

# Arcserve® Backup for Windows

## Agent for Sybase Guide

r17.0

arcserve®

This Documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by Arcserve at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of Arcserve. This Documentation is confidential and proprietary information of Arcserve and may not be disclosed by you or used for any purpose other than as may be permitted in (i) a separate agreement between you and Arcserve governing your use of the Arcserve software to which the Documentation relates; or (ii) a separate confidentiality agreement between you and Arcserve.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all Arcserve copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to Arcserve that all copies and partial copies of the Documentation have been returned to Arcserve or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, ARCSERVE PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL ARCSERVE BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF ARCSERVE IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is Arcserve.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

© 2016 Arcserve, including its affiliates and subsidiaries. All rights reserved. Any third party trademarks or copyrights are the property of their respective owners.

## Arcserve Product References

This document references the following Arcserve products:

- Arcserve® Backup
- Arcserve® Unified Data Protection
- Arcserve® Unified Data Protection Agent for Windows
- Arcserve® Unified Data Protection Agent for Linux
- Arcserve® Replication and High Availability

## Contact Arcserve

The Arcserve Support team offers a rich set of resources for resolving your technical issues and provides easy access to important product information.

<https://www.arcserve.com/support>

With Arcserve Support:

- You can get in direct touch with the same library of information that is shared internally by our Arcserve Support experts. This site provides you with access to our knowledge-base (KB) documents. From here you easily search for and find the product-related KB articles which contain field-tested solutions for many top issues and common problems.
- You can use our Live Chat link to instantly launch a real-time conversation between you and the Arcserve Support team. With Live Chat, you can get immediate answers to your concerns and questions, while still maintaining access to the product.
- You can participate in the Arcserve Global User Community to ask and answer questions, share tips and tricks, discuss best practices and participate in conversations with your peers.
- You can open a support ticket. By opening a support ticket online, you can expect a callback from one of our experts in the product area you are inquiring about.

You can access other helpful resources appropriate for your Arcserve product.



# Contents

---

<b>Chapter 1: Introducing the Agent for Sybase</b>	<b>7</b>
How the Agent Works .....	8
How the Backup Process Works .....	8
Check Backup Agent RPC Server Service .....	9
User IDs, Passwords, and Remote Database Servers .....	9
Agent Parameters .....	10
<b>Chapter 2: Installing the Agent</b>	<b>11</b>
Installation Prerequisites .....	11
Install the Agent .....	12
Configure the Agent for Multiple Instances .....	13
<b>Chapter 3: Using the Agent for Sybase</b>	<b>15</b>
Backup Options .....	15
The Agent Logs .....	15
Transaction Log Backup .....	16
Back Up Databases or Transaction Logs .....	17
Verify the Backup .....	18
Access Client List (ACL) .....	19
Restore .....	20
Restore a Sybase Database .....	20
How the Sybase Adaptive Server Security Works .....	23
Recover the Master Database .....	24
How the Agent Restores Dropped Databases .....	24
Disaster Recovery .....	25
Recover Sybase Adaptive Server Databases .....	25
Ensure Database Consistency .....	25
<b>Appendix A: Troubleshooting</b>	<b>27</b>
Configure Registry Key .....	27
Log Files .....	27
Error Messages .....	28

---

**Glossary**

**35**

**Index**

**37**

# Chapter 1: Introducing the Agent for Sybase

---

Arcserve Backup is a comprehensive storage solution for applications, databases, distributed servers, and file systems. It provides backup and restore capabilities for databases, business-critical applications, and network clients.

Among the agents Arcserve Backup offers is the Arcserve Backup Agent for Sybase. This agent lets you do the following:

- Back up Sybase Adaptive Server databases and transaction logs using Arcserve Backup without taking your database offline or preventing users from adding new data to it.
- Restore Sybase Adaptive Server databases and transaction logs using Arcserve Backup.
- Access, back up, and restore multiple Sybase Adaptive Server instances.

The Agent for Sybase is a client program that you install on the server with Sybase Adaptive Server. The agent handles the communications between Arcserve Backup and the database server during backup and restore jobs, including preparing, retrieving, and processing the data packets that are sent back and forth between the database server and Arcserve Backup.

