Essbase Beginner's Guide
Chapter-VI
Essbase Log Files

Description:

This document briefs the log files which Essbase uses during its processing. The log files are window Essbase developers and administrators. During debugging log files are vital tool which provides the direction for analysis and root cause of the errors.

History:

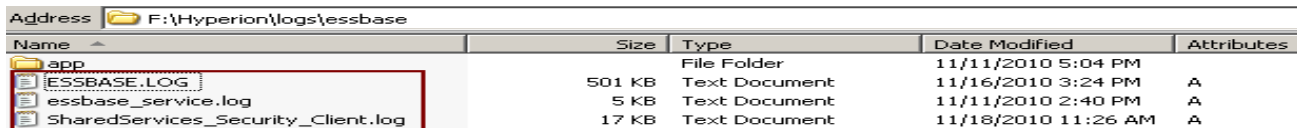| Version	Description Change	Author/Reviewer	Publish Date
0.1	Initial Draft	Gaurav Shrivastava	24-Nov-2010
0.1	1st Version	Amit Sharma	10th Jan 2011

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Information Logs

Log file keeps list of actions that have occurred. Log files are used to keep information of history. Essbase has log file for server, application and configuration. Essbase provides a variety of information for database administrators. The primary sources of this information are available in the various log files (Server log, outline change log).
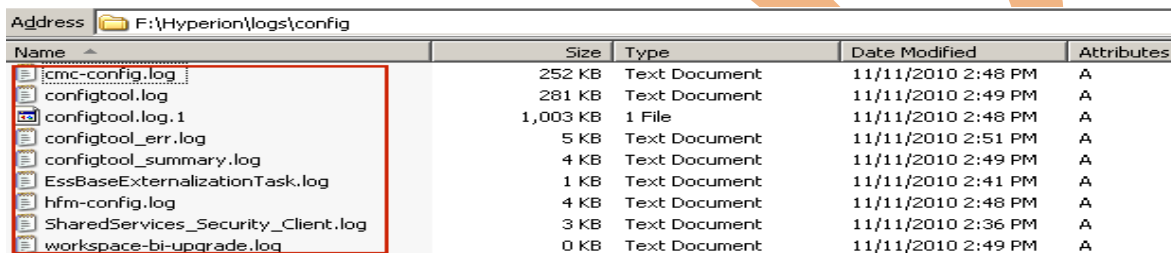
Log Files

There are many log files are there in Essbase, but the important log files are

1. Application.log
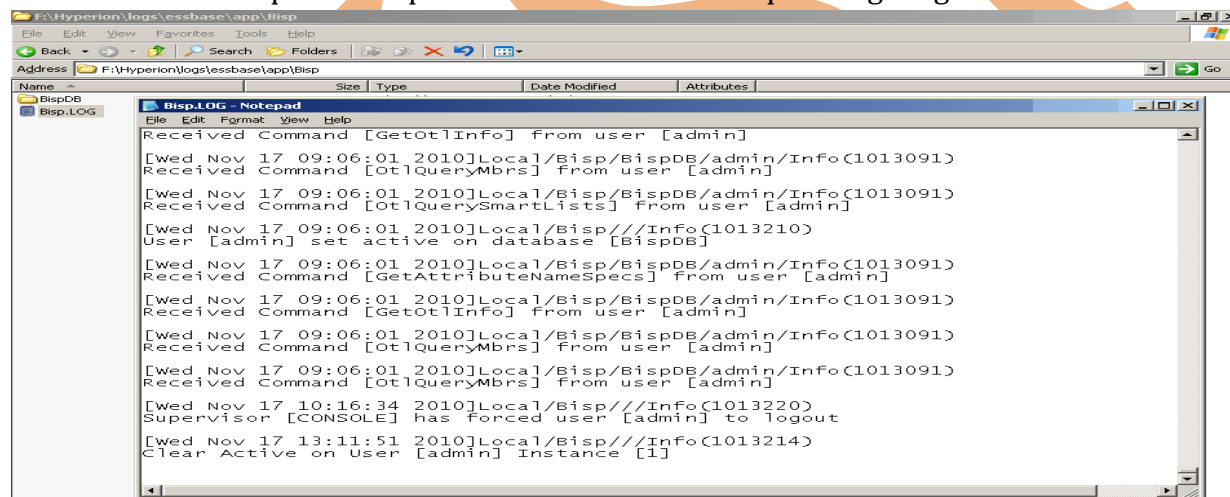2. Essbase.log
3. Configtool.log
4. eas_install.log

Configuration files.

You can trace the operations perform and the timestamp through log file.

