

# **BrightStor® ARCserve® Backup for Windows**

## **Agent for Sybase Guide**

**r11.5**



Computer Associates®

D01176-2E

This documentation and related computer software program (hereinafter referred to as the "Documentation") is for the end user's informational purposes only and is subject to change or withdrawal by Computer Associates International, Inc. ("CA") at any time.

This documentation may not be copied, transferred, reproduced, disclosed or duplicated, in whole or in part, without the prior written consent of CA. This documentation is proprietary information of CA and protected by the copyright laws of the United States and international treaties.

Notwithstanding the foregoing, licensed users may print a reasonable number of copies of this documentation for their own internal use, provided that all CA copyright notices and legends are affixed to each reproduced copy. Only authorized employees, consultants, or agents of the user who are bound by the confidentiality provisions of the license for the software are permitted to have access to such copies.

This right to print copies is limited to the period during which the license for the product remains in full force and effect. Should the license terminate for any reason, it shall be the user's responsibility to return to CA the reproduced copies or to certify to CA that same have been destroyed.

To the extent permitted by applicable law, CA 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 CA be liable to the end user or any third party for any loss or damage, direct or indirect, from the use of this documentation, including without limitation, lost profits, business interruption, goodwill, or lost data, even if CA is expressly advised of such loss or damage.

The use of any product referenced in this documentation and this documentation is governed by the end user's applicable license agreement.

The manufacturer of this documentation is Computer Associates International, Inc.

Provided with "Restricted Rights" as set forth in 48 C.F.R. Section 12.212, 48 C.F.R. Sections 52.227-19(c)(1) and (2) or DFARS Section 252.227-7013(c)(1)(ii) or applicable successor provisions.

© 2005 Computer Associates International, Inc.

All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

# Contents

---

<b>Chapter 1: Introducing the Agent</b>	<b>5</b>
How the Agent Works .....	5
How the Data Flows During Backup .....	6
The Backup Agent RPC Server Service .....	6
User IDs, Passwords, and Remote Database Servers .....	7
Customize the Agent in the Windows Registry .....	8
<b>Chapter 2: Installing the Agent</b>	<b>9</b>
Installation Prerequisites .....	9
Install the Agent .....	10
Configure the Agent for Multiple Instances .....	11
Upgrade from BrightStor ARCserve2000 Issues .....	12
<b>Chapter 3: Using the Agent</b>	<b>13</b>
Back Up Strategies .....	13
The Agent Logs .....	13
Transaction Log Backups .....	14
Back Up Databases or Transaction Logs .....	15
Verify the Backup .....	16
Access Client List (ACL) .....	17
Restore .....	18
Restore Sybase Databases .....	19
How Sybase Adaptive Server Security Works .....	21
Recover Master Databases .....	22
How the Agent Restores Dropped Databases .....	22
Disaster Recovery .....	23
Recover Sybase Adaptive Server Databases .....	23
Ensure Consistent Databases .....	24
<b>Appendix A: Troubleshooting</b>	<b>25</b>
Log Files .....	25
Error Messages .....	25
<b>Index</b>	<b>33</b>



# Chapter 1: Introducing the Agent

---

BrightStor® 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 BrightStor ARCserve Backup offers is the BrightStor® ARCserve® Backup Agent for Sybase. Using this agent, you can:

- Back up Sybase Adaptive Server databases and transaction logs using BrightStor 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 BrightStor ARCserve Backup.
- Access, back up, and restore multiple Sybase Server instances.

The agent handles all communications between BrightStor 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 BrightStor ARCserve Backup.

**Note:** Sybase Adaptive Server has built-in capabilities to back up databases that are online. However, it can only back up online databases to the local database server. It cannot back up online databases to other media.

Using BrightStor ARCserve Backup, the agent can back up to any medium available to BrightStor ARCserve Backup.

## How the Agent Works

The agent must be installed on the same server as the Sybase Adaptive Server. After installation, Sybase Adaptive Server treats the agent as if it were a user requesting data.

During a backup, the agent acts as a transporting agent. Using the Sybase Adaptive Server Dump Database and Transaction backup method (more simply known as *dump*), the agent retrieves databases or log files in data chunks, one at a time, and writes the data to BrightStor ARCserve Backup. BrightStor ARCserve Backup backs up the data to media.

For information on the Sybase Adaptive Server dump command, see *Sybase Adaptive Server System Administrator Guide*.

