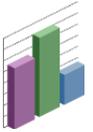




This guide describes how to diagnose and resolve issues in Oracle Business Intelligence using tools such as Fusion Middleware Control and log files.

For more detailed information about these and other tasks, see the [Oracle BI EE documentation](#) on Oracle Technology Network.



Understanding Log Files and Log Messages

You can search for and view the log entries for Oracle Business Intelligence components using Fusion Middleware Control Log Viewer. You can search the log files for log messages. You can apply filters that can, for example, target a certain date range, user, user transaction, or level of message (error, warning, notification, and so on). You can also view log files in their entirety from the Fusion Middleware Control Log Viewer.

Transaction level logging associates a unique transaction ID, which is called the Execution Context ID (ECID), with every log and error message that is generated in response to a user request. This logging enables rapid diagnosis of the cause of underlying issues.

You can also search across multiple log files for specific user transactions.

Viewing Log Messages

1. Start Fusion Middleware Control and go to the Business Intelligence Overview page.
2. Display the Log Messages tab of the Diagnostics page.
3. View the **Most Recent Errors** and **Most Recent Warnings** regions.
4. Select a link under View/Search Log Files and View/Search Log Files By Component to display messages for all log files, or for the messages for the log files of a specified component. Fusion Middleware Control displays messages in the Log Messages page that corresponds to your selection.
5. Enter appropriate search criteria to display corresponding error messages.
To view messages by ECID, click **View Related Messages** and select the **by ECID (Execution Context ID)** menu option.
6. Select one or more rows to view the log file entry details for that message.

The screenshot shows the Oracle BI Diagnostics page with the following sections:

- Overview** | **Availability** | **Capacity Management** | **Diagnostics**
- Log Messages** | **Log Configuration**
- Most Recent Errors**: A table with columns Severity, Date/Time, Component, and Message. It shows "No recent errors to report".
- Most Recent Warnings**: A table with columns Severity, Date/Time, Component, and Message. It shows "No recent warnings to report".
- View / Search Log Files**: A section with the text "Search all the log files using the Log Viewer" and a list of log files:
 - Presentation Services Log
 - Server Log
 - Scheduler Log
 - JavaHost Log
 - Cluster Controller Log
 - Essbase Log
 - Action Services Log
 - Security Services Log
 - Administrator Services Log

The screenshot shows the Log Messages search interface with the following details:

- Log Messages** header
- Search** dropdown menu
- Selected Targets (47)** dropdown
- Date Range**: Most Recent, 1 Days
- Message Types**: Incident Error, Error, Warning, Notification, Trace, Unknown
- Message**: contains
- Search** and **Add Fields** buttons
- View** dropdown menu
- Show** dropdown menu (Messages)
- View Related Messages** dropdown menu
- Export Messages to File** button
- Table of Log Entries**:

Time	Message Type	Message ID	Message
Feb 23, 2013 8:06:02 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:06:03 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:06:55 AM MST	Warning	LIBOVD-40067	Server 2606:b400:2010:504b:8423:c712
Feb 23, 2013 8:07:55 AM MST	Warning	LIBOVD-40067	Server 2606:b400:2010:504b:8423:c712
Feb 23, 2013 8:08:55 AM MST	Warning	LIBOVD-40067	Server 2606:b400:2010:504b:8423:c712
Feb 23, 2013 8:08:57 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:09:00 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:09:01 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:09:08 AM MST	Warning	ADF_FACES...	Attempt to synchronized unknown key: v
Feb 23, 2013 8:09:09 AM MST	Warning		A call to flushChanges on the current MD
Feb 23, 2013 8:09:10 AM MST	Warning	ADF_FACES...	Attempt to synchronized unknown key: v

Understanding Log File Message Levels

Levels for log file messages define the detail and level of importance with which the system writes messages to a log file.

Log file message levels are described in the table to the right.

