.1.2.22.n | String | srvPropLivenessTimeout* | LivenessTimeout |

| OID | Type | Name | Property |
|----------------------------|-------------|------------------------------------|-----------------------------|
| 1.3.6.1.4.1.897.2.1.2.23.n | String | srvPropMachineName | MachineName |
| 1.3.6.1.4.1.897.2.1.2.24.n | String | srvPropMaxMessage | MaxMessage |
| 1.3.6.1.4.1.897.2.1.2.25.n | String | srvPropMessageWindowSize | MessageWindowSize |
| 1.3.6.1.4.1.897.2.1.2.26.n | String | srvPropName | Name |
| 1.3.6.1.4.1.897.2.1.2.27.n | String | srvPropNativeProcessorArchitecture | NativeProcessorArchitecture |
| 1.3.6.1.4.1.897.2.1.2.28.n | String | srvPropNumProcessorsAvail | NumProcessorsAvail |
| 1.3.6.1.4.1.897.2.1.2.29.n | String | srvPropNumProcessorsMax | NumProcessorsMax |
| 1.3.6.1.4.1.897.2.1.2.30.n | String | srvPropOmniIdentifier | OmniIdentifier |
| 1.3.6.1.4.1.897.2.1.2.31.n | String | srvPropPageSize | PageSize |
| 1.3.6.1.4.1.897.2.1.2.32.n | String | srvPropPlatform | Platform |
| 1.3.6.1.4.1.897.2.1.2.33.n | String | srvPropPlatformVer | PlatformVer |
| 1.3.6.1.4.1.897.2.1.2.34.n | String | srvPropProcessCPU | ProcessCPU |
| 1.3.6.1.4.1.897.2.1.2.35.n | String | srvPropProcessCPUSystem | ProcessCPUSystem |
| 1.3.6.1.4.1.897.2.1.2.36.n | String | srvPropProcessCPUUser | ProcessCPUUser |
| 1.3.6.1.4.1.897.2.1.2.37.n | String | srvPropProcessorArchitecture | ProcessorArchitecture |
| 1.3.6.1.4.1.897.2.1.2.38.n | String | srvPropProductName | ProductName |
| 1.3.6.1.4.1.897.2.1.2.39.n | String | srvPropProductVersion | ProductVersion |
| 1.3.6.1.4.1.897.2.1.2.40.n | String | srvPropQuittingTime* | QuittingTime |
| 1.3.6.1.4.1.897.2.1.2.41.n | String | srvPropRememberLastStatement* | RememberLastStatement |
| 1.3.6.1.4.1.897.2.1.2.42.n | String | srvPropRequestFilterConn | RequestFilterConn |
| 1.3.6.1.4.1.897.2.1.2.43.n | String | srvPropRequestFilterDB | RequestFilterDB |
| 1.3.6.1.4.1.897.2.1.2.44.n | String | srvPropRequestLogFile* | RequestLogFile |
| 1.3.6.1.4.1.897.2.1.2.45.n | String | srvPropRequestLogging* | RequestLogging |
| 1.3.6.1.4.1.897.2.1.2.46.n | String | srvPropRequestLogMaxSize | RequestLogMaxSize |
| 1.3.6.1.4.1.897.2.1.2.47.n | String | srvPropStartTime | StartTime |
| 1.3.6.1.4.1.897.2.1.2.48.n | String | srvPropTempDir | TempDir |

| OID | Type | Name | Property |
|----------------------------|--------|---------------------------|--------------------|
| 1.3.6.1.4.1.897.2.1.2.49.n | String | srvPropThreads | Threads |
| 1.3.6.1.4.1.897.2.1.2.50.n | String | srvPropTimeZoneAdjustment | TimeZoneAdjustment |
| 1.3.6.1.4.1.897.2.1.2.51.n | String | srvPropHttpPorts | HttpPorts |
| 1.3.6.1.4.1.897.2.1.2.52.n | String | srvPropHttpsPorts | HttpsPorts |
| 1.3.6.1.4.1.897.2.1.2.53.n | String | srvPropProfileFilterConn | ProfileFilterConn |
| 1.3.6.1.4.1.897.2.1.2.54.n | String | srvPropProfileFilterUser | ProfileFilterUser |
| 1.3.6.1.4.1.897.2.1.2.55.n | String | srvPropRequestLogNumFiles | RequestLogNumFiles |
| 1.3.6.1.4.1.897.2.1.2.56.n | String | srvPropIsFipsAvailable | IsFipsAvailable |
| 1.3.6.1.4.1.897.2.1.2.57.n | String | srvPropFipsMode | FipsMode |

Database statistics

The following table lists the OIDs and names the database statistics that can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent.

The value *n* is the database number in the *asasnmplib.ini* file.

| OID | Type | Name | Property |
|----------------------------|-----------|--|----------------------------------|
| 1.3.6.1.4.1.897.2.2.1.1.n | Counter64 | dbStatCacheHits | CacheHits |
| 1.3.6.1.4.1.897.2.2.1.2.n | Integer32 | dbStatCacheReadIndInt | CacheReadIndInt |
| 1.3.6.1.4.1.897.2.2.1.3.n | Integer32 | dbStatCacheReadIndLeaf | CacheReadIndLeaf |
| 1.3.6.1.4.1.897.2.2.1.4.n | Counter64 | dbStatCacheRead | CacheRead |
| 1.3.6.1.4.1.897.2.2.1.5.n | Integer32 | dbStatCacheReadTable | CacheReadTable |
| 1.3.6.1.4.1.897.2.2.1.6.n | Integer32 | dbStatChkpt | Chkpt |
| 1.3.6.1.4.1.897.2.2.1.7.n | Integer32 | dbStatChkptFlush | ChkptFlush |
| 1.3.6.1.4.1.897.2.2.1.8.n | Integer32 | dbStatChkptPage | ChkptPage |
| 1.3.6.1.4.1.897.2.2.1.9.n | Integer32 | dbStatCheckpointUrgency | CheckpointUrgency |
| 1.3.6.1.4.1.897.2.2.1.10.n | Integer32 | dbStatCheckpointLogBitmap-Size | CheckpointLogBitmap-Size |
| 1.3.6.1.4.1.897.2.2.1.11.n | Integer32 | dbStatCheckpointLogBitmap-PagesWritten | CheckpointLogBitmap-PagesWritten |