## How the Data Flows During Backup

The following steps describe the backup process data flow:

1. The user issues a request to BrightStor ARCserve Backup.
2. BrightStor ARCserve Backup forwards the request to the agent.
3. The agent instructs the server, using the database API, to perform the dump on a particular database or log.
4. The server returns the data from the database to the agent buffer, one chunk at a time.
5. The agent receives the data from its buffer and transfers it to BrightStor ARCserve Backup.
6. BrightStor ARCserve Backup writes the data to the media device, depending on the backup destination selection.

These steps are repeated until all the selected database or log files have been backed up. The agent and the Sybase Adaptive Server dump function guarantee the consistency and accuracy of the database or transaction log backup.

## The Backup Agent RPC Server Service

The Agent for Sybase contains one service, the Backup Agent RPC (Remote Procedure Call) Server service.

The CA BrightStor Backup Agent RPC Server service, which lets the agent support remote backup and restore in the Sybase Adaptive Server, 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, follow these steps:

1. From the Windows Start button, select Control Panel, Administrative Tools, Services.
2. Locate the CA BrightStor Backup Agent RPC Server service icon.  
The panel 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

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

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

## Customize the Agent in the Windows Registry

You can customize the agent by modifying parameters in the Windows Registry using the Windows NT, Windows 2000, or Windows 2003 Regedit32 or Regedit utility.

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

HKEY\_LOCAL\_MACHINE\Software\ComputerAssociates\BrightStor ARCserve Backup\DSAgent\CurrentVersion\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 Computer Associates technical support engineer. The default value is 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. The default value is 4.
- **TblStripeNum**—Reserved.
- **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. The default value is 10 seconds.
- **Max\_pipe\_wait\_time**—Specifies the maximum time the agent waits for a valid Named Pipe for backup and restore. The default value is 400.
- **RestoreDir**—Sets the path database devices are restored to. The default value is database. Set this parameter to restore dropped database devices to a location other than the Sybase Adaptive Server home directory.

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

# Chapter 2: Installing the Agent

---

The Agent for Sybase is a client program you install on the server machine with Sybase Adaptive Server.

This chapter lists the installation prerequisites for the agent and provides an installation checklist you can use to guide your installation.

For instructions on installing the agent, see the *Getting Started*.

## Installation Prerequisites

Before installing Agent for Sybase, verify that:

- The following applications are installed and working properly:
  - BrightStor ARCserve Backup r11.5
  - Windows NT, 2000, or 2003
  - The appropriate version of Sybase with Sybase Open Client Library
- Your system meets the minimum software requirements to install the agent. For a list of requirements, see the Readme file.
- You have administrator privileges or the proper authority 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.
- If you do not use the default installation path, make a note of the installation path you use for easy reference.

Contact your BrightStor ARCserve Backup administrator to obtain administrator privileges and your Sybase administrator to obtain the Sybase instance names if you do not have them.

## Install the Agent

You must install the agent on the same computer as the Sybase Adaptive Server. However, you do not need to install the agent on a computer that has BrightStor ARCserve Backup installed on it.

**Important!** *Since the agent must interact with the Sybase Adaptive Server, its performance is dependent on the efficiency of the Sybase Backup Server Archive API used by the agent.*

You should install the agent using **sa** (system administrator) or its equivalent as the login ID. You can use another user ID, provided it has backup and restore privileges on the required databases and select privileges for the system tables in the master database. The agent also supports Integrated login, provided that this login is administrator equivalent.

Run Dbaconfig.exe in the agent home directory or the BrightStor ARCserve Backup Agent for Sybase Configuration utility to reset or update the login ID and password, if necessary.