Level	Description
Incident Error	A serious problem caused by unknown reasons. You can resolve the problem only by contacting Oracle Support. No performance impact.
Error	A problem that requires attention from the system administrator and that is not caused by a bug in the product. No performance impact.
Warning	An action that has occurred or a condition that was discovered that should be reviewed and might require action before an error occurs. No performance impact.
Info	A normal action or event. This could be a user operation, such as "login completed" or an automatic operation such as a log file rotation. This level also includes warning, error, and incident error logging. No performance impact.
Config	Configuration-related messages or problems. This level also includes Info, warning, error, and incident error logging. Low performance impact.
Fine	Trace or debug messages used for debugging or performance monitoring. Typically these messages contain detailed event data that is clear enough to be understood by someone who does not know internal implementation details. This level also includes Config, Info, warning, error, and incident error logging. Small performance impact.
Finer	Fairly detailed trace or debug messages, clear enough to be understood by Oracle Support engineers who have a deep knowledge of the product but might not know full details of the internal implementation. This level also includes Fine, Config, Info, warning, error, and incident error logging. High performance impact.
Finest	Highly detailed trace or debug messages, intended for an Oracle developer working on the product who knows enough details about the implementation of the sub-system that generates the message. This level also includes Finer, Fine, Config, Info, warning, error, and incident error logging. Very high performance impact.

Understanding Log File Rotation

Log file rotation is the creation of new log files, when the file exceeds a specified threshold or date. Take the `MaximumFileSizeKb` setting for the component log configuration file for the Oracle BI Scheduler as an example. Whenever a log file exceeds the size that is specified by this setting, the existing Scheduler log file is renamed, and a new log file is created. Additionally, a log file date that is older than the `MaximumLogAgeDay` setting is deleted.

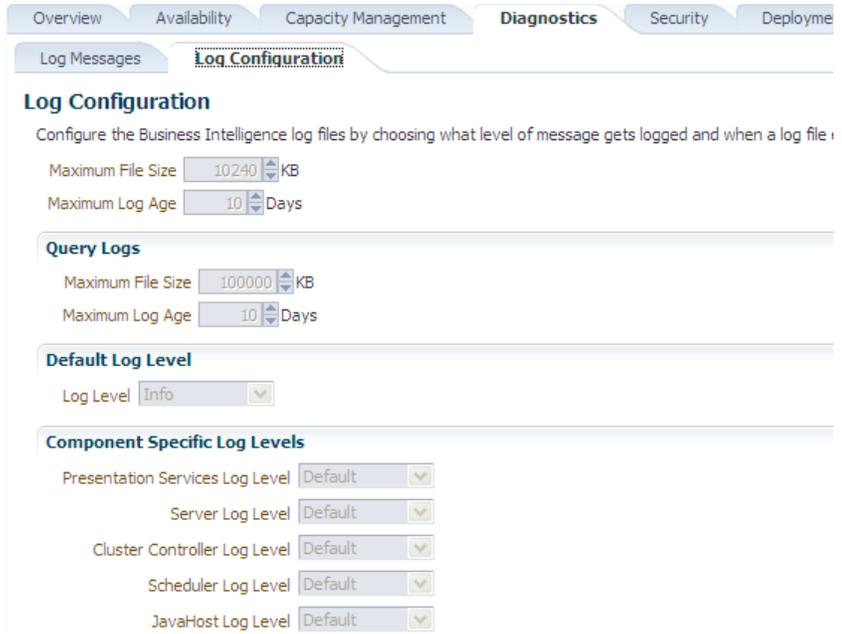
Different BI components have different log file names, and different settings within their log configuration files. For example, the file naming convention for the Scheduler is as follows:

- `nqscheduler.log` — The latest log file.
- `nqscheduler-<n>.log` — The renamed previous log file.
where *<n>* = date and timestamp, for example
`nqscheduler-20100909-2135.log`

Configuring Log File Rotation Policy and Specifying Log Levels

You can configure criteria that determine when a new log file must be created, based on the size of the log file and the age of the log file. You can also specify log levels to determine what level of message the log files contain.

1. Start Fusion Middleware Control and go to the Business Intelligence Overview page.
2. Display the Log Configuration tab of the Diagnostics page.
3. Click **Lock and Edit Configuration**.
4. Complete the appropriate elements. For example, you can specify which log levels to use.
5. Click **Apply**, then click **Activate Changes**.
6. Return to the Business Intelligence Overview page and click **Restart**.