Log file location

**C:\Hyperion\logs\essbase\app\Bisp**

1) Server Log file

Log files keep records off all performed activities. ESSBASE.LOG file is responsible for all Essbase related information.
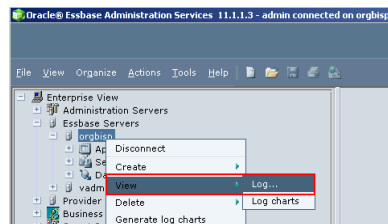
ESSBASE.LOG keeps following information.
- ✓ Who performed an operation?
- ✓ When an operation was performed?
- ✓ Errors that occurred when an operation was performed or attempted

Purpose of creating log file is for maintaining security.
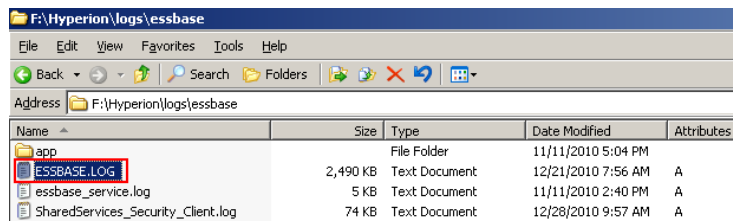
Other way to view the log file is Right click on the server and view the log file.

You can select the log files according to specific starting date . Suppose any problem comes after a specific date. So you need not to see log information before that day.
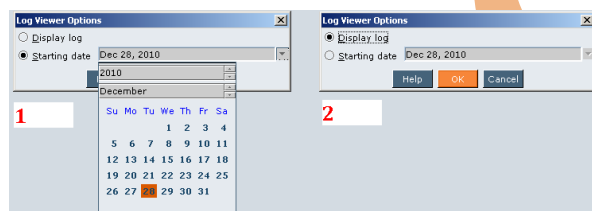
One way to open log file is through arbor path whereas other way is right click on server and view the log. First view is console view and other is text file view.

The following essbase.log example shows entries written when Essbase Server starts. First, the Sample application and the Basic database are loaded. The log includes information about the time the application and database are loaded, the process ID assigned to the application by the operating system, and the startup of the security authentication module.

[Fri Nov 12 12:22:57 2010]Local/ESSBASE0///Info(1054014)
Database Basic loaded

[Fri Nov 12 12:22:57 2010]Local/ESSBASE0///Info(1054014)
Database Xchgrate loaded

[Fri Nov 12 12:22:57 2010]Local/ESSBASE0///Info(1054014)
Database Interntl loaded

 [Fri Nov 12 16:28:53 2010]Local/ESSBASE0///Info(1051061)
Application SmpCube loaded - connection established

[Sun Nov 14 11:21:03 2010]Local/ESSBASE0///Info(1051061)
Application Sample loaded - connection established

[Tue Nov 16 07:49:46 2010]Local/ESSBASE0///Info(1051134)

External Authentication Module: [Single Sign-On] enabled

[Wed Dec 15 14:34:58 2010]Local/ESSBASE0///Info(1051051)
Essbase Server – started

The following log shows a single error. The admin user tried to rename an application using a name that already exists on Essbase Server. The log includes information about the user name, the time of the error, and the operation that failed and caused the error.

[Thu Dec 16 09:56:32 2010]Local/ESSBASE0///Info(1051001)
Received client request: Get Client Settings (from user [admin])

[Thu Dec 16 09:56:32 2010]Local/ESSBASE0///Info(1051001)
Received client request: MaxL: Execute (from user [admin])

[Thu Dec 23 13:53:02 2010]Local/ESSBASE0///Error(1051031)
Application ASOsamp already exists

[Thu Dec 23 13:53:02 2010]Local/ESSBASE0///Warning(1051003)
Error 1051031 processing request [Create Application] - disconnecting

The next log shows a shutdown. The log includes information about the name of the application shutdown and the time of the shutdown.

[Thu Dec 30 16:03:01 2010]Local/ESSBASE0///Info(1054005)
Shutting down application Bisp

[Thu Dec 30 09:49:32 2010]Local/ESSBASE0///Info(1051052)
Essbase Server - finished
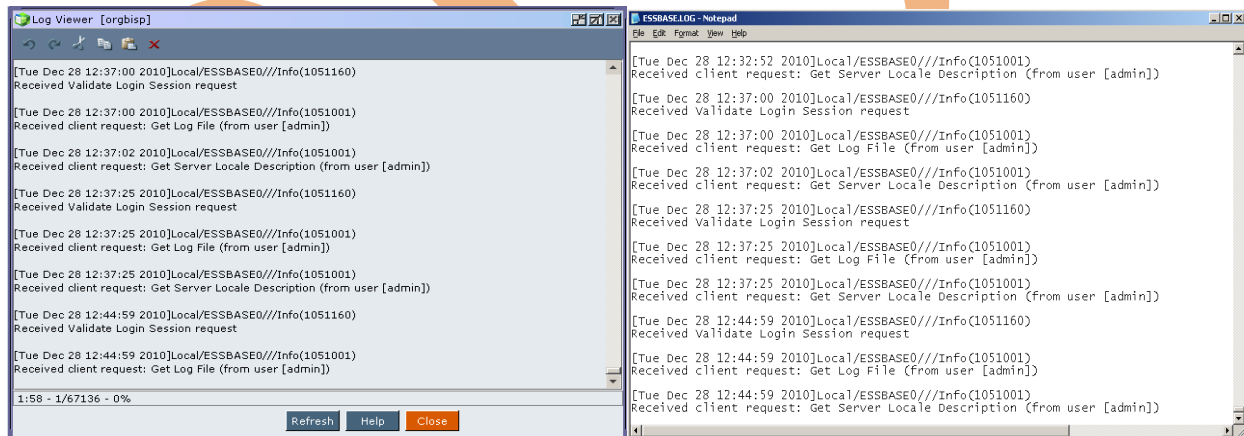
2) Application log