**Note:** The Sybase Adaptive Server backs up online databases to the local database server. It cannot back up online databases to other media.

Using Arcserve Backup, the agent can back up to any media available to Arcserve Backup.

This section contains the following topics:

[How the Agent Works](#) (see page 8)

[User IDs, Passwords, and Remote Database Servers](#) (see page 9)

[Agent Parameters](#) (see page 10)

## How the Agent Works

You must install the Agent for Sybase on the same server as the Sybase Adaptive Server. The agent communicates with the Sybase Adaptive Server in the same way as you communicate with any server.

During a backup job, the agent acts as a transporting agent. The agent uses the Sybase Adaptive Server Dump Database and Transaction backup method (more simply known as dump) to retrieve databases or log files. The agent retrieves this data in chunks, one at a time, and then writes to the Arcserve Backup. Arcserve Backup backs up the data to the designated media.

For more information about the Sybase Adaptive Server dump command, see the Sybase product documentation.

## How the Backup Process Works

The backup process consists of the following steps:

- The user sends a request to Arcserve Backup.
- Arcserve Backup forwards the request to the agent.
- The agent communicates with the server using the database API to perform the dump on a particular database or log.
- The server returns the data from the database to the agent buffer, one chunk at a time.
- The agent receives the data from its buffer and transfers it to Arcserve Backup.
- Arcserve Backup writes the data to the media device depending on the selected backup destination.

Arcserve Backup repeats this process until it backs up the entire selected database or log files. The agent and the Sybase Adaptive Server dump function help to ensure the consistency and accuracy of the database and transaction log backup.

## Check Backup Agent RPC Server Service

The Agent for Sybase contains the Backup Agent RPC (Remote Procedure Call) Server service. The Arcserve Backup Agent RPC Server service lets the agent support remote backup and restore operations in the Sybase Adaptive Server; this service operates as a Windows service. You can configure it in the Windows Services Control Manager to start automatically.

### To check the Backup Agent RPC Server service status

1. Click Start, Settings, Control Panel, Administrative Tools, and Services.
2. Click the Arcserve Backup Agent RPC Server service icon.

The dialog displays the current mode of the service.

3. To start or stop the service, highlight the Backup Agent RPC Server service icon, and click Start or Stop, respectively.

## User IDs, Passwords, and Remote Database Servers

Arcserve Backup prompts the user for a default user name and password when it submits a job that includes remote Windows database servers. Arcserve Backup accesses the remote servers using this user name and password.

You also need a remote Sybase Adaptive Server user ID and password to access the remote database server. When prompted by the system, enter the Sybase Adaptive Server user ID *sa* (System Administrator) and the corresponding password, or an ID and password with equivalent privileges.

## Agent Parameters

You can customize the agent by modifying parameters in the Windows Registry using the Windows Regedit32 or Regedit utility.

You can find the agent parameters listed in the registry under the following key:

```
HKEY_LOCAL_MACHINE\Software\ComputerAssociates\CA ARCserve  
Backup\DSAgent\Current\Version\agent\dbasyb@SYBASE_INSTANCE_NAME
```

The agent has the following modifiable registry parameters:

- **Debug**--Enables debug trace files for the agent. Change the default value only if instructed to by a Arcserve technical support engineer.  
**Default:** 0 (FALSE)
- **StripeNum**--Specifies the stripe number used during backup with a value from 1 to 16. The value depends on your hardware configuration, such as the number of CPUs, total memory, and the number of tape drives.  
**Default:** 4
- **TblStripeNum**--Indicates a reserved parameter.
- **Dll**--Specifies the location of the agent executable DLL file.
- **Connect\_wait\_time**--Specifies the maximum time the agent waits for a valid connection with Sybase Adaptive Server.  
**Default:** 10 seconds
- **Max\_pipe\_wait\_time**--Specifies the maximum time the agent waits for a valid Named Pipe for backup and restore.  
**Default:** 400
- **RestoreDir**--Sets the path to which database devices are restored. Set this parameter to restore dropped database devices to a location other than the Sybase Adaptive Server home directory.  
**Default:** Database

You must stop and then start the Backup Agent RPC Server service for registry parameter changes to take effect.

