This document describes common issues that can occur due to configuration settings that must be adjusted. It contains the following topics:

- Section 1, "Troubleshooting Upgrade Issues"
- Section 2, "Troubleshooting Startup and Login Issues"
- Section 3, "Troubleshooting Oracle BAM Web Application Issues"
- Section 4, "Troubleshooting Oracle BAM Server Issues"
- Section 5, "Troubleshooting Oracle BAM Adapter Issues"
- Section 6, "Troubleshooting Oracle BAM ICommand Issues"
- Section 7, "Troubleshooting Oracle BAM Issues With Oracle Enterprise Manager Fusion Middleware Control"
- Section 8, "Troubleshooting Oracle BAM Issues With Oracle Data Integrator"
- Section 9, "Troubleshooting Database Issues"
- Section 10, "Using the Logs"
- Section 11, "Documentation Accessibility"

1 Troubleshooting Upgrade Issues
This section contains information about troubleshooting upgrade issues. It contains the following topics:

- Section 1.1, "Open 10.1.3.x Oracle JDeveloper Project with Oracle BAM sensor actions in Oracle JDeveloper 11g"

1.1 Open 10.1.3.x Oracle JDeveloper Project with Oracle BAM sensor actions in Oracle JDeveloper 11g
When trying to migrate SOA composite project from Oracle JDeveloper 10g to 11g:

Exception occurred during invocation of JCA binding:

```
JCA Binding execute of Reference operation 'writetoBAM' failed due to:
javax.resource.ResourceException:
```

Exception occurred during invocation of JCA binding:

```
JCA Binding execute of Reference operation 'writetoBAM' failed due to:
```
javax.resource.ResourceException: javax.xml.soap.SOAPException: 
S:Server:BAM-06146: Cannot upsert rows in Data Object 
"/Samples/Employees".oracle.bam.adc.api.exceptions.BatchingException: BAM-01500: 
No value specified for key column "_Sales_Number".

Consider the following:

1. Because there were changes on Oracle BAM adapter connection/interaction 
   specification on 11g, Oracle JDeveloper migration process should handle it. If not, 
   re-configure each sensor action and JCA adapter to update with new content of 
   connection and interaction specification.

2. On the RMI authentication failure, check the configuration properties of outbound 
   connection pools to ensure valid information is provided.

3. On the SOAP failure, the exception is related to a missing key for upserting rows 
   into an Oracle BAM data object. Check your Composite XSLT rule for propagating 
   data correctly. In addition, check the SOAP settings for the previous scenarios.

2 Troubleshooting Startup and Login Issues

If your Oracle Business Activity Monitoring software does not run after installation, or 
there are problems with the Start Page, check the following points:

- Section 2.1, "Database is Running and Reachable"
- Section 2.2, "404 Error"
- Section 2.3, "Authentication Failed Exception"
- Section 2.4, "Buttons Grayed Out on the Start Page"

2.1 Database is Running and Reachable

Verify that the database is running and reachable. You should be able to connect to the 
database as system user.

C:\>sqlplus system/welcome@orcl

Error ORA-12154 could indicate that the Oracle TNS Listener service is not running.

If the database is on a remote machine you must run the command on the database 
installed machine, or you should have sqlplus on the local host.

2.2 404 Error

The following 404 error occurs on attempt to start Oracle BAM Web applications:

Error 404--Not Found
From RFC 2068 Hypertext Transfer Protocol -- HTTP/1.1:
10.4.5 404 Not Found

Verify that the port number is correct and the URL is exactly in the following format 
(which is case-sensitive):

http://host_name:port_number/OracleBAM
2.3 Authentication Failed Exception
If Oracle BAM is configured with Oracle Internet Directory, make sure you have the DefaultAuthenticator provider set to OPTIONAL in Oracle WebLogic Server Console, otherwise the authentication fails.

2.4 Buttons Grayed Out on the Start Page
This can happen when the user account is not recognized. The user might be part of a group unknown to Oracle BAM. The known groups are BamAdministrators, BamReportArchitects, BamReportCreators, and BamReportViewers.