Application information keeps information of application related activity, calculation, database information function and parameter for database. Application log creates when a new Essbase application creates. Log files are in the form of application.LOG. Arbor path of log file is \Hyperion\logs\essbase\app and the application name.
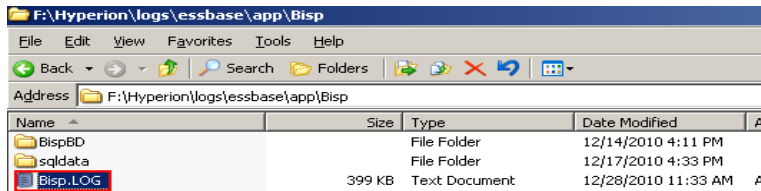
You can also open console view of Log file. Right click on application and view log.
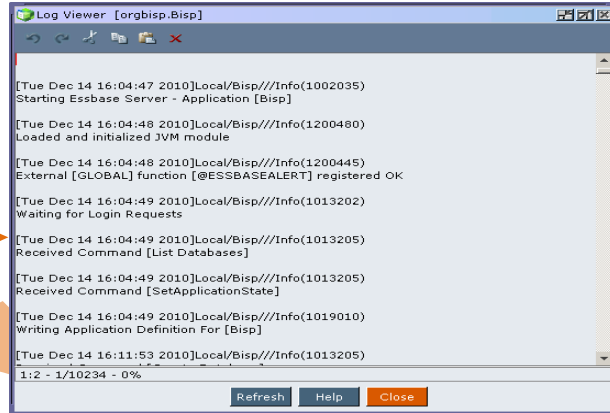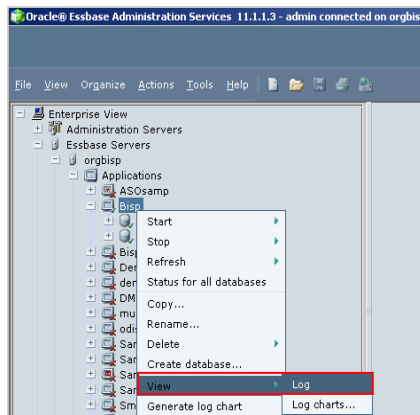
Errors in the Application Log

The following example shows a single error. An unknown member was found in the data load file; the presence of an unknown member caused the load to fail. First, you see the request for the data load, then the error message, and, finally, information messages describing the data values changed by the data load and the data load elapsed time.

[Tue Dec 14 16:23:11 2010]Local/Bisp///Info(1013210)
User [admin] set active on database [BispBD]

[Tue Dec 14 16:23:11 2010]Local/Bisp/BispBD/admin/Info(1013091)
Received Command [Restructure] from user [admin]

[Wed Dec 29 12:56:34 2010]Local/Bisp/REdata/admin/Info(1003040)
Parallel dataload enabled: [1] block prepare threads, [1] block write threads

[Wed Dec 29 13:28:57 2010]Local/Bisp/BispBD/admin/Error(1003000)
Unknown Item [500-10-10] in Data Load, [0] Records Completed

[Wed Dec 29 14:06:05 2010]Local/Bisp/REdata/admin/Warning(1003035)
No data values modified by load of this data file

[Wed Dec 29 13:12:09 2010]Local/Bisp/REdata/admin/Info(1003024)
Data Load Elapsed Time : [0.485] seconds

[Wed Dec 29 13:14:22 2010]Local/Bisp/REdata/admin/Info(1003024)
Data Load Elapsed Time : [0.547] seconds

[Wed Dec 29 13:14:22 2010]Local/Bisp/REdata/admin/Info(1019018)
Writing Parameters For Database [REdata]

Shutdown Messages in the Application Log

The following messages are logged when Essbase Server performs a normal shutdown. First, information about the database is retrieved. Then the database is unloaded, free space information is written, and the server shuts down.

[Wed Dec 29 13:24:02 2010]Local/Bisp///Info(1013214)
Clear Active on User [admin] Instance [1]

[Wed Dec 29 13:24:52 2010]Local/Bisp///Info(1013205)
Received Command [Get Database Info]

[Wed Dec 29 13:24:52 2010]Local/Bisp///Info(1013205)
Received Command [Get Database State]

[Wed Dec 29 13:24:52 2010]Local/Bisp///Info(1013205)
Received Command [Get Database Info]

[Wed Dec 29 13:24:52 2010]Local/Bisp///Info(1013205)
Received Command [Get Database State]
[Wed Dec 29 14:06:05 2010]Local/Bisp/REdata/admin/Info(1019018)
Writing Parameters For Database [REdata]

[Wed Dec 29 15:49:00 2010]Local/Bisp/REdata/admin/Info(1019020)
Writing Free Space Information For Database [REdata]

[Thu Dec 30 16:03:02 2010]Local/Bisp///Info(1013207)
RECEIVED SHUTDOWN COMMAND - SERVER TERMINATING

The default maximum log file size is 1 GB.