# Chapter 2: Installing the Agent

---

This section lists the installation prerequisites for the agent and provides a checklist that you can use to install the agent.

For more information about installing the agent, see the *Installation Guide*.

This section contains the following topics:

[Installation Prerequisites](#) (see page 11)

[Install the Agent](#) (see page 12)

[Configure the Agent for Multiple Instances](#) (see page 13)

## Installation Prerequisites

Before installing the Agent for Sybase, verify the following:

- You installed the following applications and they are working properly:
  - The Arcserve Backup base product and all the latest service packs

**Note:** Arcserve Backup and the agent can be installed on different computers. For example, you can install Arcserve Backup on a local computer and the agent on a remote computer.
  - Windows 2003 (x86)
  - The appropriate version of Sybase with Sybase Open Client Library
- Your system meets the minimum software requirements to install the agent.

**Note:** For information about system requirements and supported platforms, see the readme file.
- You have administrator or any other equal privileges to install software on the computers on which you are installing the agent.

- You know the names of all the Sybase instances that you want the agent to work with.
- You know the installation path. (You may also use the default installation path.)
- Contact your Arcserve Backup administrator to obtain administrator privileges and your Sybase administrator to obtain the Sybase instance names.

**Note:** You do not need to install the Arcserve Backup Agent for Open Files on the Sybase servers that you are protecting. The Agent for Open Files is beneficial when you want to protect files that are open or in use by active applications. Because the Agent for Sybase is an application-specific agent that is dedicated to protecting Sybase servers, it offers a complete solution that encompasses all the features offered by the Agent for Open Files.

## Install the Agent

You must install the Agent for Sybase on the same computer as the Sybase Adaptive Server. Also, you can install the agent on a computer that does not have Arcserve Backup installed on it.

**Important!** As the agent interacts with the Sybase Adaptive Server, the performance of the agent depends on the efficiency of the Sybase Backup Server archive API used by the agent.

### To install the agent

1. Install the agent using *sa* (system administrator) or an equivalent user account. You can use a different user account, provided it has backup and restore privileges on the required databases and select privileges for the system tables in the master database.

**Note:** You can also use the integrated user account, provided the account has equal privileges as the administrator. You can use the integrated user account on local a computer where both the Arcserve Backup and the Agent for Sybase are installed.

2. Run *Dbaconfig.exe* in the agent home directory or the Arcserve Backup Agent for Sybase Configuration utility to reset or update the user ID and password, if necessary.





# Chapter 3: Using the Agent for Sybase

---

You use the Agent for Sybase to back up and restore the Sybase Adaptive Server databases when the databases are active and online. This section provides information about how you can use the agent to back up and restore data.

This section contains the following topics:

[Backup Options](#) (see page 15)

[Restore](#) (see page 20)

[Disaster Recovery](#) (see page 25)

## Backup Options

You can use the agent to back up entire databases or their transaction logs. When you initiate a backup, the agent backs up:

- Only the transaction logs if you select the Backup Transaction Log option.
- Only the database if you select the Backup Database option.

**Important!** If the Sybase Adaptive Server is online, avoid backing up the physical database and log files using Arcserve Backup without the agent. The backed up image of the database file can be inconsistent. If you attempt to restore from such a backup image when the database is loaded, you can corrupt the database.

## The Agent Logs

The agent includes an Activity Log with information about backup or restore jobs and their statuses. The agent log is dbasyb.log and is located in the directory in which the agent has been installed. If errors appear in the Arcserve Backup Job Logs, check the agent log for more information about the errors.

## Transaction Log Backup

A *transaction log* is a listing of all the transactions occurring on a database from a specified time. To ensure that backup files contain the most current transactions, you should back up your transaction logs more frequently than you back up your databases. For example, you could back up a transaction log once a day and the entire database once a week. If you have to restore the database, the most currently backed up transaction would be no more than twenty-four hours old. More frequent transaction log backups would give you files with transactions that are even more current.