3 Troubleshooting Oracle BAM Web Application Issues
This section contains information about troubleshooting issues encountered with the Oracle BAM Active Viewer, Active Studio, Architect, Administrator applications, And the Oracle BAM Event Engine and Report Cache. It contains the following topics:

- Section 3.1, "Loss of Active Data"
- Section 3.2, "Printing Issues"
- Section 3.3, "Unable to Create or View Report With No Permissions on System Folder"
- Section 3.4, "Cannot Configure More Than 50 Prompt Values in a Report"
- Section 3.5, "Not All Values Are Displayed in the Filter Value Browse List"
- Section 3.6, "Action Form Error"
- Section 3.7, "Report Says "Reconnecting" Indefinitely."
- Section 3.8, "Data Object Name Is Different in Oracle BAM Architect and Oracle Enterprise Manager Fusion Middleware Control"
- Section 3.9, "Rows Truncated in List Views"

3.1 Loss of Active Data
Active Data is not pushed to Oracle BAM Reports.

Manually change the Compression setting in the webcache.xml file to set compression to NO under the SITE element:

```xml
<COMPRESSION ENABLED="NO"/>
```

Restart Oracle WebCache after this change.

The compression needs to be turned off because if it is on, then Oracle WebCache will buffer the Oracle BAM active data to a certain threshold size before it compresses the data and returns the data to Oracle BAM Active Viewer. When the compression is disabled for the SITE, Oracle WebCache does not buffer and the active data is seen in Oracle BAM Active Viewer instantaneously.

See also: Section 3.7, "Report Says "Reconnecting" Indefinitely."

If none of the above suggestions resolve your issue:
3.2 Printing Issues
Print layout must be set to Landscape in the Oracle BAM Personalize dialog and in your printer driver.

3.3 Unable to Create or View Report With No Permissions on System Folder
A user assigned to a non-Administrator role may be unable to create or view reports, but has the privileges to do so, and gets the following error:
DATAOBJECTPERMISSIONMISSINGEXCEPTION_ActiveStudio_ReportEditor_EditReport
Exception Message BAM-01257: Insufficient permission to perform the requested action.
This is due to the user not having at least Read permissions on the /System folder in Oracle BAM Architect.

3.4 Cannot Configure More Than 50 Prompt Values in a Report
If you want to configure more than 50 prompt values in a report you must change the RecordsLimitForValueBrowser configuration property in the BAMWebConfig.xml file.
Restart Oracle BAM for the change to take effect.

3.5 Not All Values Are Displayed in the Filter Value Browse List
In configuring filters on string fields, you can browse a list of values to select and filter on. If there are more than 50 values in the field, not all of the values are shown in the list.
You can increase the number of values to display in the list by changing the value for the RecordsLimitForValueBrowser setting in the BAMWebConfig.xml file. The default is 50 values.
Restart Oracle BAM for the change to take effect.
3.6 Action Form Error

The following error occurs when no Action Form Types are found in System>Views>Action Form Templates data object:

SAXPARSEEEXCEPTION_ACTIVESTUDIO_VIEWEDITOR_INPUTS

Be sure to create an entry in the Action Form Template data object before attempting to create an Action Form view.

3.7 Report Says "Reconnecting" Indefinitely

Click Reprompt to refresh the report. This can happen when Oracle BAM Server is stopped or restarted, as in failover.

If the above suggestion does not resolve your issue, contact Oracle Support Services and get a Java script patch along with instructions on how to configure Internet Explorer to generate client side logs.

3.8 Data Object Name Is Different in Oracle BAM Architect and Oracle Enterprise Manager Fusion Middleware Control

Special characters used in the creation of data objects in Oracle BAM Architect will be substituted in the data object name before the name string is shown in the Oracle BAM ADC Performance Summary page in Oracle Enterprise Manager Fusion Middleware Control. This is due to the different naming conventions used by Oracle BAM Architect and Enterprise Manager Monitoring module.

<table>
<thead>
<tr>
<th>Character</th>
<th>DMS Replacement Character</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space &quot; &quot; or Period &quot;.&quot;</td>
<td>Underscore &quot;_&quot;</td>
</tr>
<tr>
<td>Control Character</td>
<td>Underscore &quot;_&quot;</td>
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<td>&quot;&gt;&quot;</td>
<td>&quot;)&quot;</td>
</tr>
<tr>
<td>&quot;&amp;&quot;</td>
<td>&quot;^&quot;</td>
</tr>
<tr>
<td>&quot;&quot; (double quote)</td>
<td>&quot;&quot; (backquote) That is, a backquote replaces a double quote.</td>
</tr>
<tr>
<td>&quot;'&quot; (single quote)</td>
<td>&quot;&quot; (backquote). That is, a backquote replaces a single quote.</td>
</tr>
</tbody>
</table>

3.9 Rows Truncated in List Views

Oracle BAM truncates the data to be shown in list views to 64,000 rows. The ADCMaxViewsetRowCount configuration property in BAMServerConfig.xml controls the number of rows shown in list views, and this value can be changed.