| OID | Type | Name | Property |
|----------------------------|-------------|-----------------------------------|-----------------------------|
| 1.3.6.1.4.1.897.2.2.1.12.n | Integer32 | dbStatCheckpointLogCommitToDisk | CheckpointLogCommitToDisk |
| 1.3.6.1.4.1.897.2.2.1.13.n | Integer32 | dbStatCheckpointLogPageInUse | CheckpointLogPageInUse |
| 1.3.6.1.4.1.897.2.2.1.14.n | Integer32 | dbStatCheckpointLogPagesRelocated | CheckpointLogPagesRelocated |
| 1.3.6.1.4.1.897.2.2.1.15.n | Integer32 | dbStatCheckpointLogSavePreimage | CheckpointLogSavePreimage |
| 1.3.6.1.4.1.897.2.2.1.16.n | Integer32 | dbStatCheckpointLogSize | CheckpointLogSize |
| 1.3.6.1.4.1.897.2.2.1.17.n | Integer32 | dbStatCheckpointLogWrites | CheckpointLogWrites |
| 1.3.6.1.4.1.897.2.2.1.18.n | Integer32 | dbStatCheckpointLogPagesWritten | CheckpointLogPagesWritten |
| 1.3.6.1.4.1.897.2.2.1.19.n | Integer32 | dbStatCommitFile | CommitFile |
| 1.3.6.1.4.1.897.2.2.1.20.n | Integer32 | dbStatConnCount | ConnCount |
| 1.3.6.1.4.1.897.2.2.1.21.n | Integer32 | dbStatCurrIO | CurrIO |
| 1.3.6.1.4.1.897.2.2.1.22.n | Integer32 | dbStatCurrRead | CurrRead |
| 1.3.6.1.4.1.897.2.2.1.23.n | Integer32 | dbStatCurrWrite | CurrWrite |
| 1.3.6.1.4.1.897.2.2.1.24.n | Integer32 | dbStatDiskReadIndInt | DiskReadIndInt |
| 1.3.6.1.4.1.897.2.2.1.25.n | Integer32 | dbStatDiskReadIndLeaf | DiskReadIndLeaf |
| 1.3.6.1.4.1.897.2.2.1.26.n | Counter64 | dbStatDiskRead | DiskRead |
| 1.3.6.1.4.1.897.2.2.1.27.n | Integer32 | dbStatDiskReadTable | DiskReadTable |
| 1.3.6.1.4.1.897.2.2.1.28.n | Counter64 | dbStatDiskWrite | DiskWrite |
| 1.3.6.1.4.1.897.2.2.1.29.n | Integer32 | dbStatExtendDB | ExtendDB |
| 1.3.6.1.4.1.897.2.2.1.30.n | Integer32 | dbStatExtendTempWrite | ExtendTempWrite |
| 1.3.6.1.4.1.897.2.2.1.31.n | Integer32 | dbStatFullCompare | FullCompare |
| 1.3.6.1.4.1.897.2.2.1.32.n | Integer32 | dbStatGetData | GetData |
| 1.3.6.1.4.1.897.2.2.1.33.n | Integer32 | dbStatIdleCheck | IdleCheck |
| 1.3.6.1.4.1.897.2.2.1.34.n | Integer32 | dbStatIdleChkpt | IdleChkpt |
| 1.3.6.1.4.1.897.2.2.1.35.n | Integer32 | dbStatIdleChkTime | IdleChkTime |

| OID | Type | Name | Property |
|----------------------------|-----------|------------------------------|------------------------|
| 1.3.6.1.4.1.897.2.2.1.36.n | Integer32 | dbStatIdleWrite | IdleWrite |
| 1.3.6.1.4.1.897.2.2.1.37.n | Integer32 | dbStatIndAdd | IndAdd |
| 1.3.6.1.4.1.897.2.2.1.38.n | Integer32 | dbStatIndLookup | IndLookup |
| 1.3.6.1.4.1.897.2.2.1.39.n | Integer32 | dbStatIOToRecover | IOToRecover |
| 1.3.6.1.4.1.897.2.2.1.40.n | Integer32 | dbStatJavaHeapSize | JavaHeapSize |
| 1.3.6.1.4.1.897.2.2.1.41.n | Integer32 | dbStatJavaNSSize | JavaNSSize |
| 1.3.6.1.4.1.897.2.2.1.42.n | Integer32 | dbStatLockTablePages | LockTablePages |
| 1.3.6.1.4.1.897.2.2.1.43.n | Integer32 | dbStatMapPages | MapPages |
| 1.3.6.1.4.1.897.2.2.1.44.n | Integer32 | dbStatMaxIO | MaxIO |
| 1.3.6.1.4.1.897.2.2.1.45.n | Counter64 | dbStatMaxRead | MaxRead |
| 1.3.6.1.4.1.897.2.2.1.46.n | Integer32 | dbStatMaxWrite | MaxWrite |
| 1.3.6.1.4.1.897.2.2.1.47.n | Integer32 | dbStatPageRelocations | PageRelocations |
| 1.3.6.1.4.1.897.2.2.1.48.n | Integer32 | dbStatProcedurePages | ProcedurePages |
| 1.3.6.1.4.1.897.2.2.1.49.n | Integer32 | dbStatQueryCachePages | QueryCachePages |
| 1.3.6.1.4.1.897.2.2.1.50.n | Integer32 | dbStatQueryLowMemoryStrategy | QueryLowMemoryStrategy |
| 1.3.6.1.4.1.897.2.2.1.51.n | Counter64 | dbStatQueryRowsMaterialized | QueryRowsMaterialized |
| 1.3.6.1.4.1.897.2.2.1.52.n | Integer32 | dbStatRecoveryUrgency | RecoveryUrgency |
| 1.3.6.1.4.1.897.2.2.1.53.n | Integer32 | dbStatLogFreeCommit | LogFreeCommit |
| 1.3.6.1.4.1.897.2.2.1.54.n | Integer32 | dbStatLogWrite | LogWrite |
| 1.3.6.1.4.1.897.2.2.1.55.n | Integer32 | dbStatRelocatableHeapPages | RelocatableHeapPages |
| 1.3.6.1.4.1.897.2.2.1.56.n | Integer32 | dbStatRollbackLogPages | RollbackLogPages |
| 1.3.6.1.4.1.897.2.2.1.57.n | Integer32 | dbStatTempTablePages | TempTablePages |
| 1.3.6.1.4.1.897.2.2.1.58.n | Integer32 | dbStatTriggerPages | TriggerPages |
| 1.3.6.1.4.1.897.2.2.1.59.n | Integer32 | dbStatViewPages | ViewPages |