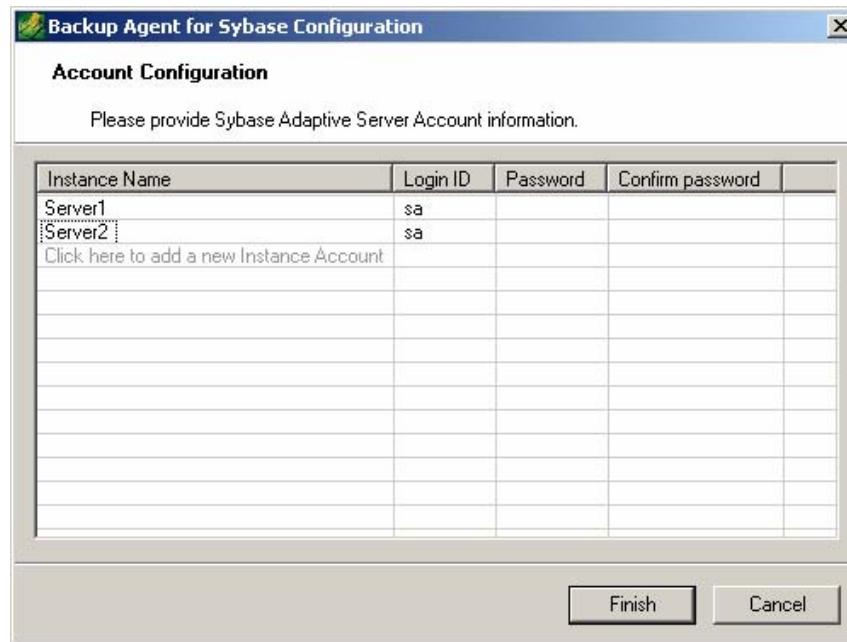
For detailed information about how to install the agent, see the *Getting Started*.

## Configure the Agent for Multiple Instances

The Agent allows you to back up and restore multiple instances of Sybase Adaptive Server.

To configure the agent to support backup or restore of multiple Sybase instances, follow these steps:

1. Select Start, Programs, Computer Associates, BrightStor, ARCserve Backup Agents, and Sybase Agent configuration. The following dialog appears:



2. Enter the requested information in the fields provided for each unique instance of Sybase Adaptive Server operation.
3. Click Finish.

The Agent is configured to support backup or restore of multiple Sybase instances.

## Upgrade from BrightStor ARCserve2000 Issues

You can upgrade both the BrightStor ARCserve Backup and the Sybase agent from BrightStor® ARCserve2000 to r11.5. The backup jobs submitted to BrightStor ARCserve2000 Sybase agent are executed correctly only if there is one Sybase instance.

If you configure multiple Sybase instances after upgrading from BrightStor ARCserve2000 to r11.5, the backup job may not be executed as expected. BrightStor ARCserve Backup uses the first instance available in the registry to backup. In this case, we strongly suggest you submit the backup job again to eliminate confusion.

# Chapter 3: Using the Agent

---

Using the Agent for Sybase, you can backup and restore Sybase Adaptive Server databases while they are active and online. This chapter provides information about backing up and restoring using the agent and gives backup and restore instructions.

## Back Up Strategies

You can use the agent to back up whole 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!** *Avoid backing up the physical database and log files using BrightStor ARCserve Backup without the agent if Sybase Server is online. The backed up image of the database file can be inconsistent. If you attempt to restore from such a backup image while 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 status. The agent log is called sybagntd.log and is located in the directory in which the agent has been installed. If errors appear in the BrightStor ARCserve Backup job logs, check the agent log for more information about why the errors occurred.

## Transaction Log Backups

A transaction log is a listing of all the transactions occurring on a given database from a given point in time. To ensure that backup files contain the most current transactions, you should back up your transaction logs more frequently than your databases. For example, you could back up a transaction log once a day and the entire database once a week. If you need 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 gives you the ability to back up log files separately from their corresponding databases only if the log files and the database files on your system are on separate 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 a transaction log only, you would select the Backup Transaction Log option during backup job setup. A transaction log backup, like a database backup, can take place while 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 backups must be considered in relation to the time required to restore.

### 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

To back up one or more databases or transaction logs, follow these steps:

1. Open BrightStor ARCserve Backup.
2. Open the Backup Manager in BrightStor ARCserve Backup.
3. In the Source window of the Backup Manager, select the databases to back up.

**Note:** Each database appears in the tree displayed by the Backup Manager as a separate object. When you prepare a backup, you should choose each object separately. To back up transaction logs only, select the databases whose transaction logs you want to back up.

4. Right-click in the Source window and select Agent Options.

The Backup Agent Backup Option dialog appears, as shown in the following example:



5. To back up the entire database, including the transaction log, select the Backup Database option and the Backup Transaction Log option. To back up transaction logs only, select the Backup Transaction Log option.
6. To truncate the transaction log, select Truncate. If you do not want to truncate the transaction log, select No Truncate. Truncate is the default.
7. Click OK.

**Note:** A database has at least one data file. It can have no log files, one log file, 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. You do not need to worry about where the files are actually stored, only about selecting the databases you want to back up.

For more information on explicit job packaging, see Packaging Your Jobs, in the chapter "BrightStor ARCserve Backup Basics", in the *Getting Started*.

