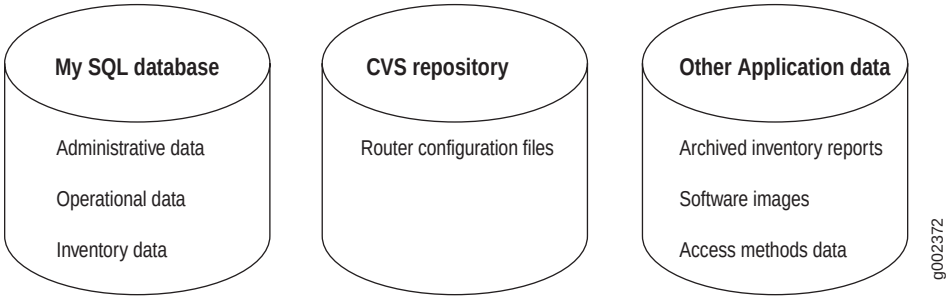
Chapter 36

Backing Up and Restoring the JUNOScope Application Data

This chapter describes how to back up and restore application data stored by JUNOScope to prevent data loss in the event o f a disaster.

Figure 15 shows the application data that you can back up and restore.

Figure 15: JUNOScope Application Data to Back Up and Restore



You can back up and restore the following JUNOScope application data in the MySQL database:

- Administrative settings—Settings data that can be imported and exported.
- Operational data—Monitor > Operstions, Monitor > Status, and Monitor > Audit Log data.
- Inventory data—Inventory Management > Scan data, including demostration inventory data.

You can also back up and restore archived device configuration files in the Configuration Version System (CVS) repository. Archived device configuration files are generated when you use Configuration > Repository > Archive or import a configuration file by using Configuration > Repository > Import.

You can also back up and restore archived inventory reports and imported JUNOS software images. Archived inventory reports are generated when you schedule an inventory management system report using Inventory Management > Repository > Schedule. These are the reports that you see when you use Inventory Management > Repository > View. JUNOS software images are stored when you import them using Software Management > Images.

The JUNOScope software supports only full MySQL database backups; not incremental ones.

You do not need to shut down the JUNOScope server while you back up the MySQL database and repositories. You do, however, need to temporarily shut down the JUNOScope server when you restore them.

It is recommended that you back up and restore the database and data repositories simultaneously and at a time when the operational activities of the JUNOScope server are at a minimum.

You can automate backup and restore tasks within a UNIX shell script, which could then be run at specified times by the cron utility.

This chapter includes the following sections:

Backing Up JUNOScope Application Data

Periodically, when the operational activities of the JUNOScope server are at a minimum, you should back up the JUNOScope application data. We recommend that you back up the database and data repositories simultaneously to ensure data consistency between the JUNOScope router configuration repository and the MySQL database.

To back up JUNOScope application data, follow these steps:

1. Change to the directory where the JUNOScope software is installed:

   ```
   % cd $JTK_INSTALL
   ```

2. Using the mysqldump command, back up the contents of the JUNOScope MySQL database:

   ```
   % ./mysql/bin/mysqldump --socket=data/db/mysql.sock
                           --user=root
                           --password=pw
                           --opt
                           --all-databases
                           > /path-to-backup/junoscope-db-backup.sql
   ```

   $JTK_INSTALL is the path of the JUNOScope installation, *<pw>* is the database root user's password (created during JUNOScope installation, and *<path-to-backup/junoscope-db-backup.sql>* is the name and location of the backup file you create.

For example:

```
% cd $JTK_INSTALL
% ./mysql/bin/mysqldump --socket=data/db/mysql.sock
                --user=root
                --password=foobar
                --opt --all-databases
                > /opt/backups/jnscp/dbdump.sql
```

This command example backs up the contents of the MySQL database using the password foobar and creates a file called dbdump.sql in the /opt/backups/jnscp/ directory.

3. Navigate to the JUNOScope data directory:

```
% cd $JTK_INSTALL/data
```

$JTK_INSTALL/data is the path where the JUNOScope application data is stored,

4. Back up the contents JUNOScope router configuration repository CVS root directory using a UNIX backup utility or the tar command:

```
% tar cf /path-to-backup/junoscope-data-backup.tar cvsroot
archivedreports images access-methods.xml
```

<*path-to-backup*> is the directory where you want to store the backup, <*junoscope-data-backup.tar*> is the name of the backup tar file to create.

Restoring JUNOScope Application Data

You should restore the JUNOScope application data when the operational activities of the JUNOScope server are at a minimum, We recommend that you restore the database and data repositories simultaneously to ensure data consistency between the JUNOScope router configuration repository and the MySQL database.

To restore the JUNOScope application data, follow these steps:

1. Change directories to where the JUNOScope software is installed:

```
% cd $JTK_INSTALL
```

$JTK_INSTALL is the location of the JUNOScope installation.

2. Shut down the JUNOScope server:

```
% ./jtk/rc.d/jtk stop
```

3. Start the JUNOScope MySQL database:

```
% ./jtk/rc.d/mysql start
```

4. Restore the contents of the JUNOScope MySQL database:

   ```
   % ./mysql/bin/mysql –socket=data/db/mysql.sock
                      –user=root
                      –password=pw
                      < /path-to-backup/junoscope-db-backup.sql
   ```

   For example:

   ```
   % ./mysql/bin/mysql –socket=data/db/mysql.sock
                       –user=root
                       –password=foobar
                       < /opt/backups/jnscp/dbdump.sql
   ```

5. Stop the JUNOScope MySQL database:

   ```
   % ./jtk/rc.d/mysql stop
   ```

6. Change directories to where the JUNOScope application data is stored:

   ```
   % cd $JTK_INSTALL/data
   ```

7. Restore the contents of the CVS repository and other data directories:

   ```
   % mv cvsroot cvsroot.old
   % mv archivedreports archivedreports.old
   % mv images images.old
   % mv access-methods.xml access-methods.xml.old
   % cd $JTK_INSTALL/tomcat/work/Standalone/localhost/jtk/
   cocoon-files
   % mv cvs-top cvs-top.old
   ```

8. Restore the CVS repository from an earlier backup or extracting from an existing tar file:

   ```
   % cd $JTK_INSTALL/data
   % tar xf /path-to-backup/junoscope-data-backup.tar
   ```

   <path-to-backup> is the directory where the backup is stored.
   <junoscope-data-backup.tar> is the name of an existing backup tar file.

9. Restart the JUNOScope server:

   ```
   % ./jtk/rc.d/jtk start
   ```