

# AtmDirector Database Management

---

This appendix contains the information you need to manage the AtmDirector database. The following procedures are provided:

- Backing Up the AtmDirector Database
- Recovering the AtmDirector Database
- Enlarging the AtmDirector Database

## Backing Up the AtmDirector Database

To backup the AtmDirector database, follow these steps:

- 1 Shut down the AtmDirector application.
- 2 Log in as the superuser by entering **su** and the root password.
- 3 Begin the backup by entering the following command:

```
# atmd_backup
```

The system displays the following prompt:

```
Enter the Sybase 'sa' password?
```

- 4 Enter the password for Sybase.

The system prompts you to choose the type of backup you want to perform, as follows:

```
Please choose from the following backup options:
```

- 1) Backup the Sybase master database.
- 2) Backup the AtmDirector for Solaris database.

```
Enter the option number?
```

## Backing Up the AtmDirector Database

---

---

**Note** The Sybase master database is backed up and restored in only extreme instances. Only knowledgeable Sybase administrators should perform a Sybase master database backup and restore. For more information about backing up and restoring the Sybase master database, refer to the *Sybase Administration Guide*.

---

- 5** Choose option **2** to back up the AtmDirector database. The system prompts for the name of the database:

Please enter the name of the database to backup.

If you are backing up the AtmDirector for Solaris database, and have not recovered it to another name, then use the default name atmddb.

Enter the database name? [atmdb]

- 6** If you have not previously recovered the database to a database with a name other than *atmdb*, press Enter. Otherwise, enter the correct name of the database.

The system prompts for the device to use as the destination for the database:

Please choose from the following device options:

- 1) Dump to disk.
- 2) Dump to tape.

Enter the option number?

- 7** To copy the database to a directory on the hard disk, choose **1**. To copy the database to a tape, choose **2**. If you choose to copy the directory to tape, you must then specify the size of the tape.

The system prompts for the name of the directory or device:

Please enter the location to which the dump file will be written.

For a dump to disk, this should be the name of a directory into which the dump will be written. The dump file will be named using the database name and the current date and time.

For a dump to tape, this should be the name of a no-rewind tape device.

Dump device location? **/disk2/dumps**

- 8** If you chose **1**, enter a directory name. If you chose **2**, enter the device name of the tape drive.

If you chose **2**, you need to specify the size of the tape:

Please enter the approximate capacity of the tape device in KB.

Tape capacity in KB?

The system displays the backup configuration you have entered and asks for confirmation:

You have chosen the following values for this setup.

Backup type - AtmDirector for Solaris database (atmddb)  
Device type - Disk  
Device name - /disk2/dumps/atmddb960814155916

You may accept these values and proceed with the backup, reject the values and reenter them from the beginning, return to the last question, or quit without backing up.

Continue with the backup (y,n,^,q)? **y**

## Backing Up the AtmDirector Database

---

- 9 Answer **y** to continue with the backup.

The system proceeds to back up the AtmDirector database to the location you specified and displays status messages. Note the name of the backup file. The name of the backup file is located on the line that reads as follows:

```
1> dump database atmddb to "/disk2/dumps/atmddb960814155916" with init
```

The name of the backup file is in the following format:

*atmddbymmddhhmmss*, where

*ymmdd* = current date (year, month, and day)

*hhmmss* = current time (hours, minutes, and seconds)

---

**Note** Record the name of the backup file. You will need this name to recover the database.

---

The system displays the following messages:

Dumping database. This may take a while...

```
1> dump database atmddb to "/disk2/dumps/atmddb960814155916" with init
Backup Server session id is: 6. Use this value when executing the
'sp_volchanged' system stored procedure after fulfilling any volume change
request from the Backup Server.
Backup Server: 4.41.1.1: Creating new disk file
/disk2/dumps/atmddb960814155916.
Backup Server: 6.28.1.1: Dumpfile name 'atmddb962270E10C ' section number
0001
mounted on disk file '/disk2/dumps/atmddb960814155916'
Backup Server: 4.58.1.1: Database atmddb: 472 kilobytes DUMPed.
Backup Server: 4.58.1.1: Database atmddb: 1464 kilobytes DUMPed.
Backup Server: 4.58.1.1: Database atmddb: 2940 kilobytes DUMPed.
Backup Server: 3.43.1.1: Dump phase number 1 completed.
Backup Server: 3.43.1.1: Dump phase number 2 completed.
Backup Server: 3.43.1.1: Dump phase number 3 completed.
Backup Server: 4.58.1.1: Database atmddb: 2948 kilobytes DUMPed.
Backup Server: 3.42.1.1: DUMP is complete (database atmddb).

Backup completed successfully.
```

## Recovering the AtmDirector Database

To recover the AtmDirector database, follow these steps:

- 1 Shut down the AtmDirector application.
- 2 Log in as the superuser by entering **su** and the root password.
- 3 Restore the database by entering the following command:

```
# atmd_recover
```

The system displays the following prompt:

```
Enter the Sybase 'sa' password?
```

- 4 Enter the password for Sybase.

The system prompts you to choose the type of backup you want to perform, as follows:

```
Please choose from the following recovery options:
```

- 1) Recover the Sybase master database.
- 2) Recover the AtmDirector for Solaris database.

```
Enter the option number? 2
```

---

**Note** The Sybase master database is backed up and restored in only extreme instances. Only knowledgeable Sybase administrators should perform a Sybase master database backup and restore. For more information about backing up and restoring the Sybase master database, refer to the *Sybase Administration Guide*.