Database properties

The following table lists the OIDs and names of the database properties that

can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent.

Writable properties are marked with an asterisk (*). The value *n* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Property |
|------------------------------------|--------|------------------------------|------------------------|
| 1.3.6.1.4.1.897.2.2.2.1. <i>n</i> | String | dbPropAlias | Alias |
| 1.3.6.1.4.1.897.2.2.2.2. <i>n</i> | String | dbPropAuditingTypes | AuditingTypes |
| 1.3.6.1.4.1.897.2.2.2.3. <i>n</i> | String | dbPropBlankPadding | BlankPadding |
| 1.3.6.1.4.1.897.2.2.2.4. <i>n</i> | String | dbPropBlobArenas | BlobArenas |
| 1.3.6.1.4.1.897.2.2.2.5. <i>n</i> | String | dbPropCapabilities | Capabilities |
| 1.3.6.1.4.1.897.2.2.2.6. <i>n</i> | String | dbPropCaseSensitive | CaseSensitive |
| 1.3.6.1.4.1.897.2.2.2.7. <i>n</i> | String | dbPropCaseSensitivePasswords | CaseSensitivePasswords |
| 1.3.6.1.4.1.897.2.2.2.8. <i>n</i> | String | dbPropCharSet | CharSet |
| 1.3.6.1.4.1.897.2.2.2.9. <i>n</i> | String | dbPropChecksum | Checksum |
| 1.3.6.1.4.1.897.2.2.2.10. <i>n</i> | String | dbPropClusteredIndexes | ClusteredIndexes |
| 1.3.6.1.4.1.897.2.2.2.11. <i>n</i> | String | dbPropCollation | Collation |
| 1.3.6.1.4.1.897.2.2.2.12. <i>n</i> | String | dbPropCompressedBTrees | CompressedBTrees |
| 1.3.6.1.4.1.897.2.2.2.13. <i>n</i> | String | dbPropCompression | Compression |
| 1.3.6.1.4.1.897.2.2.2.14. <i>n</i> | String | dbPropCurrentRedoPos | CurrentRedoPos |
| 1.3.6.1.4.1.897.2.2.2.15. <i>n</i> | String | dbPropDBFileFragments | DBFileFragments |
| 1.3.6.1.4.1.897.2.2.2.16. <i>n</i> | String | dbPropDriveType | DriveType |
| 1.3.6.1.4.1.897.2.2.2.17. <i>n</i> | String | dbPropEncryption | Encryption |
| 1.3.6.1.4.1.897.2.2.2.18. <i>n</i> | String | dbPropFile | File |
| 1.3.6.1.4.1.897.2.2.2.19. <i>n</i> | String | dbPropFileSize | FileSize |
| 1.3.6.1.4.1.897.2.2.2.20. <i>n</i> | String | dbPropFileVersion | FileVersion |
| 1.3.6.1.4.1.897.2.2.2.21. <i>n</i> | String | dbPropFreePageBitMaps | FreePageBitMaps |
| 1.3.6.1.4.1.897.2.2.2.22. <i>n</i> | String | dbPropFreePages | FreePages |
| 1.3.6.1.4.1.897.2.2.2.23. <i>n</i> | String | dbPropGlobalDBId | GlobalDBId |
| 1.3.6.1.4.1.897.2.2.2.24. <i>n</i> | String | dbPropHistogramHashFix | HistogramHashFix |

