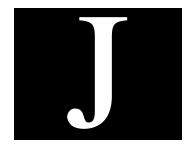J

EMD

The Enterprise Management Database (EMD) application is in charge of all communication between the database and other ENlighten/DSM components. It consists of three components:

- Informix SE Database Engine with an ANSI-compliant database.
- ODBC drivers (currently supporting only Informix)
- A daemon emdd that handles all requests from other ENlighten/DSM components.

An RPC-based server, emdd communicates with the following ENlighten/DSM components: Events agent, Sys Admin DSA, Status Map, PEP, andthe user interface.

The communication layer between emdd and the database is ODBC compliant. Our ODBC drivers are supplied by Visigenic Software Inc. The drivers are Core and Level 1 API-conformant and Minimum and Core SQL-conformant.

Basic Design

EMD registers all its procedures when it comes up and then waits for incoming requests. The emdd daemon also checks daily to see if any data in the database needs to be expired.

When servicing incoming requests, EMD (the emdd daemon) forks itself so it can handle more than one request at a time.

Relational Database

ENlighten/DSM includes a relational database as part of EMD. The following data will be stored in the database:

- Pool Configurations
- Session Preferences
- Host Overrides
- User Authorizations
- Add User Templates
- Archive Device Configurations
- Events log data
- Events alarm data
- Software and Hardware Inventory lists generated by Events
- Acknowledgment of events from the Status Map
- Backup Catalogs
- The Scheduling of Backups
- Host Notes

The following data will not be stored in a database:

- Events host-specific testtab files
- Events AgentENL.config file data
- Snapshots of disks/filesystems

Directory Structure

The EMD directory structure is:

- `install-path/bin`
- `install-path/dbtables`
- `install-path/odbc`
- `install-path/informix`
- `install-path/msg`
- `install-path/log`

where:

`bin`	contains the `emdd` daemon and its logfile `emdd.log`
`dbtables`	contains the database tables, the database's transaction log, and a script to create the database tables
`odbc`	contains the ODBC drivers and other related components
`informix`	contains the Informix SE products
`msg`	contains any message catalog files
`log`	contains the emdd'd logfile `emdd.log`

Database Access

The database and its tables are owned by the user dbenl. This is a new user that is created at installation time. User dbenl's home directory will contain an odbc initialization file `.odbc.ini,` and its `.cshrc` or `.profile` file will contain the environment variables necessary to run Informix and the ODBC driver.

By default, only user dbenl has access to the database. dbenl must start the daemon `emdd` or the daemon will not be able to access the database. The database administrator at your installation site may change the database privileges if he/she so chooses.

Manually Killing/Invoking EMD

Sometimes you may want to manually kill or invoke EMD, for example, when you're bringing down the system for maintenance or upgrading to a new release of ᴇɴlighten.

☞ You *must* terminate EMD before backing up any database tables and then manually re-invoke them afterwards.

The rest of this section details how to do this for EMD.

Terminating EMD

You can bring down the `emdd` daemon with the following CLI command:

```
stop_enl_daemons
```

This sends an interrupt to the daemon and allows it to shut down gracefully. The daemon waits for any child processes to exit before shutting down. This may take up to 10 seconds.

Starting EMD

You can invoke the `emdd` daemon with the following CLI command:

```
start_enl_daemons
```

This starts the daemon in the background and sets the log level to 0. The logfile will generated, but only error messages will be logged (if any occur).