CA ARCserve® Backup for Windows

Agent for Sybase Guide

r12.5
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CA Product References

This documentation set references the following CA products:

- BrightStor® ARCserve® Backup for Laptops and Desktops
- BrightStor® CA-Dynam®/TLMS Tape Management
- BrightStor® CA-Vtape™ Virtual Tape System
- BrightStor® Enterprise Backup
- BrightStor® High Availability
- BrightStor® Storage Resource Manager
- CA Antivirus
- CA ARCserve® Backup Agent for Advantage™ Ingres®
- CA ARCserve® Backup Agent for Novell Open Enterprise Server for Linux
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- CA ARCserve® Backup Agent for Open Files on Windows
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- CA ARCserve® Backup Client Agent for Linux
- CA ARCserve® Backup Client Agent for Mainframe Linux
- CA ARCserve® Backup Client Agent for NetWare
- CA ARCserve® Backup Client Agent for UNIX
- CA ARCserve® Backup Client Agent for Windows
- CA ARCserve® Backup Enterprise Option for AS/400
- CA ARCserve® Backup Enterprise Option for Open VMS
- CA ARCserve® Backup for Microsoft Windows Essential Business Server
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- CA ARCserve® Backup for Windows Agent for Oracle
- CA ARCserve® Backup for Windows Agent for Sybase
- CA ARCserve® Backup for Windows Agent for Virtual Machines
- CA ARCserve® Backup for Windows Disaster Recovery Option
- CA ARCserve® Backup for Windows Disk to Disk to Tape Option
- CA ARCserve® Backup for Windows Enterprise Module
- CA ARCserve® Backup for Windows Enterprise Option for IBM 3494
- CA ARCserve® Backup for Windows Enterprise Option for SAP R/3 for Oracle
- CA ARCserve® Backup for Windows Enterprise Option for StorageTek ACSLS
- CA ARCserve® Backup for Windows Image Option
- CA ARCserve® Backup for Windows Microsoft Volume Shadow Copy Service
- CA ARCserve® Backup for Windows NDMP NAS Option
- CA ARCserve® Backup for Windows Serverless Backup Option
- CA ARCserve® Backup for Windows Storage Area Network (SAN) Option
- CA ARCserve® Backup for Windows Tape Library Option
- CA Dynam®/B Backup for z/VM
- CA VM:Tape for z/VM
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Chapter 1: Introducing the Agent for Sybase

CA 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 CA ARCserve Backup offers is the CA ARCserve Backup Agent for Sybase. This agent lets you do the following:

- Back up Sybase Adaptive Server databases and transaction logs using CA 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 CA 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 all communications between CA 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 CA 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 CA ARCserve Backup, the agent can back up to any media available to CA ARCserve Backup.

This section contains the following topics:

- [How the Agent Works](#) (see page 10)
- [User IDs, Passwords, and Remote Database Servers](#) (see page 11)
- [Agent Parameters](#) (see page 12)
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. 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 CA ARCserve Backup. CA ARCserve Backup backs up the data to the designated media.

For information on 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 CA ARCserve Backup.
- CA 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 CA ARCserve Backup.
- CA ARCserve Backup writes the data to the media device depending on the selected backup destination.

CA 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 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 CA 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, Services.
2. Click the CA 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

CA ARCserve Backup prompts the user for a default user name and password when it submits a job that includes remote Windows database servers. CA 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, you must enter the Sybase Adaptive Server user ID sa (System Administrator) and the corresponding password, or an ID and password with equivalent privileges.
You can customize the agent by modifying parameters in the Windows Registry using the Windows 2000, or the 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\CA 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 CA 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**

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. 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 to which database devices are restored. 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

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

For more information on installing the agent, see the Installation Guide.

This section contains the following topics:
- Installation Prerequisites (see page 13)
- Install the Agent for Sybase (see page 14)
- Configure the Agent for Sybase for Multiple Instances (see page 15)
- Upgrading from Earlier Versions (see page 16)

Installation Prerequisites

Before installing the Agent for Sybase, verify that:

- You have installed the following applications and they are working properly:
  - CA ARCserve Backup r12.5 and all of the latest service packs
    
    **Note:** CA ARCserve Backup and the agent can be installed on different computers. For example, you can install CA ARCserve Backup on a local computer and the agent on a remote computer.
  - Windows 2000 or Windows 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 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 CA ARCserve Backup administrator to obtain administrator privileges and your Sybase administrator to obtain the Sybase instance names.
Install the Agent for Sybase

You must install the Agent for Sybase on the same computer as the Sybase Adaptive Server. Also, you may install the agent on a computer that does not have CA 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 may 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 CA ARCserve Backup and the Agent for Sybase are installed.

2. Run Dbaconfig.exe in the agent home directory or the CA ARCserve Backup Agent for Sybase Configuration utility to reset or update the user ID and password, if necessary.
Configure the Agent for Sybase for Multiple Instances

The Agent for Sybase lets you back up and restore multiple instances of Sybase Adaptive Server.

**To configure the agent to support multiple Sybase instances**

1. Click Start, Programs, CA, ARCserve Backup Agents, and Sybase Agent Configuration. The Backup Agent for Sybase Configuration dialog opens.