4 Troubleshooting Oracle BAM Server Issues

This section contains information about troubleshooting issues encountered with the Oracle BAM Server. It contains the following topics:

- Section 4.1, "Enterprise Message Source Not Receiving Messages"
4.1 Enterprise Message Source Not Receiving Messages

When setting up enterprise message sources on remote destinations on Oracle WebLogic Server JMS, Global Trust must be set up properly.

See "Enabling Global Trust" in Oracle Fusion Middleware Securing Oracle WebLogic Server for information about setting up Global Trust.

5 Troubleshooting Oracle BAM Adapter Issues

This section contains information about troubleshooting issues encountered with SOA-Oracle BAM integration issues using the Oracle BAM JCA adapter. It contains the following topics:

- Section 5.1, "SOA Server Invalid User Name Exception"
- Section 5.2, "SOA Server Authentication Error With Correct Credential Configuration"
- Section 5.3, "Illegal Argument Exception on Oracle WebLogic Server Console Upon Restart or Editing Deployment of Oracle BAM Adapter"

5.1 SOA Server Invalid User Name Exception

From the SOA Server log, observed the following:

```xml
```

- Use the Oracle WebLogic Server Console to check the Oracle BAM adapter configuration properties for outbound connection pool setting.

- If you were using plain text to store credentials,
  
  Go to Oracle WebLogic Server Console>Deployment>OracleBamAdapter>Configuration>Outbound Connection Pool, and check each connection pool setting for correct user name and password information.

- If you have verified that everything is correct in Oracle WebLogic Server Console, and you have verified that the connection properties are saved into the corresponding Plan.xml file, click Save and try restarting Oracle WebLogic Server (this requirement is due to Oracle WebLogic Server Console behavior, or if you have any pre-existing connection pool instance opened).

- If you were using credential mapping to store user name and password, see "Configuring Credential Mapping" in Oracle Fusion Middleware Administrator’s Guide for Oracle SOA Suite.
5.2 SOA Server Authentication Error With Correct Credential Configuration

With SOA and BAM deployed on two separate WLS domain.

Security Exception Observed on RMI invocation from SOA to BAM ADC EJB

From SOA Server Log:

Caused by: java.lang.SecurityException: [Security:090398]Invalid Subject: principals=weblogic, Administrators ... 
Caused by: java.lang.SecurityException: [Security:090398]Invalid Subject: principals=weblogic, Administrators
at weblogic.security.service.SecurityServiceManager.seal(SecurityServiceManager.java:835) ...

From BAM Server Log:

java.lang.SecurityException: [Security:090398]Invalid Subject: principals=weblogic, Administrators
at weblogic.security.service.SecurityServiceManager.seal(SecurityServiceManager.java:835)
at weblogic.security.service.SecurityServiceManager.getSealedSubjectFromWire(SecurityServiceManager.java:524)
at weblogic.rjvm.MsgAbbrevInputStream.getSubject(MsgAbbrevInputStream.java:315)
at weblogic.rmi.internal.BasicServerRef.acceptRequest(BasicServerRef.java:875)
at weblogic.rmi.internal.BasicServerRef.dispatch(BasicServerRef.java:310)
Truncated. see log file for complete stacktrace

You must set up Trusted Domain on both Oracle WebLogic Server domains.

Go to Oracle WebLogic Server Administration Console>Respected Domainssoainfra or bam>Security and do the following:


2. Click Advanced, enter the desired password in the Credential and Confirm Credential fields, and click Save.

3. Repeat this configuration change for both domains using the same password value.

4. Restart both Oracle WebLogic Servers.

5.3 Illegal Argument Exception on Oracle WebLogic Server Console Upon Restart or Editing Deployment of Oracle BAM Adapter

Using integrated SOA deployment from an Oracle JDeveloper installation.

Upon start of the Oracle BAM Adapter deployed on the Oracle WebLogic Server administrative server, Oracle WebLogic Server Console displays the following error:
java.lang.IllegalArgumentException: [J2EE Deployment SPI:260134] Unable to identify application for start operation.

The SOA deployment shipped with Oracle JDeveloper will have Oracle BAM Adapter in non-active status by default, to save the load and start up time on SOA Server for this scenario.