| OID | Type | Name | Property |
|----------------------------|--------|-----------------------------|-----------------------|
| 1.3.6.1.4.1.897.2.2.2.25.n | String | dbPropHistograms | Histograms |
| 1.3.6.1.4.1.897.2.2.2.26.n | String | dbPropIndexStatistics | IndexStatistics |
| 1.3.6.1.4.1.897.2.2.2.27.n | String | dbPropIQStore | IQStore |
| 1.3.6.1.4.1.897.2.2.2.28.n | String | dbPropJDKVersion | JDKVersion |
| 1.3.6.1.4.1.897.2.2.2.29.n | String | dbPropLanguage | Language |
| 1.3.6.1.4.1.897.2.2.2.30.n | String | dbPropLargeProcedureIDs | LargeProcedureIDs |
| 1.3.6.1.4.1.897.2.2.2.31.n | String | dbPropLogFileFragments | LogFileFragments |
| 1.3.6.1.4.1.897.2.2.2.32.n | String | dbPropLogMirrorName | LogMirrorName |
| 1.3.6.1.4.1.897.2.2.2.33.n | String | dbPropLogName | LogName |
| 1.3.6.1.4.1.897.2.2.2.34.n | String | dbPropLTMGeneration | LTMGeneration |
| 1.3.6.1.4.1.897.2.2.2.35.n | String | dbPropLTMTrunc | LTMTrunc |
| 1.3.6.1.4.1.897.2.2.2.36.n | String | dbPropMultiByteCharSet | MultiByteCharSet |
| 1.3.6.1.4.1.897.2.2.2.37.n | String | dbPropName | Name |
| 1.3.6.1.4.1.897.2.2.2.38.n | String | dbPropNamedConstraints | NamedConstraints |
| 1.3.6.1.4.1.897.2.2.2.39.n | String | dbPropPageSize | PageSize |
| 1.3.6.1.4.1.897.2.2.2.40.n | String | dbPropPreserveSource | PreserveSource |
| 1.3.6.1.4.1.897.2.2.2.41.n | String | dbPropProcedureProfiling* | ProcedureProfiling |
| 1.3.6.1.4.1.897.2.2.2.42.n | String | dbPropReadOnly | ReadOnly |
| 1.3.6.1.4.1.897.2.2.2.43.n | String | dbPropRemoteTrunc | RemoteTrunc |
| 1.3.6.1.4.1.897.2.2.2.44.n | String | dbPropSeparateCheckpointLog | SeparateCheckpointLog |
| 1.3.6.1.4.1.897.2.2.2.45.n | String | dbPropSeparateForeignKeys | SeparateForeignKeys |
| 1.3.6.1.4.1.897.2.2.2.46.n | String | dbPropStringHistogramsFix | StringHistogramsFix |
| 1.3.6.1.4.1.897.2.2.2.47.n | String | dbPropSyncTrunc | SyncTrunc |
| 1.3.6.1.4.1.897.2.2.2.48.n | String | dbPropTableBitMaps | TableBitMaps |
| 1.3.6.1.4.1.897.2.2.2.49.n | String | dbPropTablesQualTriggers | TablesQualTriggers |
| 1.3.6.1.4.1.897.2.2.2.50.n | String | dbPropTempFileName | TempFileName |
| 1.3.6.1.4.1.897.2.2.2.51.n | String | dbPropTransactionsSpanLogs | TransactionsSpanLogs |
| 1.3.6.1.4.1.897.2.2.2.52.n | String | dbPropVariableHashSize | VariableHashSize |

| OID | Type | Name | Property |
|----------------------------|--------|------------------------|------------------|
| 1.3.6.1.4.1.897.2.2.2.53.n | String | dbPropUniqueIdentifier | UniqueIdentifier |

Database options

The following table lists the OIDs and names of the database options that can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent.

Writable options are marked with an asterisk (*). The value *n* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Option |
|----------------------------|-----------|-----------------------------------|--------------------------------|
| 1.3.6.1.4.1.897.2.2.3.1.n | String | dbOptAllowNullsByDefault* | Allow_nulls_by_default |
| 1.3.6.1.4.1.897.2.2.3.2.n | String | dbOptAnsiNull* | AnsiNull |
| 1.3.6.1.4.1.897.2.2.3.3.n | String | dbOptAnsiBlanks* | Ansi_blanks |
| 1.3.6.1.4.1.897.2.2.3.4.n | String | dbOptAnsiCloseCursorsOn-Rollback* | Ansi_close_cursors_on_rollback |
| 1.3.6.1.4.1.897.2.2.3.5.n | String | dbOptAnsiIntegerOverflow* | Ansi_integer_overflow |
| 1.3.6.1.4.1.897.2.2.3.6.n | String | dbOptAnsiPermissions* | Ansi_permissions |
| 1.3.6.1.4.1.897.2.2.3.7.n | String | dbOptAnsiUpdateConstraints* | Ansi_update_constraints |
| 1.3.6.1.4.1.897.2.2.3.8.n | String | dbOptAuditing* | Auditing |
| 1.3.6.1.4.1.897.2.2.3.9.n | String | dbOptAuditingOptions* | Auditing_options |
| 1.3.6.1.4.1.897.2.2.3.10.n | String | dbOptAutomaticTimestamp* | Automatic_timestamp |
| 1.3.6.1.4.1.897.2.2.3.11.n | String | dbOptBackgroundPriority* | Background_priority |
| 1.3.6.1.4.1.897.2.2.3.12.n | String | dbOptBlocking* | Blocking |
| 1.3.6.1.4.1.897.2.2.3.13.n | Integer32 | dbOptBlockingTimeout* | Blocking_timeout |
| 1.3.6.1.4.1.897.2.2.3.14.n | String | dbOptChained* | Chained |
| 1.3.6.1.4.1.897.2.2.3.15.n | Integer32 | dbOptCheckpointTime* | Checkpoint_time |
| 1.3.6.1.4.1.897.2.2.3.16.n | Integer32 | dbOptCisOption* | Cis_option |
| 1.3.6.1.4.1.897.2.2.3.17.n | Integer32 | dbOptCisRowsetSize* | Cis_rowset_size |
| 1.3.6.1.4.1.897.2.2.3.18.n | String | dbOptCloseOnEndtrans* | Close_on_endtrans |