3) **Outline Change Log File**

Log files also record information of any kind of modification. Log files keeps information of creation time, update information, user information, modification type and other information. Outline change information log file size limits minimum, maximum or default size.

The outline change log files size limitations, which you can tune within the minimum and Maximum sizes as follows:

Minimum: 8092 bytes
Maximum: 2 MB
Default: 64,000 bytes

You can change the file size with the following co

OUTLINECHANGELOGFILESIZE
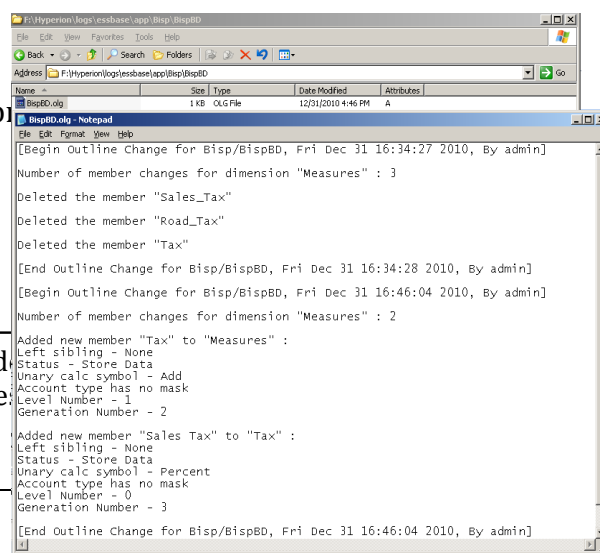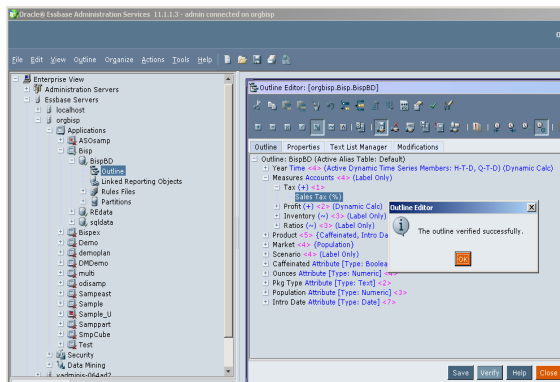
When the maximum file size is reached, the OLG log file is back up to an OLB file and is overwritten. It is good practice to back up the OLB file, because it is also overwritten each time the OLG files reach its maximum file size.
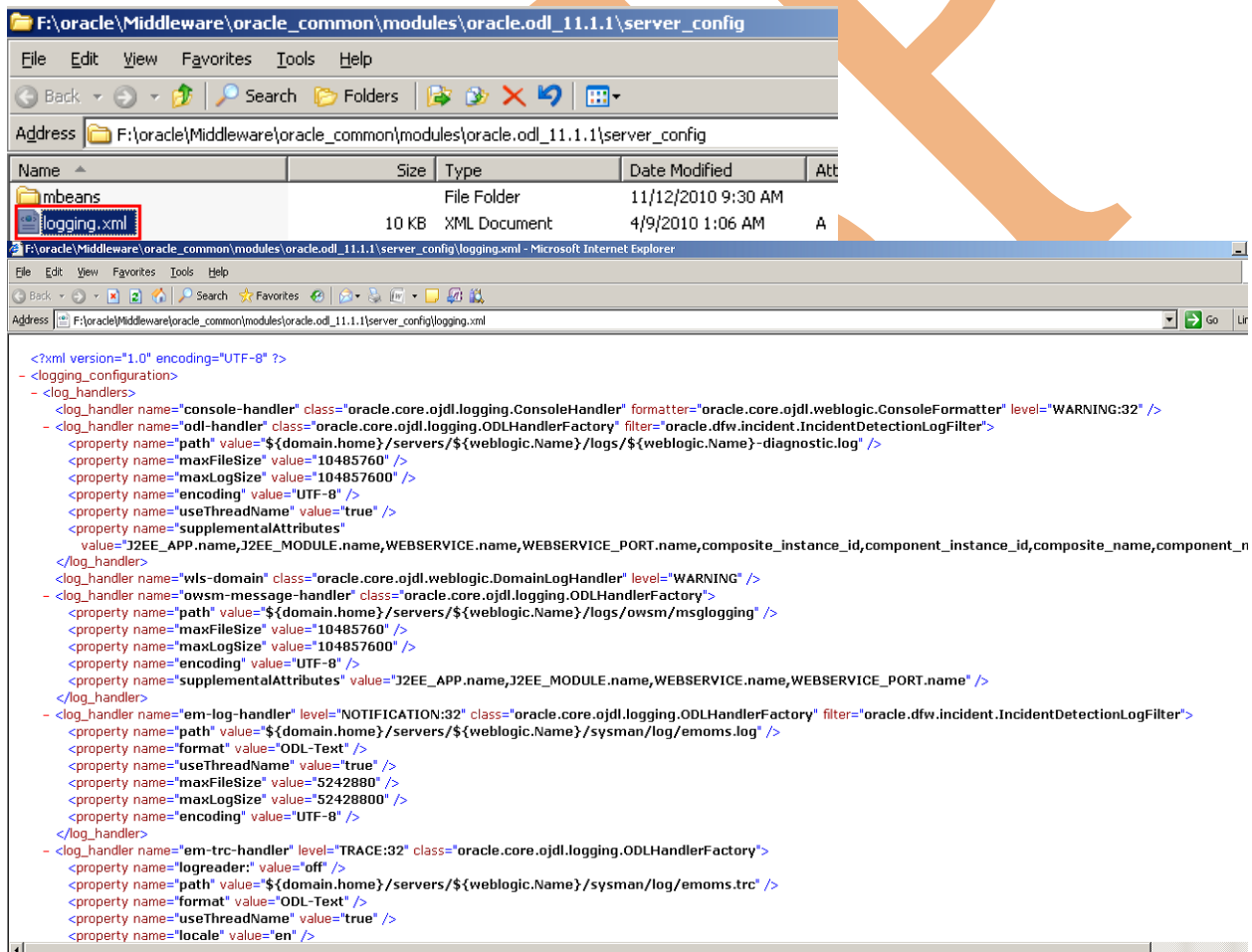
4) Query Logs