## Verify the Backup

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

To open the Activity Log, follow these steps:

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

The Activity Log appears. Verify the backup in the Activity Log.

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

## Access Client List (ACL)

You use the Access Client Lists to identify the specific remote BrightStor ARCserve Backup servers permitted to back up a Sybase database. If the BrightStor® ARCserve® Backup Client Agent for Windows is installed, you can create and edit ACLs from the Client Agent Admin GUI.

For more information about ACLs, see the *BrightStor ARCserve Backup Client Agent for Windows Help*.

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

Software\ComputerAssociates\BrightStor ARCserve Backup\UniversalClientAgent\ACL

After you have navigated to the proper registry key, change the following registry values as described:

### **ServerList (REG\_MULTI\_SZ)**

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

### **type (REG\_DWORD)**

Select one of the following options:

#### **Option 0**

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

#### **Option 1**

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

#### **Option 2**

Only BrightStor ARCserve Backup servers NOT on the list are permitted to back up the database.

## Restore

The agent can restore a database or transaction log online. You do not need to shut down the server during the restore operation.

**Note:** Only the database the agent is restoring is inaccessible during a restore operation.

If you are completely 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. 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 a backup, therefore it is considerably slower than a backup. Unless an error message is displayed or reported, do not stop the restore.

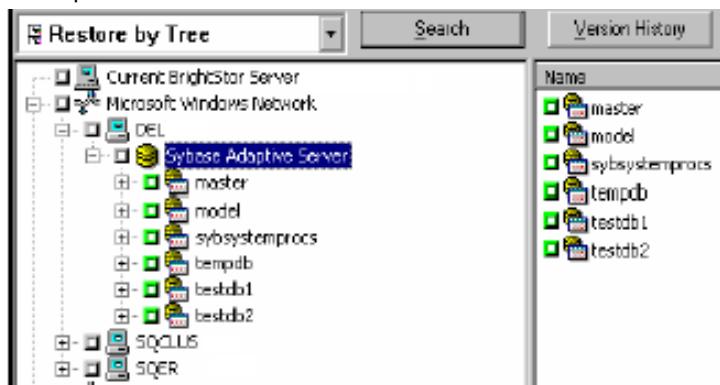
In general, restoring a transaction log is much faster than restoring a database. Therefore, you may not need to restore a database as often as a transaction log.

For more information on transaction logs, see Transaction Log Backups in this chapter.

## Restore Sybase Databases

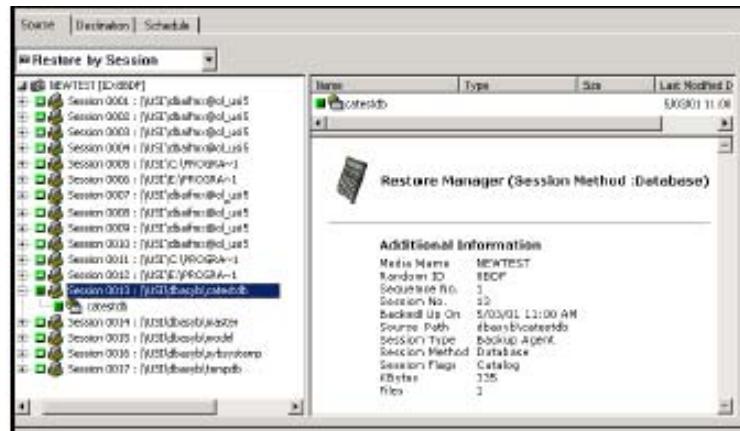
To restore a database or transaction log, follow these steps:

1. In BrightStor ARCserve Backup, open the Restore Manager and select the database sessions you want to restore using one of the following restore methods:
  - **Restore by Tree** - Displays a tree of the networks and machines backed up by BrightStor ARCserve Backup, as shown in the following example:



The databases shown in this view are the most recent backup sessions. Browse the list to select the database you want to restore. After you have selected the database, you can then select an older version of the database to restore by clicking Version History.

- **Restore by Session** - Displays a list of media you have used when backing up with BrightStor ARCserve Backup, as shown in the following example:



Choose the media containing the backup you want, browse the session containing that backup, and select the specific database or log you want to restore.