**Note:** The agent lets you back up log files separately from their corresponding databases *only* if the log files and the database files on your system are on different Sybase devices.

Backing up a transaction log takes less time and uses less storage space than backing up a database, so it is an efficient way of keeping your backup files current. To back up only a transaction log, you must select the Backup Transaction Log option when setting up the backup job. A transaction log backup, like a database backup, can take place when the database is active.

**Important!** Do not back up a transaction log unless the database has already been backed up at least once.

It takes longer to recover a database when you restore the database and all transaction logs sequentially than it does when you restore only the database. Finding the correct strategy depends on your environment. The time required to perform backup must be considered in relation to the time required to restore.

**More information:**

[Restore](#) (see page 20)

## Truncate Transaction Logs During Backup

To decrease the size of a transaction log, you can choose to truncate the transaction log when you back it up. When the agent backs up a transaction log without truncating it, the agent backs up the log from the last successfully executed log backup to the current end of the log. The backup includes both the active and inactive portions of the log file. If you choose to truncate the log during backup, the agent removes the inactive portion of the log and truncates the log to the beginning of its active portion, the part that contains the oldest open transaction.

## Back Up Databases or Transaction Logs

You can back up databases or transaction logs using the following procedure.

**Note:** The agent limits the database name to 30 bytes. So, use a name that has approximately 30 characters.

### To back up one or more databases or transaction logs

1. Select Quick Start, Backup.

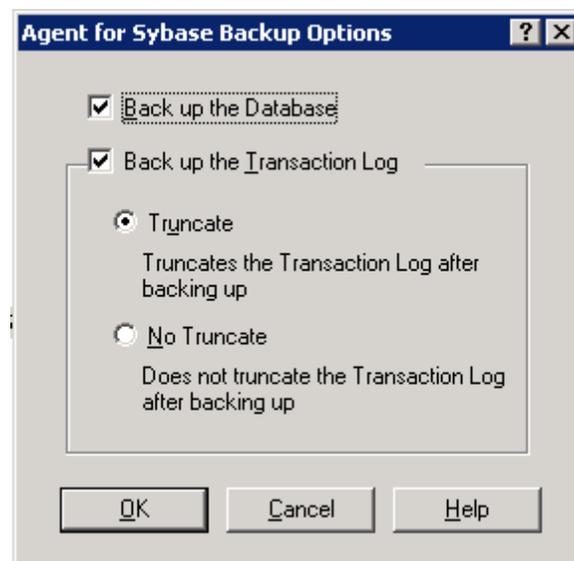
The Backup Manager opens.

2. In the Source tab, select the databases that you want to back up.

**Note:** Each database appears as a separate object, choose all the objects that you want to back up. To back up only the transaction logs, select the databases whose transaction logs you want to back up.

3. Right-click the database and select Agent Options.

The Agent for Sybase Backup Options dialog opens.



#### Back up the Database

Backs up the entire database.

#### Back up the Transaction Log

Backs up only the transaction logs.

To back up the database including transaction logs, select both the check boxes.

4. Click OK.

**Note:** A database has at least one data file. It can have no log files, one, or more than one log file. A typical database shares its data area with other databases in one or more large data files. These files can be stored anywhere.

5. Click the Schedule tab and create a schedule for your backup job.
6. Click the Destination tab and select a location to store your backed up data.
7. Click Submit in the toolbar.

The backup job starts or is scheduled to be executed.

## Verify the Backup

To verify that a backup job has been successful, check the Activity Log in Arcserve Backup. The Activity Log records backup events, their dates, and times.

### To verify the backup job

1. Open the Job Status Manager in Arcserve Backup.
2. Select the Activity Log tab.

The Activity Log dialog opens.

3. Verify the details of the backup job in the Activity Log.

**Note:** The Activity Log identifies database and log backup by displaying the names of individual databases in the format Server Name\Database Name.

---

## Access Client List (ACL)

You use the Access Client Lists (ACL) to identify the specific remote Arcserve Backup servers permitted to back up a Sybase database. If the Arcserve Backup Client Agent for Windows is installed, you can create and edit ACLs from the Administration section of the client agent.

