



APPENDIX **D**

Database Backup and Restore

Databases need to have a well-defined and thoroughly tested backup and restore plan so that access to data cannot be at risk. The backup and recovery of databases involve the process of making a copy of a database in case of an equipment failure or disaster, then retrieving the copied database if needed.

This appendix explains how to back up and restore Fabric Manager Server databases.

Fabric Manager uses the PostgreSQL database management system as the default database. PostgreSQL databases are backed up with the **pg_dump** command. The **pg_dump** utility dumps the PostgreSQL database content to an ASCII dump file. The backup dump file represents a snapshot of the database at the time of backup.

The database is restored with the **pg_restore** utility. The **pg_restore** utility uses psql to rebuild the PostgreSQL database from the dump file created by **pg_dump**.

For more information about **pg_dump**, see

<http://www.postgresql.org/docs/current/interactive/app-pgdump.html>

This appendix includes the following sections:

- [Backing Up Fabric Manager Server Database, page D-1](#)
- [Restoring Fabric Manager Server Database, page D-2](#)
- [Considerations for Database Backup and Restore Operations, page D-2](#)

Backing Up Fabric Manager Server Database

To backup the Fabric Manager server database, use the PostgreSQL **pg_dump** command as follows:

```
cd $INSTALLDIR/bin
./pgbackup.sh 02252008.data (on Linux and Solaris operation systems)
pgbackup.bat 02252008.data (on Windows operating system)
```

The INSTALLDIR is the top directory of Fabric Manager Installation and a backup file (02252008.data) is created in the \$INSTALLDIR/bin directory.

Specify the full path name of the dump file to create the backup file in a standard backup directory.



Note

In all operating systems, the scripts run the **pg_dump** command to backup the database.

[Send documentation comments to mdsfeedback-doc@cisco.com](mailto:mdsfeedback-doc@cisco.com)

Restoring Fabric Manager Server Database

To restore the Fabric Manager Server database, use the `pg_restore` command.

```
cd $ INSTALLDIR/bin
./pgrestore.sh 02252008.data (on Linux and Solaris operating systems)
pgrestore.bat 02252008.data (on Windows operating system)
```

The backup restore process requires the server to be stopped.



Note

In all operating systems the scripts run `pg_restore` command to restore the database.

Considerations for Database Backup and Restore Operations

When implementing the Fabric Manager Server backup and restore operations, consider the following :

- The new media keys created after the backup of the database are lost after the restore operation since the backup copy does not have the latest media keys.
- If there are new tape backup groups and tape volume groups created after the database backup, the property should be set to `true` in `smeserver.properties` before starting the Fabric Manager Server. This will synchronise the new volume group keys to the KMC.

```
sme.kmc.sync.model.at.startup=true
```

This property is also applicable for any tape volume group rekey operation.

- If a master key is rekeyed after the database backup, then restoring the data of the previous database makes the cluster unusable. After the master key rekey operation, take a backup of the database and discard the copies of the previous database backup .