Query log file generates when you write a query. The query log file use for all queries performed against the database, query execute with Oracle Essbase Spreadsheet Add-in or

Report Writer. Query logging can track members, generation or level numbers of members belonging to specific generations or levels, and Hybrid Analysis members. Query logging also offers the flexibility to exclude logging of certain dimensions and members belonging to generations or levels. By default the query log file output is an XML file, you can import the log file to any XML-enabled tool to view the log.

For information about the query log file structure, refer to querylog.dtd in the ESSBASEPATH/bin directory.
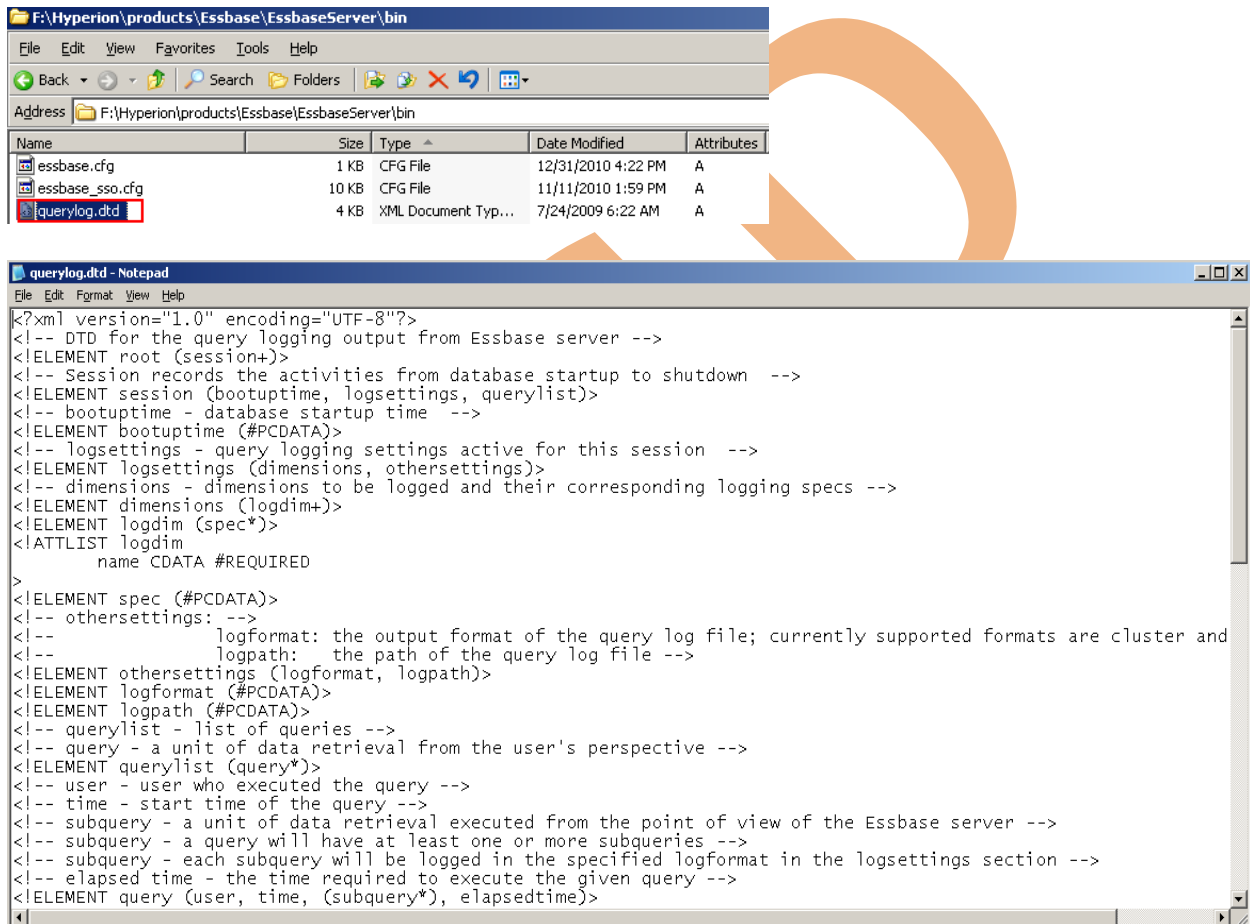
In the ARBORPATH/app/appname/dbname directory, create a query log configuration file. The configuration file must be named dbname.cfg, where dbname matches the name of the database. For example, the query log configuration file for Bisp.BispDB is BispDB.cfg. The output query log file is located at, by default, ARBORPATH/app/appname/dbname00001.qlg.