If you have not installed the Arcserve Backup Client Agent for Windows, you can create ACLs manually by adding new registry values under:

HKEY\_LOCAL\_MACHINE\Software\ComputerAssociates\CA ARCserve Backup\UniversalClientAgent\ACL

Change the following registry values as described:

### ServerList (REG\_MULTI\_SZ)

Add Arcserve Backup server names. You can add one server name per line.

### type (REG\_DWORD)

Select one of the following options:

#### Option 0

All Arcserve Backup servers are permitted to back up the database (default).

#### Option 1

Only Arcserve Backup servers on the list are permitted to back up the database.

#### Option 2

Only Arcserve Backup servers *not* on the list are permitted to back up the database.

## Restore

The Agent for Sybase can restore a database or a transaction log online.

**Important!** You must not shut down the server during the restore operation.

During a restore operation, you will not be able to access the database that the Agent for Sybase is restoring. Also, when you try to restore a Sybase database session (in single user mode), the job fails. You must check the agent log to see if the restore was successful or not.

If you are reconstructing an entire server, you must confirm that the same database or log and the corresponding physical devices are defined in the server master database. If they are damaged and cannot be recovered, you must drop the database and the related devices before proceeding with the restore operation. The agent checks the validity of each restore before it begins the operation.

**Important!** It is assumed that you have sufficient knowledge about the database you are restoring, such as the size, logical names and physical names of devices.

**Note:** Restoring a database incurs significantly more overhead on a server than backing it up, therefore a restore process is considerably slower than a backup process. Unless an error message is displayed or reported, do not stop the restore job.

Restoring a transaction log is much faster than restoring a database. You may not need to restore a database as often as you restore a transaction log.

**More Information:**

[Transaction Log Backup](#) (see page 16)

## Restore a Sybase Database

You can restore a database or a transaction log using the Restore Manager.

**To restore a database or a transaction log**

1. In Arcserve Backup, open the Restore Manager and select the database sessions you want to restore using either the Restore by Tree or the Restore by Session methods.

2. Click the Destination tab, and select one of the following:
  - The Restore files to their original locations option
  - Another Sybase instance to which you want the database restored

**Note:** If the backup session was created in a previous version of Sybase Adaptive Server, the Restore files to their original location option will not work because no instance name was specified for the backup. For files created in a previous version of Sybase Adaptive Server, you must select a specific Sybase instance as a restore destination.

3. Click Submit on the toolbar.  
The Restore Media dialog opens.
4. Select the backup server where you want to run the restore job.  
Click OK.  
The Session User Name and Password dialog opens.
5. Select a session on the Machine tab.  
Click Edit.  
The Enter User Name and Password dialog opens.
6. Specify the User Name and Password for the computer to which you are restoring, and click OK.
7. Click the DBAgent tab.
8. Select a session on the DBAgent tab and click Edit.  
The Enter User Name and Password dialog opens.
9. Specify the user name and password for the database to which you are restoring, and click OK.
10. Click OK on the Session User Name and Password dialog.

The job is submitted. When the job finishes, a message reporting a successful restore operation appears. After the agent has restored all the sessions successfully, Sybase Adaptive Server sets the status of the restored database to *offline*.

**Note:** When restoring, remember the order in which you backed up the database and the log. For example, if you backed up the database first and then backed up the related logs, you should restore them in the same order.

11. Run the Sybase isql utility either from the interface, or from the command line.

To run the isql utility from the command line:

- a. Start the isql utility by entering the following command at a command line console:

```
Sybase_main_dir\OCSxxx\bin\isql.exe -Ssybase_instance_name -Usa -Ppassword_for_sa
```

- b. Enter the following commands:

```
online database DATABASE_NAME
```

```
go
```

The database becomes online.

For more information on using Arcserve Backup to restore files, see the *Administration Guide*.

## How the Sybase Adaptive Server Security Works

When you browse a server, Arcserve Backup begins communicating with the agent. The Security dialog opens, prompting you for security information.