| OID | Type | Name | Option |
|----------------------------|-----------|--------------------------------------|---------------------------------|
| 1.3.6.1.4.1.897.2.2.3.19.n | String | dbOptConnectionAuthenticat- ion* | Connection_authentication |
| 1.3.6.1.4.1.897.2.2.3.20.n | String | dbOptContinueAfterRaiseer- ror* | Continue_after_raise_error |
| 1.3.6.1.4.1.897.2.2.3.21.n | String | dbOptConversionError* | Conversion_error |
| 1.3.6.1.4.1.897.2.2.3.22.n | String | dbOptCooperativeCommits* | Cooperative_commits |
| 1.3.6.1.4.1.897.2.2.3.23.n | Integer32 | dbOptCooperativeCommit- Timeout* | Cooperative_commit_ timeout |
| 1.3.6.1.4.1.897.2.2.3.24.n | String | dbOptDatabaseAuthentica- tion* | Database_authentication |
| 1.3.6.1.4.1.897.2.2.3.25.n | String | dbOptDateFormat* | Date_format |
| 1.3.6.1.4.1.897.2.2.3.26.n | String | dbOptDateOrder* | Date_order |
| 1.3.6.1.4.1.897.2.2.3.27.n | String | dbOptDebugMessages* | Debug_messages |
| 1.3.6.1.4.1.897.2.2.3.28.n | String | dbOptDedicatedTask* | Dedicated_task |
| 1.3.6.1.4.1.897.2.2.3.29.n | Integer32 | dbOptDefaultTimestampIn- crement* | Default_timestamp_ increment |
| 1.3.6.1.4.1.897.2.2.3.30.n | String | dbOptDelayedCommits* | Delayed_commits |
| 1.3.6.1.4.1.897.2.2.3.31.n | Integer32 | dbOptDelayedCommitTime- out* | Delayed_commit_timeout |
| 1.3.6.1.4.1.897.2.2.3.32.n | String | dbOptDivideByZeroError* | Divide_by_zero_error |
| 1.3.6.1.4.1.897.2.2.3.33.n | String | dbOptEscapeCharacter* | Escape_character |
| 1.3.6.1.4.1.897.2.2.3.34.n | String | dbOptExcludeOperators* | Exclude_operators |
| 1.3.6.1.4.1.897.2.2.3.35.n | String | dbOptExtendedJoinSyntax* | Extended_join_syntax |
| 1.3.6.1.4.1.897.2.2.3.36.n | String | dbOptFireTriggers* | Fire_triggers |
| 1.3.6.1.4.1.897.2.2.3.37.n | Integer32 | dbOptFirstDayOfWeek* | First_day_of_week |
| 1.3.6.1.4.1.897.2.2.3.38.n | String | dbOptFloatAsDouble* | Float_as_double |
| 1.3.6.1.4.1.897.2.2.3.39.n | String | dbOptForceViewCreation* | Force_view_creation |
| 1.3.6.1.4.1.897.2.2.3.40.n | String | dbOptForXmlNullTreatment* | For_xml_null_treatment |
| 1.3.6.1.4.1.897.2.2.3.41.n | Integer32 | dbOptGlobalDatabaseId* | Global_database_id |
| 1.3.6.1.4.1.897.2.2.3.42.n | Integer32 | dbOptIsolationLevel* | Isolation_level |

| OID | Type | Name | Option |
|----------------------------|-------------|--------------------------------------|------------------------------------|
| 1.3.6.1.4.1.897.2.2.3.43.n | Integer32 | dbOptJavaHeapSize* | Java_heap_size |
| 1.3.6.1.4.1.897.2.2.3.44.n | String | dbOptJavaInputOutput* | Java_input_output |
| 1.3.6.1.4.1.897.2.2.3.45.n | Integer32 | dbOptJavaNamespaceSize* | Java_namespace_size |
| 1.3.6.1.4.1.897.2.2.3.46.n | Integer32 | dbOptJavaPageBufferSize* | Java_page_buffer_size |
| 1.3.6.1.4.1.897.2.2.3.47.n | String | dbOptLockRejectedRows* | Lock_rejected_rows |
| 1.3.6.1.4.1.897.2.2.3.48.n | String | dbOptLoginMode* | Login_mode |
| 1.3.6.1.4.1.897.2.2.3.49.n | String | dbOptLoginProcedure* | Login_procedure |
| 1.3.6.1.4.1.897.2.2.3.50.n | String | dbOptLogDetailedPlans* | Log_detailed_plans |
| 1.3.6.1.4.1.897.2.2.3.51.n | Integer32 | dbOptLogMaxRequests* | Log_max_requests |
| 1.3.6.1.4.1.897.2.2.3.52.n | Integer32 | dbOptMaxCursorCount* | Max_cursor_count |
| 1.3.6.1.4.1.897.2.2.3.53.n | Integer32 | dbOptMaxHashSize* | Max_hash_size |
| 1.3.6.1.4.1.897.2.2.3.54.n | Integer32 | dbOptMaxPlansCached* | Max_plans_cached |
| 1.3.6.1.4.1.897.2.2.3.55.n | Integer32 | dbOptMaxRecursiveIterations* | Max_recursive_iterations |
| 1.3.6.1.4.1.897.2.2.3.56.n | Integer32 | dbOptMaxStatementCount* | Max_statement_count |
| 1.3.6.1.4.1.897.2.2.3.57.n | Integer32 | dbOptMaxWorkTableHash-Size* | Max_work_table_hash_size |
| 1.3.6.1.4.1.897.2.2.3.58.n | Integer32 | dbOptMinPasswordLength* | Min_password_length |
| 1.3.6.1.4.1.897.2.2.3.59.n | Integer32 | dbOptInternal | Internal |
| 1.3.6.1.4.1.897.2.2.3.60.n | Integer32 | dbOptNearestCentury* | Nearest_century |
| 1.3.6.1.4.1.897.2.2.3.61.n | String | dbOptNonKeywords* | Non_keywords |
| 1.3.6.1.4.1.897.2.2.3.62.n | String | dbOptODBCDistinguishChar-AndVarchar* | ODBC_distinguish_char_-and_varchar |
| 1.3.6.1.4.1.897.2.2.3.63.n | String | dbOptOnCharsetConversion-Failure* | On_charset_conversion_-failure |
| 1.3.6.1.4.1.897.2.2.3.64.n | String | dbOptOnTsqlError* | On_tsql_error |
| 1.3.6.1.4.1.897.2.2.3.65.n | String | dbOptOptimisticWaitFor-Commit* | Optimistic_wait_for_commit |
| 1.3.6.1.4.1.897.2.2.3.66.n | String | dbOptOptimizationGoal* | Optimization_goal |