5) Exception Logs

When an Essbase Server, an application, or a database shuts down abnormally, Essbase Server sometimes creates an exception log as a text file named log0000n.xcp. The following topics describe the server, application, and database exception logs and the actions that you can perform on them.

Exception Log Files Location

Essbase Server Exception files location
 `Hyperion/products/Essbase/EssbaseServer/log00001.xcp`
Application Exception files location
`Hyperion/products/Essbase/EssbaseServer/app/log00001.xcp`
Database Exception files location
`Hyperion/products/Essbase/EssbaseServer/app/appname/dbname/log00001.xcp`

Exception can come during abnormal shutdown. You can use the EXCEPTIONLOGOVERWRITE TRUE configuration setting in essbase.cfg to overwrite the existing exception log instead of creating a new log, Oracle recommends that you use the default setting of FALSE.

Configuration File Parameters

When Essbase server starts, first it reads the essbase.cfg file. Essbase server works according to default setting of essbase.cfg file. You need to alter essbase.cfg file for advance settings. You can make changes individual application or database level in essbase.cfg file.
Essbase.cfg setting for outline change details in Essbase Configuration File

OUTLINECHANGELOG TRUE

essbase.cfg setting the Maximum Log File Size for Essbase Server and Application Logs

AGTMAXLOGFILESIZE
APPMAXLOGFILESIZE
The default maximum log file size is 1 GB.
Essbase.cfg setting the Type of Essbase Server Messages Logged
AGENTLOGMESSAGELEVEL → Log Message, Warning and Error
PORTUSAGELOGINTERVAL → To check the number of ports in use

essbase.cfg Setting the Type of Application Messages Logged

LOGMESSAGELEVEL → To determine whether Essbase Server writes all messages, warning, or errors to the application log.

TIMINGMESSAGES → To determine whether Essbase Server writes the duration of each spreadsheet and report query to the application log.
SSLUNKNOWN → To determine whether Essbase Server writes error messages when it encounters an unknown member name during a spreadsheet operation to the application log.

SET MSG → To determine whether Essbase Server writes the following items to the application log during the duration of the calculation.

essbase.cfg Clearing the Essbase Server and Application Logs upon Restart

CLEARLOGFILE → when set to TRUE, clears the Essbase Server log each time Essbase
Server restarts and the application log each time the application restarts.

essbase.cfg Setting Delimiters in the Essbase Server and Application Logs

DELIMITEDMSG → when set to TRUE, adds a tilde (~) between each field in the server and
application logs.
DELIMITER → The DELIMTER setting works only when DELIMITEDMSG is set to TRUE.

essbase.cfg files settings for Exception

EXCEPTIONLOGOVERWRITE TRUE → essbase.cfg files setting in to overwrite the existing
exception log instead of creating a new log.