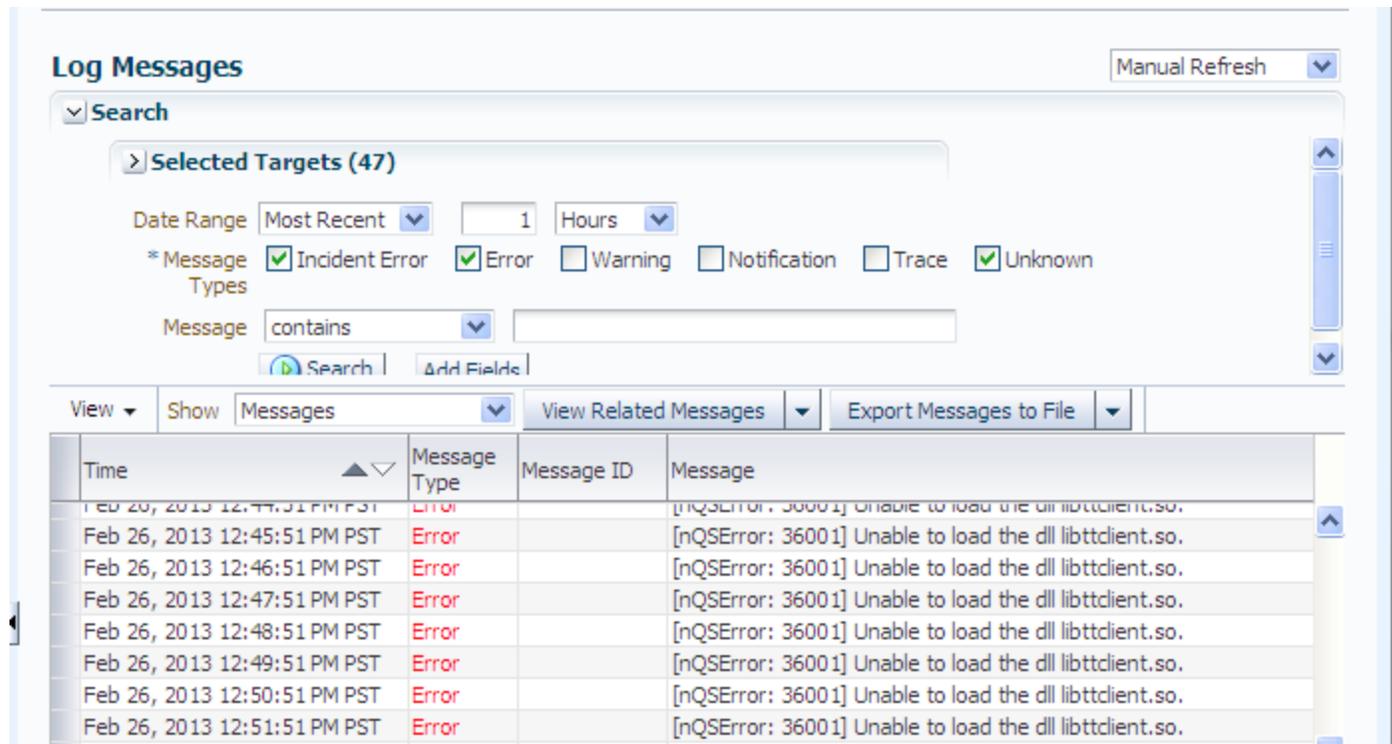
Diagnosing Issues in Oracle Business Intelligence Using the Log Viewer

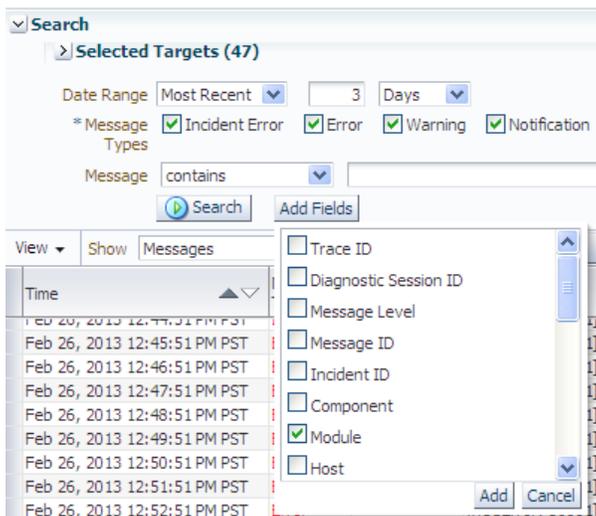
You can use the Log Viewer in Fusion Middleware Control to find messages that can assist you in resolving issues with Oracle Business Intelligence.