| OID | Type | Name | Option |
|----------------------------|-----------|---------------------------------------|------------------------------------|
| 1.3.6.1.4.1.897.2.2.3.67.n | Integer32 | dbOptOptimizationLevel* | Optimization_level |
| 1.3.6.1.4.1.897.2.2.3.68.n | String | dbOptOptimizationLogging* | Optimization_logging |
| 1.3.6.1.4.1.897.2.2.3.69.n | String | dbOptOptimizationWorkload* | Optimization_workload |
| 1.3.6.1.4.1.897.2.2.3.70.n | Integer32 | dbOptPinnedCursorPer- centOfCache* | Pinned_cursor_percent_of_ cache |
| 1.3.6.1.4.1.897.2.2.3.71.n | Integer32 | dbOptPrecision* | Precision |
| 1.3.6.1.4.1.897.2.2.3.72.n | String | dbOptPrefetch* | Prefetch |
| 1.3.6.1.4.1.897.2.2.3.73.n | String | dbOptPreserveSourceFormat* | Preserve_source_format |
| 1.3.6.1.4.1.897.2.2.3.74.n | String | dbOptPreventArticlePkeyUp- date* | Prevent_article_pkey_update |
| 1.3.6.1.4.1.897.2.2.3.75.n | String | dbOptQueryPlanOnOpen* | Query_plan_on_open |
| 1.3.6.1.4.1.897.2.2.3.76.n | String | dbOptQuotedIdentifier* | Quoted_identifier |
| 1.3.6.1.4.1.897.2.2.3.77.n | String | dbOptReadPastDeleted* | Read_past_deleted |
| 1.3.6.1.4.1.897.2.2.3.78.n | Integer32 | dbOptRecoveryTime* | Recovery_time |
| 1.3.6.1.4.1.897.2.2.3.79.n | String | dbOptReplicateAll* | Replicate_all |
| 1.3.6.1.4.1.897.2.2.3.80.n | String | dbOptReturnDateTime- AsString* | Return_date_time_as_string |
| 1.3.6.1.4.1.897.2.2.3.81.n | String | dbOptReturnJavaAsString* | Return_java_as_string |
| 1.3.6.1.4.1.897.2.2.3.82.n | String | dbOptRITriggerTime* | RI_trigger_time |
| 1.3.6.1.4.1.897.2.2.3.83.n | String | dbOptRowCounts* | Row_counts |
| 1.3.6.1.4.1.897.2.2.3.84.n | Integer32 | dbOptScale* | Scale |
| 1.3.6.1.4.1.897.2.2.3.85.n | String | dbOptSortCollation* | Sort_collation |
| 1.3.6.1.4.1.897.2.2.3.86.n | String | dbOptSQLFlaggerError- Level* | SQL_flagger_error_level |
| 1.3.6.1.4.1.897.2.2.3.87.n | String | dbOptSQLFlaggerWarn- ingLevel* | SQL_flagger_warning_level |
| 1.3.6.1.4.1.897.2.2.3.88.n | String | dbOptStringRtruncation* | String_rtruncation |
| 1.3.6.1.4.1.897.2.2.3.89.n | String | dbOptSubsumeRowLocks* | Subsume_row_locks |
| 1.3.6.1.4.1.897.2.2.3.90.n | String | dbOptSuppressTDSDebug- ging* | Suppress_TDS_debugging |

| OID | Type | Name | Option |
|-----------------------------|-------------|-------------------------------------|-----------------------------------|
| 1.3.6.1.4.1.897.2.2.3.91.n | String | dbOptTDSEmptyStringIs-Null* | TDS_empty_string_is_null |
| 1.3.6.1.4.1.897.2.2.3.92.n | Integer32 | dbOptThreadCount* | Thread_count |
| 1.3.6.1.4.1.897.2.2.3.93.n | Integer32 | dbOptThreadStack* | Thread_stack |
| 1.3.6.1.4.1.897.2.2.3.94.n | Integer32 | dbOptThreadSwaps* | Thread_swaps |
| 1.3.6.1.4.1.897.2.2.3.95.n | String | dbOptTimestampFormat* | Timestamp_format |
| 1.3.6.1.4.1.897.2.2.3.96.n | String | dbOptTimeFormat* | Time_format |
| 1.3.6.1.4.1.897.2.2.3.97.n | Integer32 | dbOptTimeZoneAdjustment* | Time_zone_adjustment |
| 1.3.6.1.4.1.897.2.2.3.98.n | String | dbOptTruncateDateValues* | Truncate_date_values |
| 1.3.6.1.4.1.897.2.2.3.99.n | String | dbOptTruncateTimestampValues* | Truncate_timestamp_values |
| 1.3.6.1.4.1.897.2.2.3.100.n | String | dbOptTruncateWithAutocommit* | Truncate_with_auto_commit |
| 1.3.6.1.4.1.897.2.2.3.101.n | String | dbOptTsqlHexConstant* | Tsql_hex_constant |
| 1.3.6.1.4.1.897.2.2.3.102.n | String | dbOptTsqlVariables* | Tsql_variables |
| 1.3.6.1.4.1.897.2.2.3.103.n | String | dbOptUpdateStatistics* | Update_statistics |
| 1.3.6.1.4.1.897.2.2.3.104.n | String | dbOptUpgradeDatabaseCapability* | Upgrade_database_capability |
| 1.3.6.1.4.1.897.2.2.3.105.n | String | dbOptUserEstimates* | User_estimates |
| 1.3.6.1.4.1.897.2.2.3.106.n | String | dbOptWaitForCommit* | Wait_for_commit |
| 1.3.6.1.4.1.897.2.2.3.107.n | String | dbOptTempSpaceLimitCheck* | Temp_space_limit_check |
| 1.3.6.1.4.1.897.2.2.3.108.n | Integer32 | dbOptRemoteIdleTimeout* | Remote_idle_timeout |
| 1.3.6.1.4.1.897.2.2.3.109.n | Integer32 | dbOptInternal | Internal |
| 1.3.6.1.4.1.897.2.2.3.110.n | String | dbOptODBCDescribeBinaryAsVarbinary* | ODBC_describe_binary_as_varbinary |
| 1.3.6.1.4.1.897.2.2.3.111.n | String | dbOptRollbackOnDeadlock | Rollback_on_deadlock |
| 1.3.6.1.4.1.897.2.2.3.112.n | String | dbOptIntegratedServerName* | Integrated_server_name |
| 1.3.6.1.4.1.897.2.2.3.113.n | String | dbOptLogDeadlocks* | Log_deadlocks |

CHAPTER 3

RDBMS MIB Reference

About this chapter

This chapter contains descriptions of each of the tables in the RDBMS MIB.