Dimension Build and Data Load Error Logs
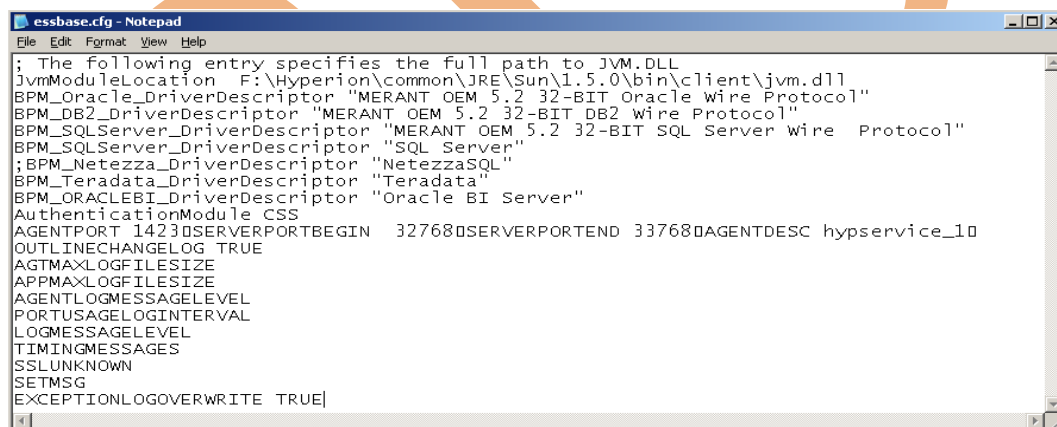
The dataload.err log contains errors that occurred during a dimension build or a data load.

essbase.cfg setting the Number of Error Records

DATAERRORLIMIT → Determines the number of records logged in the dataload.err log.

How to update "Essbase.cfg" file?
Open "essbase.cfg" into notepad make update and save.

```
essbase.cfg - Notepad                                                    _ □ ×
File  Edit  Format  View  Help
; The following entry specifies the full path to JVM.DLL
JvmModuleLocation  F:\Hyperion\common\JRE\Sun\1.5.0\bin\client\jvm.dll
BPM_Oracle_DriverDescriptor "MERANT OEM 5.2 32-BIT Oracle Wire Protocol"
BPM_DB2_DriverDescriptor "MERANT OEM 5.2 32-BIT DB2 Wire Protocol"
BPM_SQLServer_DriverDescriptor "MERANT OEM 5.2 32-BIT SQL Server Wire  Protocol"
BPM_SQLServer_DriverDescriptor "SQL Server"
;BPM_Netezza_DriverDescriptor "NetezzaSQL"
BPM_Teradata_DriverDescriptor "Teradata"
BPM_ORACLEBI_DriverDescriptor "Oracle BI Server"
AuthenticationModule CSS
AGENTPORT 1423□SERVERPORTBEGIN  32768□SERVERPORTEND 33768□AGENTDESC hypservice_1□
OUTLINECHANGELOG TRUE
AGTMAXLOGFILESIZE
APPMAXLOGFILESIZE
AGENTLOGMESSAGELEVEL
PORTUSAGELOGINTERVAL
LOGMESSAGELEVEL
TIMINGMESSAGES
SSLUNKNOWN
SETMSG
EXCEPTIONLOGOVERWRITE TRUE|
```