---

- 5 Choose option **2** to recover the AtmDirector database. The system prompts for the name of the database:

```
Please enter the name of the database to recover.
```

If you are recovering the AtmDirector for Solaris database, you should probably just use the default name atmdodb.

```
Enter the database name? [atmdodb]
```

## Recovering the AtmDirector Database

---

- 6** To recover the database to the default file, *atmdb*, press Enter. Otherwise, enter an alternate name for the database file.

The system prompts for the device to use to retrieve the database backup file:

Please choose from the following device options:

- 1) Recover from disk.
- 2) Recover from tape.

Enter the option number? **1**

- 7** To recover the database from a file on the hard disk, choose **1**. To recover the database from tape, choose **2**. If you choose to recover the directory from tape, you must then specify an absolute path from the */dev* directory.

The system prompts for the name of the directory or device:

Please enter the location from which to recover the database.

For a recovery from disk, this should be the name of a file into which the database was previously dumped.

For a recovery from tape, this should be the name of a no-rewind tape device.

- 8** If you chose **1**, enter the location and name of the database backup file you previously created:

Dump device location? **/disk2/dumps/atmdb960814155916**

If you chose **2**, you need to specify the absolute path from the */dev* directory for a no-rewind tape device:

Dump device location? **/dev/nrst12**

The system displays the recovery configuration you have entered and asks for confirmation:

You have chosen the following values for this setup.

```
Recovery type - AtmDirector for Solaris database (atmddb)
Device type   - Disk
Device name   - /disk2/dumps/atmddb960814155916
```

You may accept these values and proceed with the recover, reject the values and reenter them from the beginning, return to the last question, or quit without backing up.

Continue with the recovery (y,n,^,q)? **y**

If you did not shut down the AtmDirector application, the following message appears:

The following users are logged into atmddb:

```
atmdroot
```

You must log out these users before recovering the database.

Press enter when ready, or 'q' to quit?

Shut down the AtmDirector application, then press Enter.

Recovering database. This may take a while...

```
1> load database atmddb from "/disk2/dumps/atmddb960814155916"
Backup Server session id is: 10. Use this value when executing the
'sp_volchanged' system stored procedure after fulfilling any volume change
request from the Backup Server.
Backup Server: 6.28.1.1: Dumpfile name 'atmddb962270E10C ' section number
0001
mounted on disk file '/disk2/dumps/atmddb960814155916'
Backup Server: 4.58.1.1: Database atmddb: 1448 kilobytes LOAded.
Backup Server: 4.58.1.1: Database atmddb: 22024 kilobytes LOAded.
Backup Server: 4.58.1.1: Database atmddb: 63496 kilobytes LOAded.
Backup Server: 4.58.1.1: Database atmddb: 63504 kilobytes LOAded.
Backup Server: 3.42.1.1: LOAD is complete (database atmddb).
```

Recovery completed successfully.

# Enlarging the AtmDirector Database

To enlarge the database capacity, follow these steps:

- 1 Shut down the AtmDirector application.
- 2 Log in as the superuser by entering **su** and the root password.
- 3 Enlarge the database by entering the following command:

```
# /opt/CSCOatmd/etc/atmd_enlarge
```

The system displays the following message:

```
Database enlarge script for AtmDirector, Version 1.0.8.
```

```
This script will enlarge the Sybase temporary database, the
AtmDirector database, or the AtmDirector transaction log.
```

The following Sybase variable values will be used.

```
Sybase location      ($SYBASE) = /opt/CSCOsyb
Sybase data server ($DSQUERY) = CW_SYBASE
Sybase backup server          = CW_BACKUP_SERVER
AtmDirector database          = atmddb
```

```
Please answer the following questions.  You may terminate the
database setup at any time by answering 'q' (without the quotes).
You may return to the previous question at any time by typing '^'
(without the quotes).
```

```
Enter the Sybase 'sa' password?
```

```
The Sybase 'sa' password is required in order to enlarge the
database for AtmDirector.
```

- 4 When prompted, enter the Sybase password. The following options appear:

```
Please choose from the following enlarge options:
```

- 1) Enlarge the Sybase temporary database.
- 2) Enlarge the AtmDirector database.
- 3) Enlarge the AtmDirector transaction log.

```
Enter the option number? 2
```



- 5** Enter **2** to enlarge the AtmDirector database. The following prompt appears:

Please enter the amount of space in MB that you wish to add to the database.

You must add at least 10 MB.

Space to add in MB? 20

- 6** Enter the number of megabytes you want to add to the database. The following prompt appears:

Please enter the name of a physical device that will be used to expand the database.

This can be either a regular file or a raw partition.

As a convenience, for a regular file, you may enter the name of an existing directory in which to create the regular file, and this script will automatically generate a file name.

Note that a raw partition is not allowed for the temporary database.

Enter device filename? [/opt/CSCOsyb/data]

- 7** If you installed AtmDirector in the default directory, press Enter to accept the default filename. If you installed AtmDirector in a different directory, enter the filename of that directory. The following message appears:

You have chosen the following values.

Enlarge - AtmDirector database  
Size to add - 20 MB  
Physical device - /opt/CSCOsyb/data/atmd\_datadevice9

You may accept these values and proceed (y), reject the values and reenter them from the beginning (n), return to the last question (^), or quit without enlarging (q).

Continue (y/n)? y

## Enlarging the AtmDirector Database

---

- 8 Confirm the values that you have entered, and press **y** to continue. The following messages appear while the database is enlarged:

Dropping existing devices, if any...

Enlarging database.

Creating physical device...

Enlarging database...

Enlarge completed successfully.