To ensure that you get access to the files you want, log on either as a system administrator or with a user account that has similar privileges as the system administrator.

**Note:** You must have system administrator privileges to browse, back up, or restore databases or transaction logs.

## Recover the Master Database

You can recover a master database in the Sybase Adaptive Server.

**Note:** You must run the Sybase Adaptive Server in the single-user mode.

**Follow these steps:**

1. Verify that Arcserve Backup, Sybase Adaptive Server, and the agent are installed on the appropriate systems.
2. Append the parameter -m to the command line in the RUN\_servername.BAT file.

**Note:** You can find the RUN\_servername.BAT file in the sybase\_main\_dir\ASExxx\install directory

3. Run the RUN\_servername.BAT file.  
The Sybase Adaptive Server is now in the single-user mode.
4. Restore the master database using Arcserve Backup and the agent.
5. Shut down the server and restart it in the normal (multi-user) mode.

For more information about restoring a master database, see the Sybase documentation.

**More information:**

[Recover Sybase Adaptive Server Databases](#) (see page 25)

[Ensure Database Consistency](#) (see page 25)

## How the Agent Restores Dropped Databases

A dropped database is a database that has been removed from the Sybase database and is no longer accessible. Restore jobs fail when you try to restore a dropped database. To overcome this behavior, complete the following remedial steps:

1. Create a database on the destination using the name of the database that was deleted (dropped).
2. Allocate an amount of disk space on the destination that is greater than the amount of disk space that the Sybase database consumed before it was backed up.
3. Submit the restore.

## Disaster Recovery

This section describes how you can perform disaster recovery on the Sybase Adaptive Server databases and servers.

### Recover Sybase Adaptive Server Databases

You can recover a database in the Sybase Adaptive Server.

#### To recover your Sybase Adaptive Server database

1. Reinstall the environment that you had before the disaster happened.
2. Install the operating system.
3. Install Arcserve Backup.
4. Install Sybase Adaptive Server.
5. Install the Agent for Sybase.  
**Note:** You should use the same server names and directory paths that you had before the disaster.
6. Restore the master database.
7. Restore the remaining databases normally using Arcserve Backup and the agent.

#### More Information:

[Recover the Master Database](#) (see page 24)

### Ensure Database Consistency

If you have a large database, we recommend that you run a database consistency check when your database activity is low.

#### Follow these steps:

1. Verify that Arcserve Backup, Sybase Adaptive Server, and the agent are installed on the appropriate systems.
2. Start the Sybase Adaptive Server in single-user mode. To do so, append -m to the end of the command line in the following file:  

```
Sybase_main_dir\ASExxx\install\run_servername.bat
```
3. Run the file. Keep the batch file command window open.

4. Start the Sybase Adaptive Server by running the following file:  
`Sybase_main_dir\ASExx\install\run_servername.bat`
5. Restore the master database.
6. After the master database is restored, shut down the server and restart it in normal (multi-user) mode.
7. Restore the remaining databases.

**More Information:**

[Recover the Master Database](#) (see page 24)

# Appendix A: Troubleshooting

---

This section contains the following topics:

[Configure Registry Key](#) (see page 27)

[Log Files](#) (see page 27)

[Error Messages](#) (see page 28)

## Configure Registry Key

You can configure the following registry key of the Agent for Sybase to help you in troubleshooting:

```
HKEY_LOCAL_MACHINE\Software\ComputerAssociates\CA  
ARCserveBackup\DSAgent\CurrentVersion\agent\dbasyb@SYBASE_INSTANCE_NAME
```

To configure the registry key, change the following registry entries:

### Max\_pipe\_wait\_time

Specifies the maximum time the agent waits for a valid Named Pipe for backup and restore. The agent uses named pipes to send its data to and from Arcserve Backup. Under a heavy system load, the named pipe can time out before data becomes available. To resolve this problem, you can increase the value of Max\_pipe\_wait\_time in the registry.

### Debug

Helps you generate execution trace, which assists in tracking down problems with the agent. If you set the debug flag in the registry to one (1), the agent generates an execution trace.