2. Click the Destination tab. On the Destination tab, 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 locations 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 the Start tool bar button on the Restore Manager.  
The Session User Name and Password dialog appears.
4. To enter or change the user name and password for the machine to which you are restoring, select a session on the Machine tab and click Edit.  
The Enter User Name and Password dialog appears.
5. Enter or change the user name and password. Click OK when you are finished.
6. To enter or change the user name and password for the database to which you are restoring, click the DBAgent tab.
7. Select a session on the DBAgent tab and click Edit.  
The Enter User Name and Password dialog appears.
8. In the Enter User Name and Password dialog, enter or change the user name and password. Click OK when you are finished.
9. To submit the job, click OK on the Session User Name and Password dialog.  
When the job finishes, a message reporting a successful restore operation appears.
10. After the agent has restored all the sessions successfully, Sybase Adaptive Server takes the restored database offline. To bring the database online and make it accessible, run the Sybase isql utility. To start the isql utility, enter the following command at a command line console:  

```
Sybase_main_dir\OCSxxx\bin\isql.exe -Ssybase_instance_name -Usa -Ppassword_for_sa
```
11. After you have started the isql utility, enter the following commands to bring the database online:  

```
online database DATABASE_NAME
go
```

For more information on using BrightStor ARCserve Backup to restore files, see the *Administrator Guide*.

## How Sybase Adaptive Server Security Works

When you browse a server, BrightStor ARCserve Backup begins by opening communication with the agent. The Security dialog appears, prompting you for security information, as shown in the following example:



To ensure access to the files you want, log in as a system administrator or with a user name and password that has system administrator privileges.

**Note:** If the user name and password you enter do not have system administrator privileges, the server may not let you browse, back up or restore databases, or transaction logs.

## Recover Master Databases

To recover the master database, you must run the Sybase Adaptive Server in the single-user mode.

To run the Sybase Adaptive Server in the single-user mode and recover the master database, follow these steps:

1. Verify that BrightStor ARCserve Backup, Sybase Adaptive Server, and the agent are installed on the appropriate systems.
2. Append a -m parameter to the command line in the RUN\_servername.BAT file.  
**Note:** This file can be found in the sybase\_main\_dir\install directory.
3. Run the file. Sybase Adaptive Server is now in single-user mode.
4. Restore the master database from a storage device using BrightStor ARCserve Backup and the agent.
5. Shut down the server and restart it in normal (multi-user) mode.

After Sybase confirms that the master database is in good condition, the master database has been recovered.

For more information on restoring a master database, see the *Sybase Adaptive Server System Administrator Guide* and *Sybase Adaptive Server Reference Manual*.

## 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. The agent can restore a dropped database, even if the database has not been recreated. To do this, the agent recreates the devices needed to restore the database by using information from the database backup session:

- First, the agent creates one or two devices large enough to hold all the backed up data. The agent creates these devices in the path set in the RestoreDir registry key.  
**Note:** The agent creates two devices if the dropped database had a separate log.
- If the key is Null, the agent creates the devices in the Sybase Adaptive Server home directory. The devices are named DbadvX.Dat or DbadvX.Log, where X is an increasing number.
- The agent recreates the database on these devices with the data definitions from the session being restored.  
**Note:** If the restore job fails, you must delete the DbadvX.Dat and DbadvX.Log devices using SQL commands in the Sybase isql utility.

## Disaster Recovery

This section describes disaster recovery procedures for Sybase Adaptive Server databases and servers.

### Recover Sybase Adaptive Server Databases

In the event of disaster, follow these steps to recover your Sybase Adaptive Server databases:

1. Reinstall your environment so it is the same as it was before the disaster.
2. Install your operating system.
3. Install BrightStor ARCserve Backup.
4. Install Sybase Adaptive Server.
5. Install the agent.  
**Note:** You should use the same server names and directory paths as before the disaster.
6. Restore the master database.  
For more information, see Recover a Master Database in this chapter.
7. Restore the remaining databases normally, using BrightStor ARCserve Backup and the agent.

## Ensure Consistent Databases

When performing disaster recovery procedures, or any restore operation involving the master database, follow these steps to ensure a consistent database:

1. Verify that BrightStor ARCserve Backup, Sybase Adaptive Server, and the agent are installed on the appropriate systems.
2. Start 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_directory\install\run_servername.bat`  
Run the file. Keep the batch file command window open.
3. Start the Sybase Server by running the following file:  
`Sybase_main_directory\install\run_servername.bat`
4. Restore the master database.  
For more information, see Recovering a Master Database in this chapter.
5. After the master database restore is complete, shut down the server and restart it in normal (multi-user) mode.
6. Restore the rest of the databases.