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The RDBMS MIB

The following sections list the OIDs of the values that can be retrieved using the Adaptive Server Anywhere SNMP Extension Agent. By default, the RDBMS MIB is located in *C:\Program Files\Sybase\SQL Anywhere 9\snmp\RDBMS-MIB.mib*.

rdbmsDbTable

This table lists information about the databases installed on a system.

The value *db* is the database number in the *asasnmplib.ini* file.

| OID | Type | Name | Value returned |
|---------------------------|---------|----------------------|--------------------------|
| 1.3.6.1.2.1.39.1.1.1.1.db | Integer | rdbmsDbIndex | <i>db</i> |
| 1.3.6.1.2.1.39.1.1.1.2.db | OID | rdbmsDbPrivateMibOID | 1.3.6.1.4.1.897.2 |
| 1.3.6.1.2.1.39.1.1.1.3.db | String | rdbmsDbVendorName | property('CompanyName') |
| 1.3.6.1.2.1.39.1.1.1.4.db | String | rdbmsDbName | db_property('name') |
| 1.3.6.1.2.1.39.1.1.1.5.db | String | rdbmsDbContact | property('LicensedUser') |

rdbmsDbInfoTable

This table provides additional information about the databases on the system.

The value *db* is the database number in the *asasnmplib.ini* file.

| OID | Type | Name | Value returned |
|---------------------------|--------|-------------------------|----------------------------|
| 1.3.6.1.2.1.39.1.2.1.1.db | String | rdbmsDbInfoProduct-Name | property('PropertyName') |
| 1.3.6.1.2.1.39.1.2.1.2.db | String | rdbmsDbInfoVersion | property('ProductVersion') |

| OID | Type | Name | Value returned |
|---------------------------|---------|--------------------------|--|
| 1.3.6.1.2.1.39.1.2.1.3.db | Integer | rdbmsDbInfoSizeUnits | Calculated based on dbInfoSizeAllocated and dbInfoSizeUsed. <ul style="list-style-type: none"> ◆ 1=bytes ◆ 2=KB ◆ 3=MB ◆ 4=GB ◆ 5=TB (Each unit is 1024 times the previous.) |
| 1.3.6.1.2.1.39.1.2.1.4.db | Integer | rdbmsDbInfoSizeAllocated | db_property('pagesize') * db_property('filesize') |
| 1.3.6.1.2.1.39.1.2.1.5.db | Integer | rdbmsDbInfoSizeUsed | db_property('pagesize') * (db_property('filesize') - db_property('freepages')) |
| 1.3.6.1.2.1.39.1.2.1.6.db | String | rdbmsDbInfoLastBackup | NULL ¹ |

¹ This OID is not currently supported by the Adaptive Server Anywhere SNMP Extension Agent.

rdbmsDbParamTable

This table lists the configuration parameters for the databases on the system.

The value *db* is the database number in the *asasnmplib.ini* file, while *n* is the index of the option in the *asa.2.3* subtree.

| OID | Type | Name | Value returned |
|---------------------------|---------|-----------------------|--|
| 1.3.6.1.2.1.39.1.3.1.1.db | String | rdbmsDbParamName | Option name |
| 1.3.6.1.2.1.39.1.3.1.2.db | Integer | rdbmsDbParamSubIndex | <i>n</i> |
| 1.3.6.1.2.1.39.1.3.1.3.db | OID | rdbmsDbParamID | OID in Adaptive Server Anywhere MIB corresponding to this option |
| 1.3.6.1.2.1.39.1.3.1.4.db | String | rdbmsDbParamCurrValue | Option value |
| 1.3.6.1.2.1.39.1.3.1.5.db | String | rdbmsDbParamComment | NULL ¹ |

¹ This OID is not currently supported by the Adaptive Server Anywhere SNMP Extension Agent.

rdbmsDbLimitedResourceTable

This table lists free space information on each dbspace. In this table, *n* represents each dbspace as follows:

- ◆ 1-13 are for normal dbspaces (numbered 0-12 in the database)
- ◆ 14 is the transaction log file
- ◆ 15 is the transaction log mirror file
- ◆ 16 is the temporary file
- ◆ 17 is the write file

The value *db* is the database number in the *asasnmplib.ini* file.

| OID | Type | Name | Value returned |
|-------------------------------------|---------|-----------------------------------|---|
| 1.3.6.1.2.1.39.1.4.1.1. <i>n.db</i> | String | rdbmsDbLimitedResource-Name | Name of dbspace, or Transaction Log, Transaction Log Mirror, Temporary File, or Write File . |
| 1.3.6.1.2.1.39.1.4.1.2. <i>n.db</i> | OID | rdbmsDbLimitedResourceID | 1.3.6.1.4.1.897.2 |
| 1.3.6.1.2.1.39.1.4.1.3. <i>n.db</i> | Integer | rdbmsDbLimitedResource-Limit | Free space available on disk + current file size, in bytes |
| 1.3.6.1.2.1.39.1.4.1.4. <i>n.db</i> | Integer | rdbmsDbLimitedResourceCurrent | Current file size |
| 1.3.6.1.2.1.39.1.4.1.5. <i>n.db</i> | Integer | rdbmsDbLimitedResource-Highwater | Current size |
| 1.3.6.1.2.1.39.1.4.1.6. <i>n.db</i> | Integer | rdbmsDbLimitedResource-Failure | 0 ¹ |
| 1.3.6.1.2.1.39.1.4.1.7. <i>n.db</i> | String | rdbmsDbLimitedResourceDescription | "Bytes" |

¹ This OID is not currently supported by the Adaptive Server Anywhere SNMP Extension Agent.

rdbmsSrvTable

This table lists the database servers running or installed on your system.