**Note:** The debug flag is designed for use by Arcserve Technical Support. Do not set this flag unless requested to do so by Arcserve Technical Support.

## Log Files

The agent creates several log files that you can use to troubleshoot any backup and restore issues. The dbasyb.log file contains error codes and messages from the agent and the Sybase Adaptive Server. The log file provides general information on the progress of the backup and restore operations, and is located in the main agent directory.

The agent also creates the Activity Log file that you can view in the Activity Log window.

## Error Messages

This section contains a list of error messages generated by the agent, and gives a brief description of each error with a possible solution.

### Agent Function entry point not supported

**Reason:**

The client was unable to access agent functions.

**Action:**

Ensure that the proper version of the agent is installed.

### Exceeded allocated buffer

**Reason:**

The allocated buffer is full.

**Action:**

Back up or restore fewer objects in one session.

### Received unsupported command

**Reason:**

The agent tried to process an unsupported object.

**Action:**

For assistance, contact Arcserve Support at <https://www.arcserve.com/support>.

### Sybase query failed

**Reason:**

The agent could not query Sybase Adaptive Server; the server allows client connections to query.

**Action:**

Confirm that the Sybase Adaptive Server is running.

### Failed to initialize Sybase Client-Library

**Reason:**

The agent could not initialize its connection path.

**Action:**

For assistance, contact Arcserve Support at <https://www.arcserve.com/support>.

### Cannot parse database path

**Reason:**

A client sent the wrong database path to the agent.

**Action:**

For assistance, contact Arcserve Support at <https://www.arcserve.com/support>.

### Cannot create database or log, please manually create one

**Reason:**

The agent was unable to create a database to restore.

**Action:**

For assistance, contact Arcserve Support at <https://www.arcserve.com/support>.

### Database or transaction log name not found

**Reason:**

The selected database or transaction log could not be found.

**Action:**

Confirm the existence of the selected database and check for corruption. Run DBCC CHECKDB(DATABASE\_NAME) from the Sybase isql utility and check the output to see if it reports any errors.

### Tried to load a non-Sybase file

**Reason:**

The backup session contains invalid Sybase data.

**Action:**

Restore from the correct session or from another backup session if possible.

### Failed to create database

**Reason:**

The agent was unable to create a database.

**Action:**

Make sure sufficient disk space exists for database creation.

### Exceeding maximum number of stripe number

**Reason:**

The backup or restore operation attempted to use more stripes than is supported.

**Action:**

Reduce the value of:

HKEY\_LOCAL\_MACHINE\Software\CA\ARCserve Backup\DSAgent\Current  
Version\agent\dbasyb\Sybase\_Instance\_name\StripeNum (REG\_DWORD).

### Error status in named pipe

**Reason:**

Named pipe operations encountered an unexpected error.

**Action:**

If you were running a remote backup or restore operation, check the network connections. Also, verify that you have provided the correct host and Sybase user names and passwords. For assistance, contact Arcserve Support at <https://www.arcserve.com/support>.

### Read/Write error in named pipes

**Reason:**

Named pipe operations encountered a read or write error.

**Action:**

If you were running a remote backup or restore operation, check the network connections. Also, verify that you have provided the correct host and Sybase user names and passwords. For assistance, contact Arcserve Technical Support.

### Command not supported

**Reason:**

The client issued an unsupported command to the agent.

**Action:**

If no backup or restore error occurs and the backup or restore was successful, you can ignore this error message. If the backup or restore fails, verify the version numbers of Arcserve Backup and the agent and confirm their compatibility.

For assistance, contact Arcserve Technical Support.

### Cannot get information from the registry

**Reason:**

The agent was unable to retrieve information from the registry.

**Action:**

Verify that the proper version of the agent is installed.

### No io\_unit structure is available

**Reason:**

The agent ran out of input or output handles.

**Action:**

Wait for current agent operations to complete.

### The database cannot be used at the moment

**Reason:**

A necessary database is currently inaccessible.

**Action:**

Try the following actions:

- Wait for the current activity to finish, and then try again.
- Verify that the Sybase online database command has succeeded.
- Check the Sybase Adaptive Server messages logged into the Sybase Backup Agent log for errors or problems.