# Appendix A: Troubleshooting

---

The Agent for Sybase has several troubleshooting mechanisms that you can configure under the registry key:

HKEY\_LOCAL\_MACHINE\Software\ComputerAssociates\BrightStor\_ARCserve\_Backup\DSAgent\CurrentVersion\agent\dbasyb@SYBASE\_INSTANCE\_NAME

The registry entries under this key that you can change include:

## **Max\_pipe\_wait\_time**

The agent uses named pipes to send its data to and from BrightStor ARCserve Backup. Under a heavy system load, the named pipe can time out before data becomes available. To alleviate this problem, you can increase the Max\_pipe\_wait\_time in the registry value.

## **Debug**

If you set the debug flag in the registry to one (1), the agent generates an execution trace. This trace is designed to assist in tracking down problems with the agent.

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

## Log Files

The agent produces several log files you can use when troubleshooting:

- **dbasyb.log**—This file is located in the main agent directory and provides general information on the progress of backup and restore operations. You can find error codes and messages from the agent and Sybase Adaptive Server in this file.
- **BrightStor.log**—This file is located in the BrightStor ARCserve Backup\log directory and contains major errors recorded on the BrightStor ARCserve Backup Manager side.

## Error Messages

This section contains a list of error messages produced by the agent with a brief description of each error and 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 Customer Support at <http://ca.com/support>.

**Sybase query failed**

**Reason:**

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

**Action:**

Confirm that Sybase Adaptive Server is running.

**Failed to initialize Sybase Client-Library**

**Reason:**

The agent could not initialize its connection path.

**Action:**

For assistance, contact Customer Support at <http://ca.com/support>.

**Cannot parse database path**

**Reason:**

A client sent the wrong database path to the agent.

**Action:**

For assistance, contact Customer Support at <http://ca.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 Customer Support at <http://ca.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 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\BrightStor 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 Customer Support at <http://ca.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 Customer Support at <http://ca.com/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 BrightStor ARCserve Backup and the agent and confirm their compatibility.

For assistance, contact Customer Support at <http://ca.com/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, then try again.
- Verify that the Sybase online database command has succeeded.
- Check the Sybase Server messages logged into the Sybase Backup Agent log for errors or problems.

For assistance, contact Customer Support at <http://ca.com/support>.

**No dupload structure is available**

**Reason:**

The agent ran out of Dump or Load handles.

**Action:**

Wait for 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 in backup**

**Reason:**

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

**Action:**

For assistance, contact Customer Support at <http://ca.com/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 Customer Support at <http://ca.com/support>.



# Index

---

## A

access client list • 17  
ACL • 17  
Activity log • 16  
administrator privileges • 9

## B

backup  
Activity log • 16  
agent activity log • 13  
database and transaction logs • 13  
procedure • 15  
transaction logs • 13  
transaction logs only • 13  
verifying • 16  
while database active • 13  
without agent • 13  
Backup Agent RPC Server service • 6  
backup options  
back up entire database • 15  
back up transaction logs • 15  
no truncate • 15  
truncate • 15  
BrightStor ARCserve Backup  
defined • 5  
BrightStor ARCserve Backup Agent for Sybase  
customizing in Win • 8  
data flow during b • 6  
functions • 5  
BrightStorAB.log • 25

## D

data flow during back up • 6  
Dbaconfig.exe • 10  
DBAgent tab • 19  
dbasyb.log • 13, 25  
Destination tab • 19  
disaster recovery • 23  
dropped database, restoring • 22

## I

installing the agent  
password • 10  
prerequisites • 9

requirements • 10  
user ID • 10  
integrated login • 10

## L

log files  
BrightStorAB.log • 25  
dbasyb.log • 25

## M

Machine tab • 19  
master database, recovering • 22  
messages • 25

## N

no truncate backup option • 15

## P

parameters, modifiable in Windows Registry • 8  
passwords for remote Windows database  
backups • 7  
prerequisites for installation • 9

## R

restore  
DBAgent tab • 19  
Destination tab • 19  
dropped database • 22  
file order • 19  
Machine tab • 19  
password • 19  
procedure • 19  
Restore Manager • 19  
restoring by session • 19  
restoring by tree • 19  
user name • 19  
Restore Manager • 19  
restoring by session • 19  
restoring by tree • 19  
RUN\_servername file • 22

## S

Sybase Adaptive Server  
security • 21

---

Security dialog • 21

**T**

transaction log

    backing up • 13

    definition • 13

    truncating • 14

troubleshooting • 25

truncate backup option • 15

truncate, transaction log after backup • 14

**W**

Windows Registry • 8