Once you retarget the Oracle BAM Adapter component to the Oracle WebLogic Server administrative server, the component will start automatically.

1. Go to Oracle WebLogic Server Console>Deployment>OracleBamAdapter.
2. Select the component (OracleBamAdapter) you would like to start.
3. Navigate to the Target tab.
4. Select the Server (Admin Server), and click Save.

6 Troubleshooting Oracle BAM ICommand Issues

This section contains information about troubleshooting issues encountered with the Oracle BAM ICommand utility. It contains the following topics:

- Section 6.1, "JDBC Connection Pool Error"
- Section 6.2, "ICommand Fails to Connect With Oracle BAM Server"

6.1 JDBC Connection Pool Error

If you encounter error warnings in Oracle BAM ICommand or Oracle BAM Server such as:

```
weblogic.jdbc.extensions.PoolDisabledSQLException:
weblogic.common.resourcepool.ResourceDisabledException: Pool BAMDataSource is disabled, cannot allocate resources to applications
```

Then the maximum connection pool capacity of BAMDataSource should be increased by logging into Oracle WebLogic Server Console>Datasources>BAMDataSource>Configuration-Connection Pool>Maximum Capacity, and set BAMDataSource to 200 (default 100).

6.2 ICommand Fails to Connect With Oracle BAM Server

When Oracle BAM is installed, ICommand looks for the Oracle BAM server on port 9001 by default. If the Oracle BAM server port number is changed from the default (9001) during the setup and configuration of Oracle BAM using the Oracle Weblogic Configuration Wizard, then the user must manually change the port number from 9001 to the new port number in the file BAMICommandConfig.xml.

The property to change is

```
<ADCServerPort>9001</ADCServerPort>
```

The BAMICommandConfig.xml file is located in ${ORACLE.HOME}/bam/config.
7 Troubleshooting Oracle BAM Issues With Oracle Enterprise Manager Fusion Middleware Control

This section contains information about troubleshooting issues encountered with Oracle BAM content on Oracle Enterprise Manager Fusion Middleware Control. It contains the following topics:

- Section 7.1, "Oracle BAM Security Roles and Policies Are Not Displayed"

7.1 Oracle BAM Security Roles and Policies Are Not Displayed

In Oracle Enterprise Manager Fusion Middleware Control page for Security, the Oracle BAM application roles and policies are not displayed until you do a search for roles or policies by clicking Search.

8 Troubleshooting Oracle BAM Issues With Oracle Data Integrator

This section contains information about troubleshooting issues encountered with Oracle BAM content on Oracle Enterprise Manager Fusion Middleware Control. It contains the following topics:

- Section 8.1, "Unable to Connect With Oracle Data Integrator"

8.1 Unable to Connect With Oracle Data Integrator

Verify that you have the correct versions of Oracle Data Integrator that are certified for use with Oracle BAM. These are Oracle Data Integrator 10.1.3.4 and 10.1.3.5.

Verify that the database and Oracle BAM Server are running when the integration configuration script is executed.

9 Troubleshooting Database Issues

This section contains information about troubleshooting issues encountered with the Oracle Database while using Oracle Business Activity Monitoring. It contains the following topics:

- Section 9.1, "Unable to Extend ORABAM Tablespace"
- Section 9.2, "Data Corruption Symptoms"

9.1 Unable to Extend ORABAM Tablespace

The following CacheException occurs,

```java
CacheException: BAM-01265: An error "ORA-01653: unable to extend table DEV_ORABAM.19f9d-6062 by 128 in tablespace DEV_ORABAM"
```

Check if DEV.ORABAM has autoextend set and if enough disk space exists. If both are not issues, then one needs to add a new datafile to the tablespace to resolve the issue.
9.2 Data Corruption Symptoms

If there are any symptoms of data corruption, check the JDBC Data Source Statement-Cache-Size setting. It must be set to zero for Oracle BAM.

For single instance database installs, the statement cache size will already be set to 0 (zero) by default. Do not change this to a non-zero value.

For installs against a RAC database, the statement cache size must manually be set to 0 for each RAC data source; otherwise, data corruption may occur and the Oracle BAM Active Data Cache may need to be restored from a backup (or reinitialized if no backups are available).

10 Using the Logs

Oracle Business Activity Monitoring logs are configured and viewable using Oracle Enterprise Manager Fusion Middleware Control. See Oracle Fusion Middleware Administrator’s Guide for Oracle SOA Suite for more information.

11 Documentation Accessibility

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