   ![Backup Agent for Sybase Configuration dialog](image)

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

3. Click Finish.

   The agent is now configured to support backup or restore operations for multiple Sybase instances.
Upgrading from Earlier Versions

You can upgrade both the CA ARCserve Backup and the agent for Sybase from versions earlier than CA ARCserve Backup r11.1 to CA ARCserve Backup r12.5. The backup jobs submitted through the agent for Sybase for these versions (such as BrightStor ARCserve2000, BrightStor ARCserve Backup r9 or BrightStor Enterprise Backup r10.5) can be executed correctly only if there is one Sybase instance configured after the upgrade. If you configured multiple Sybase instances after upgrading from any of these versions to CA ARCserve Backup r12.5, the backup job may not execute as expected. This is because, CA ARCserve Backup may not find the correct instance to use; you will see the warning W8654 (Agent(AgentName) does not exist. Maybe you upgraded CA ARCserve Backup from a lower version. Now we will use ' (new AgentName)' to retry. We strongly suggest you re-submit the job.) in the Activity Log. CA ARCserve Backup uses the first instance available in the registry to back up. So, we recommend that you submit the backup job again.

**Note:** You will not face this problem if you upgrade from CA ARCserve Backup r11.1 or later versions to CA ARCserve Backup r12.5.
Chapter 3: Using the Agent

Using the Agent for Sybase, you can backup and restore the Sybase Adaptive Server databases when they are active and online. This chapter provides information about how to use the agent to back up and restore data.

This section contains the following topics:
- **Backup Options** (see page 17)
- **Restore** (see page 22)
- **Disaster Recovery** (see page 26)

### 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 CA 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 called sybagntd.log and is located in the directory in which the agent has been installed. If errors appear in the CA 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 given database from a given 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 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.

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. Open CA ARCserve Backup Manager.

2. In the Source window of the Backup Manager, select the databases to back up.

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

3. Right-click the Source window and select Agent Options.

   The Backup Agent Backup Option dialog opens.

   ![Agent for Sybase Backup Options Dialog](image)

   **Backup Database**

   Backs up the entire database.

   **Backup Transaction Log**

   Backs up only the transaction logs.

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

4. Click OK.
**Backup Options**

**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.

For more information on explicit job packaging, see the chapter "CA ARCserve Backup Basics" in the *Installation Guide*.

**Verify the Backup**

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

**To verify the backup job**

1. Open the Job Status Manager in CA 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 CA ARCserve Backup servers permitted to back up a Sybase database. If the CA ARCserve Backup Client Agent for Windows is installed, you can create and edit ACLs from the Administration section of the client agent.

For more information about ACLs, see the Client Agent for Windows Help.

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

\HKEY_LOCAL_MACHINE\Software\ComputerAssociates\CA 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 CA ARCserve Backup server names. You can add one server name per line.

type (REG_DWORD)

Select one of the following options:

Option 0

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

Option 1

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

Option 2

Only CA ARCserve Backup servers not on the list are permitted to back up the database.
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 which 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 a transaction log.

**More Information:**

[Transaction Log Backup](#) (see page 18)

**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 CA 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 Start on the Restore Manager window.
   The Session User Name and Password dialog opens.

4. Select a session on the Machine tab and click Edit.
   The Enter User Name and Password dialog opens.

5. Specify the user name and password for the computer to which you are restoring, and click OK.

6. Click the DBAgent tab.

7. Select a session on the DBAgent tab and click Edit.
   The Enter User Name and Password dialog opens.

8. Specify the user name and password for the database to which you are restoring, and click OK.

9. 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.

10. Run the Sybase isql utility.
    The database becomes online and accessible.

11. 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
    ```
12. Enter the following commands:

    online database DATABASE_NAME
    go

    The database becomes online.

For more information on using CA ARCserve Backup to restore files, see the Administration Guide.

How the Sybase Adaptive Server Security Works

When you browse a server, CA ARCserve Backup begins communicating with the agent. The Security dialog opens, prompting you for security information, as shown in the following illustration:

![Security Dialog](image)

To log on to a Database server, enter the Database user name.

To ensure 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.

To recover the master database

1. Verify that CA 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\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 from a storage device using CA ARCserve Backup and the agent.
5. Shut down the server and restart it in the normal (multi-user) mode.

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

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:

- 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 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 CA ARCserve Backup.
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 CA ARCserve Backup and the agent.

More Information:

Recover the Master Database (see page 25)
Ensure Database Consistency

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

To ensure consistency of a database

1. Verify that CA 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_directory\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_directory\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 25)
Appendix A: Troubleshooting

This section contains the following topics:

Configure Registry Key (see page 29)
Log Files (see page 29)
Error Messages (see page 30)

Configure Registry Key

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

\[\text{HKEY\_LOCAL\_MACHINE}\backslash \text{Software}\backslash \text{ComputerAssociates}\backslash \text{CA ARCserveBackup}\backslash \text{DSAgent}\backslash \text{CurrentVersion}\backslash \text{agent}\backslash \text{dbasyb@SYBASE\_INSTANCE\_NAME}\]

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

**Max\_pipe\_wait\_time**

The agent uses named pipes to send its data to and from CA 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 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 CA Technical Support. Do not set this flag unless requested to do so by CA 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 Technical Support at [http://ca.com/support](http://ca.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 Technical Support at [http://ca.com/support](http://ca.com/support).

Cannot parse database path

**Reason:**
A client sent the wrong database path to the agent.

**Action:**
For assistance, contact Technical Support at [http://ca.com/support](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 Technical Support at [http://ca.com/support](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 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 Technical 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 Technical 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 CA ARCserve Backup and the agent and confirm their compatibility.

For assistance, contact Technical Support at [http://ca.com/support](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, 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 Technical Support at [http://ca.com/support](http://ca.com/support).
Error Messages

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 Technical 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 Technical Support at [http://ca.com/support](http://ca.com/support).
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