



APPENDIX **A**

Database Backup and Restore

This appendix describes the database backup and restore procedure.

- [Overview](#)—Provides an overview of the backup procedure.
- [Backed-Up Content](#)—Describes the data that is backed up.
- [Backup Procedure](#)—Describes how to activate the backup procedure.
- [Changing Periodic Backup Time](#)—Describes how to change the backup time.
- [Restore Procedure](#)—Describes the restore procedure.

Overview

The backup procedure is used to perform data backup once a week. It operates through the UNIX cron mechanism. The factory settings entry in the cron table (crontab) runs the backup procedure every Sunday at 1:00 AM. To activate the backup procedure, the user needs to remove the comment for the relevant line in the cron table.

The restoration is done manually by executing the restore.pl script.

Backed-Up Content

The data that has been backed-up is:

- Cisco ANA database
- Cisco ANA registry (Golden Source)
- cron table (crontab)

Backup Procedure

The backup script is a scheduled task. It operates through cron.

The backup files are stored in the following directory, `~sheer/db/db_backup/[date+time]`.

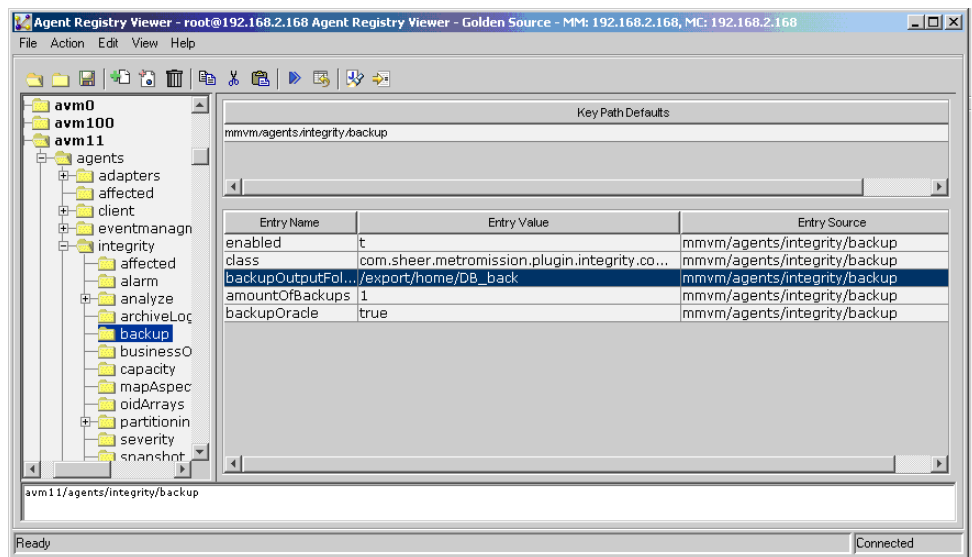
**Note**

The filler [date+time] is a directory name composed of a date and time of the backup. For example, ~sheer/db/db_backup/200604130404/ is created on 13 April 2006 at 4:04 AM. By default the cron table executes the backup procedure every Sunday at 1:00AM.

The location is configurable through the registry. For more information, refer to registry path, *avm11/agents/integrity/backup*.

The figure below displays the backup registry entries.

Figure A-1 Backup Registry Entries



The backup is disabled by default.

To enable the backup:

Step 1 Telnet to the Cisco ANA gateway as *sheer* user.

Step 2 Edit the cron table as follows:

```
crontab -e
```

Step 3 Add the following line to the file, and save the change:

```
0 1 * * 0 cd Main;./mc.csh localhost 8011 integrity.executeTest backup > /dev/null 2>&1
```

**Note**

Refer to *crontab(1)* in the Solaris documentation for a detailed explanation about the cron table format.

The user can activate the backup procedure immediately.

To activate the backup procedure immediately:

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- Step 1** Telnet to the Cisco ANA gateway as `sheer` user.
- Step 2** Change the directory to `sheer/Main` by executing the following command:
- ```
cd ~/Main
```
- Step 3** At the prompt, run the following command line:
- ```
./mc.csh localhost 8011 integrity.executeTest backup
```
-

Changing Periodic Backup Time

A crontab file consists of lines of six fields each. The fields are separated by spaces or tabs. The first five are integer patterns that specify the following:

- minute (0-59)
- hour (0-23)
- day of the month (1-31)
- month of the year (1-12)
- day of the week (0-6 with 0=Sunday)

To specify days using only one field, the other field should be set to `*`.

For example, `0 0 * * 1` would run a command only on Mondays.

Another example cleans up core files every weekday morning at 3:15 am:

```
15 3 * * 1-5 find $HOME -name core 2>/dev/null | xargs rm -f
```

The sequence `0 0 1,15 * 1` runs a command on the first and fifteenth of each month as well as every Monday.

Restore Procedure

Install the Cisco ANA gateway. For more information, refer to the *Cisco Active Network Abstraction Servers Installation Guide*. Note that you will need to login as root.

To restore from a backup:

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- Step 1** Change the directory `/export/home/sheer/Main/scripts` by executing the following command:
- ```
cd ~/sheer/Main/scripts
```
- Step 2** Execute the restoration script:
- ```
restore.pl [backup-files-location]
```

**Note**

By default the [backup-files-location] is ~sheer/db/db_backup/[date+time] (this is configurable through the registry). The filler [date+time] is a directory name composed of a date and time backup time. For example, ~sheer/db/db_backup/200604130404/ is created on 13 April 2006 at 4:04 AM.

Step 3 Once the restoration is successful, initialize the Cisco ANA gateway by running the following command:

```
su - sheer
cd Main
./mvm.csh
```

**Note**

The default password for the user sheer is *sheer*.