The value *db* is the database number in the *asasnmp.ini* file.

| OID | Type | Name | Value returned |
|-----------------------------------|--------|-----------------------|-----------------------------|
| 1.3.6.1.2.1.39.1.5.1.1. <i>db</i> | OID | rdbmsSrvPrivateMibOID | 1.3.6.1.4.1.897.2 |
| 1.3.6.1.2.1.39.1.5.1.2. <i>db</i> | String | rdbmsSrvVendorName | property('CompanyName') |
| 1.3.6.1.2.1.39.1.5.1.3. <i>db</i> | String | rdbmsSrvProductName | property('ProductName') |
| 1.3.6.1.2.1.39.1.5.1.4. <i>db</i> | String | rdbmsSrvContact | property('LicencedCompany') |

rdbmsSrvInfoTable

This table lists additional information about the database servers in your system.

The value *db* is the database number in the *asasnmp.ini* file.

| OID | Type | Name | Value returned |
|------------------------------------|---------|----------------------------------|--|
| 1.3.6.1.2.1.39.1.6.1.1. <i>db</i> | Integer | rdbmsSrvInfoStartupTime | property('StartTime') |
| 1.3.6.1.2.1.39.1.6.1.2. <i>db</i> | Integer | rdbmsSrvInfoFinishedTransactions | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.3. <i>db</i> | Integer | rdbmsSrvInfoDiskReads | property('DiskReadEng') |
| 1.3.6.1.2.1.39.1.6.1.4. <i>db</i> | Integer | rdbmsSrvInfoLogicalReads | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.5. <i>db</i> | Integer | rdbmsSrvInfoDiskWrites | prop- erty('DiskWriteEng') |
| 1.3.6.1.2.1.39.1.6.1.6. <i>db</i> | Integer | rdbmsSrvInfoLogicalWrites | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.7. <i>db</i> | Integer | rdbmsSrvInfoPageReads | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.8. <i>db</i> | Integer | rdbmsSrvInfoPageDiskOutOfWrites | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.9. <i>db</i> | Integer | rdbmsSrvInfoSpaces | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.10. <i>db</i> | Integer | rdbmsSrvInfoHandledRequests | property('Req') |
| 1.3.6.1.2.1.39.1.6.1.11. <i>db</i> | Integer | rdbmsSrvInfoRequestRecvs | prop- erty('PacketsReceivedUncomp') |
| 1.3.6.1.2.1.39.1.6.1.12. <i>db</i> | Integer | rdbmsSrvInfoRequestSends | prop- erty('PacketsSentUncomp') |

| OID | Type | Name | Value returned |
|----------------------------|---------|--|----------------|
| 1.3.6.1.2.1.39.1.6.1.13.db | Integer | rdbmsSrvInfoHighwaterInboundAssociations | 0 ¹ |
| 1.3.6.1.2.1.39.1.6.1.14.db | Integer | rdbmsSrvInfoMaxInboundAssociations | 0 ¹ |

¹ This OID is not currently supported by the Adaptive Server Anywhere SNMP Extension Agent.

rdbmsSrvParamTable

This table lists the server options that can be set by the Adaptive Server Anywhere SNMP Extension Agent through the Adaptive Server Anywhere MIB. *n* is the index, as follows:

| <i>n</i> | Server option |
|----------|---------------------------|
| 1 | ConnsDisabled |
| 2 | LivenessTimeout (default) |
| 3 | QuittingTime |
| 4 | RememberLastStatement |
| 5 | RequestLogFile |
| 6 | RequestLogging |

The value *db* is the database number in the *asasmp.ini* file.

| OID | Type | Name | Value returned |
|-----------------------------|---------|--------------------------|----------------------------------|
| 1.3.6.1.2.1.39.1.7.1.1.n.db | String | rdbmsDbSrvParamName | Name of option <i>n</i> |
| 1.3.6.1.2.1.39.1.7.1.2.n.db | Integer | rdbmsDbSrvParamSubIndex | <i>n</i> |
| 1.3.6.1.2.1.39.1.7.1.3.n.db | OID | rdbmsDbSrvParamID | 1.3.6.1.4.1.897.2 |
| 1.3.6.1.2.1.39.1.7.1.4.n.db | String | rdbmsDbSrvParamCurrValue | Current value of option <i>n</i> |
| 1.3.6.1.2.1.39.1.7.1.5.n.db | String | rdbmsDbSrvParamComment | Full name of option <i>n</i> |

rdbmsSrvLimitedResourceTable

This table contains information about server configuration parameters.

The value *db* is the database number in the *asasmp.ini* file, while *n* is the index of the resource as follows:

| <i>n</i> | Name | Resource | Resource limit |
|----------|-------------|--------------------------------|--|
| 1 | Connections | property('LicensesInUse') | property('LicenseCount') |
| 2 | Processors | property('NumProcessorsAvail') | property('NumProcessorsMax') If this is 0, then it returns property('NumProcessorsAvail') |

| OID | Type | Name | Value returned |
|-----------------------------------|---------|------------------------------------|--|
| 1.3.6.1.2.1.39.1.8.1.1. <i>db</i> | String | rdbmsSrvLimitedResource-Name | Name of resource <i>n</i> |
| 1.3.6.1.2.1.39.1.8.1.2. <i>db</i> | OID | rdbmsSrvLimitedResourceID | OID in Adaptive Server Anywhere MIB corresponding to this option |
| 1.3.6.1.2.1.39.1.8.1.3. <i>db</i> | Integer | rdbmsSrvLimitedResource-Limit | Upper limit of resource <i>n</i> |
| 1.3.6.1.2.1.39.1.8.1.4. <i>db</i> | Integer | rdbmsSrvLimitedResource-Current | Current value of resource <i>n</i> |
| 1.3.6.1.2.1.39.1.8.1.5. <i>db</i> | Integer | rdbmsSrvLimitedResource-Highwater | Current value of resource <i>n</i> |
| 1.3.6.1.2.1.39.1.8.1.6. <i>db</i> | Integer | rdbmsSrvLimitedResource-Failures | 0 ¹ |
| 1.3.6.1.2.1.39.1.8.1.7. <i>db</i> | String | rdbmsSrvLimitedResourceDescription | Name of resource <i>n</i> |

¹ This OID is not currently supported by the Adaptive Server Anywhere SNMP Extension Agent.



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