Log analyzer
Log analyzer provides a graphical analysis tool for log information. Log analyzer accessed
from administration services console.
Right click and log charts.
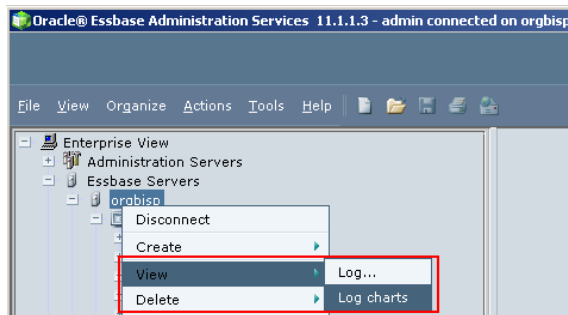
You can access Log Analyzer to filter, search, and analyze Essbase server logs and allocation logs. Based on filters that you choose or create, you can view robust graphical charts depicting Essbase server activity. An auto refresh option enables you to monitor log information dynamically.
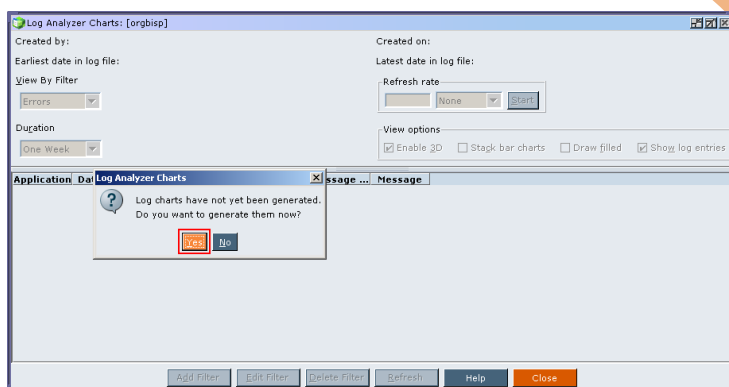
You can set filter and see log information.
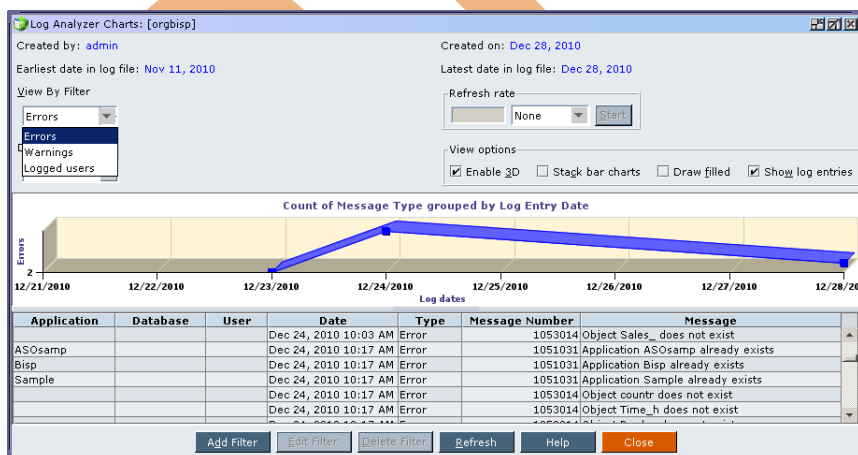
Which duration period information you want to see?
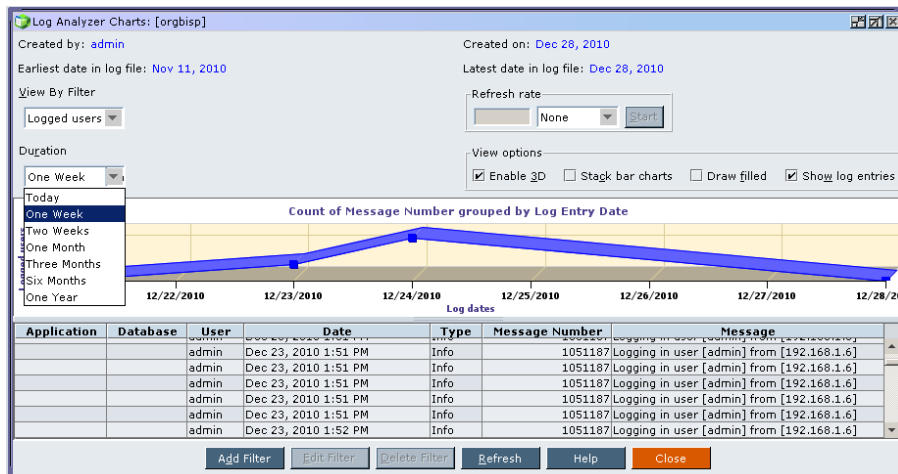
Application log analyzer
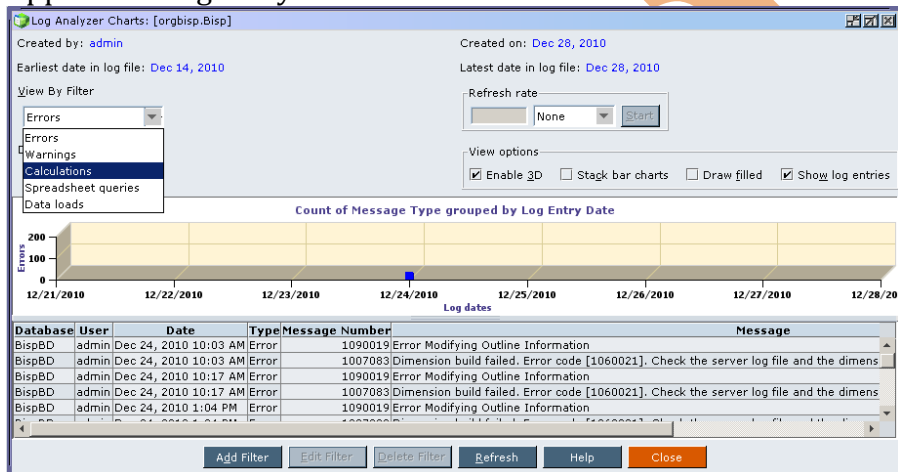
Examples

1) When you create new database application, the below information enters into log file. You can see the log information associated with database. Like, what was the event time? Who was the user?

2) When you make changes in outline structure, log file keep this timestamp information.

Load Data Error

When you load data and you it gets fail. You can see the log file and find what the error for data fail is?
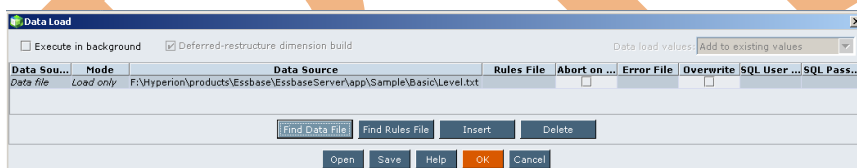
There are some facts for data load fail. Levelref.txt has some unknown member. Outline is differs with the text file.

If Data load through rule file gets fail, you can see the log file and trace information. Who is the user? What is the error? What data gets update? Log file shows all related information.

When you execute calculation script it keeps information for execution time and updated record members details.

Problem: If there is Error in starting an Essbase Server.

Solution: You need to see easserver.log file.

Problem: When error comes while starting application, loading data into application or other error related to application.

Solution: You need to see application.log file.