For assistance, contact Arcserve Technical Support.

### **No dumpload structure is available**

**Reason:**

The agent ran out of dump or load handles.

**Action:**

Wait for the current agent operations to complete.

### **Failed to send SQL command. Please check the log file DBASYB.LOG**

**Reason:**

The agent was unable to send an SQL command to Sybase.

**Action:**

Check the specified log file for further information.

### **Failed to bind the result rows from Sybase SQL query. Please check the log file DBASYB.LOG**

**Reason:**

The agent was unable to connect to its query results.

**Action:**

Check the specified log file for further information.

### **Sybase Adaptive Server Error. Please check the log file DBASYB.LOG**

**Reason:**

The agent received an error from Sybase.

**Action:**

Check the specified log file for more information.

### **Cannot restore with different stripe number from backup**

**Reason:**

The session stripe number and the agent stripe number do not match.

**Action:**

For assistance, contact Arcserve Technical Support.

### Invalid user ID or password was submitted

**Reason:**

The agent issued an invalid user name or password.

**Action:**

Verify user login information.

### Sybase Adaptive Server or Backup server is not running

**Reason:**

Necessary Sybase services are not running.

**Action:**

Start all required Sybase services.

### Cannot open a service

**Reason:**

The agent could not open a required service.

**Action:**

Ensure that all necessary services are running.

### Cannot query a Sybase Adaptive Server Service

**Reason:**

The agent could not receive information from Sybase Adaptive Server services.

**Action:**

Ensure that all necessary Sybase services are running.

### Cannot get a service handle

**Reason:**

The agent was unable to connect to a required service.

**Action:**

For assistance, contact Arcserve Technical Support.



# Glossary

---

## **agent log**

The *agent log* is a log file that contains information about backup or restore jobs and their statuses. The agent log file is dbasyb.log and is located in the directory in which the agent has been installed.

## **dropped database**

A *dropped database* is a database that has been removed from the Sybase database and is no longer accessible.

## **Sybase Adaptive Server**

*Sybase Adaptive Server* is the relational database management system of Sybase, Inc.

## **transaction log**

A *transaction log* is a listing of all the transactions occurring on a database from a specified time.



# Index

---

## A

- access client list. See ACL • 19
- ACL • 19
- administrator privileges • 11
- Arcserve Backup Agent for Sybase
  - customizing in Windows • 10
  - data flow during backup • 8
  - functions • 7
- Arcserve Backup, definition • 7

## B

- backup
  - Activity Log • 18
  - agent activity log • 15
  - database and transaction logs • 15
  - procedure • 17
  - transaction logs • 16
  - verifying • 18
  - while database active • 15, 16
  - without agent • 15
- Backup Agent RPC Server service • 9
- backup options
  - entire database • 17
  - no truncate • 17
  - transaction logs • 17
  - truncate • 17

## D

- data flow during back up • 8
- Dbconfig.exe • 12
- dbasyb.log • 15, 27
- disaster recovery • 25
- dropped database, restoring • 24

## I

- installing the agent
  - prerequisites • 11
  - requirements • 12
- integrated login • 12

## L

- log files
  - Activity Log • 18

- dbasyb.log • 15, 27

## M

- Machine tab • 20
- master database, recovering • 24
- messages • 28

## N

- no truncate backup option • 17

## P

- parameters, modifiable in Windows Registry • 10
- prerequisites, installation • 11

## R

- remote Windows database servers • 9
- restore
  - dropped database • 24
  - procedure • 20
  - restore file to original location • 20
  - Restore Manager • 20
  - restoring by session • 20
  - restoring by tree • 20
- Restore Manager • 20
- restoring by session • 20
- restoring by tree • 20
- RUN\_servername file • 24

## S

- Sybase Adaptive Server
  - security • 23
  - Security dialog • 23

## T

- transaction log
  - backing up • 16
  - definition • 16
  - truncating • 16
- troubleshooting • 27
- truncate backup option • 17
- truncate, transaction log after backup • 16

---

## W

Windows Registry • 10