1. Start Fusion Middleware Control.
2. Right-click the bifoundation domain and select **Logs**, then select **View Log Messages**.



The Log Messages page is displayed. The Log Viewer collects lines from all log files and displays them on this page. You can filter the lines to view the ones in which you are interested.





3. To start filtering the list, enter search criteria to locate the messages in which you are interested:

- If you know that an error occurred around a certain date, then:
 - a. Set the **Date Range** to **Time Interval**.
 - b. Select the start and end dates for filtering.
- If the error happens continually, then:
 - a. Set the **Date Range** to **Most Recent**.
 - b. Select **Days** and specify a number such as 1 or 3.
- For Message Types, select the following: **Incident Error**, **Error**, **Warning**, and **Notification**. If the number of messages that is returned is too large, then deselect **Notification** to see only errors and warnings.

The advantage of selecting **Notification** is that you can see what Oracle Business Intelligence was doing, which can assist you in determining where something went wrong.

4. To filter for the Oracle Business Intelligence messages:

- a. Click **Add Fields**, then select **Module**, and click **Add**.
- b. Ensure that **Module** is set to **contains**, then enter the following value:

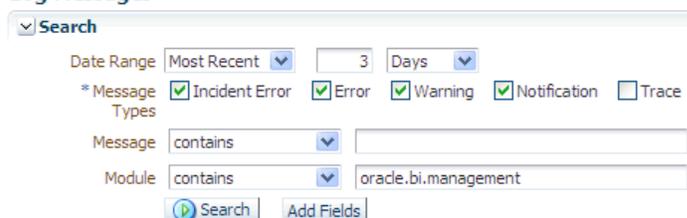
oracle.bi.management

That value specifies the name of the Java package from which all log entries for systems management for Oracle Business Intelligence originate.

5. Click **Search**.

The page lists all log messages that meet the criteria, including the errors and warnings that lead up to the problem that you are diagnosing.

Log Messages



Note: To save a copy of the log messages, click **Export Messages to File**, then select **As Oracle Diagnostic Log Text (.txt)** or other format appropriate to your needs.

View Show Messages View Related Messages Export Messages to File

Time	Message Type	Message ID	Message
Feb 23, 2013 2:02:34 PM PST	Notificat...		BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrinc
Feb 23, 2013 2:02:35 PM PST	Notificat...	OBI-SYSMA...	Summary of current system component statuses; Up: 6; Down: 0;
Feb 23, 2013 5:02:33 PM PST	Notificat...		BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrinc
Feb 23, 2013 5:02:34 PM PST	Notificat...	OBI-SYSMA...	Summary of current system component statuses; Up: 6; Down: 0;
Feb 23, 2013 8:02:33 PM PST	Notificat...		BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrinc
Feb 23, 2013 8:02:34 PM PST	Notificat...	OBI-SYSMA...	Summary of current system component statuses; Up: 6; Down: 0;
Feb 23, 2013 11:02:33 PM PST	Notificat...		BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrinc
Feb 23, 2013 11:02:34 PM PST	Notificat...	OBI-SYSMA...	Summary of current system component statuses; Up: 6; Down: 0;
Feb 24, 2013 2:02:33 AM PST	Notificat...		BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrinc
Feb 24, 2013 2:02:34 AM PST	Notificat...	OBI-SYSMA...	Summary of current system component statuses; Up: 6; Down: 0;

Rows Selected 1 Columns Hidden 21 Total Rows : 95

Feb 23, 2013 /Farm_bifoundation_domain/bifoundation_domain/AdminServer/biadminservlets(11.1.1) (Application Deployment)

Message Level 1 Host IP Address 10.241.89.245
 Relationship ID 0 User <WLS Kernel>
 Component AdminServer Thread ID DmsThread-2
 Module oracle.bi.management.adminservices ECID 0000Jo0hQaD33FHLIuO5yf1H9lvj000002
 Host slc02kxw
 Message BIInstanceStatusMetricMBeanImpl; getServiceStatus: currentPrincipal is null