

IBM TRIRIGA Application Platform
3.8.0

Administrator Console User Guide



Note

Before using this information and the product it supports, read the information in [“Notices” on page 33.](#)

This edition applies to version 3, release 8, modification 0 of IBM® TRIRIGA® Application Platform and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Administering with the Administrator Console

Analyzing and optimizing the health of the system are primary functions for a system administrator. IBM TRIRIGA developed the Administrator Console to facilitate these tasks. The IBM TRIRIGA Administrator Console categorizes data into segments to help a system administrator find information and make changes to it quickly and effectively. The Administrator Console is a centralized location for viewing and editing system settings to optimize system health.

Chapter 2. Signing in to the Administrator Console

The Administrator Console is a centralized location for viewing and editing system settings to optimize system health. Many of the settings in the Administrator Console are linked to IBM TRIRIGA properties.

Before you begin

You must have access to the Administrator Console. Another administrator can grant you access by using the Admin User Manager.

Procedure

1. Open a web browser and enter the following value into the address field:

```
http://hostname:port/context_path/html/en/default/admin
```

Where *hostname:port* is the value for your environment and *context path* is the directory in which IBM TRIRIGA is installed.

2. If you are not already logged in to IBM TRIRIGA, enter your user name and password, and click **Login**.

Chapter 3. Administering agents and processes

In the Administrator Console, you can use the **Agent Manager** object to configure the process agents. You can use the **Threads Manager** object to control the threads that are started for each agent, and the **Workflow Agent Manager** object designate users for a workflow agent.

Agent administration

Agents perform background processes, such as cleaning up data, running workflows, and calculating formulas. You can manage and configure your agents in the Agent Manager object of the Administrator Console.

Multiple instances of the Workflow Agent and the Data Import Agent can run on the IBM TRIRIGA database. All other agents are single-instance agents, and problems can occur if more than one instance of a single-instance agent runs simultaneously.

Do not do data loading or integrations when the Cleanup Agent is running. The Cleanup Agent can throw deadlocks if hierarchy data is being imported while it is running

The Agent Manager identifies the agents that are currently running on all servers. You can request any running agent to stop, or you can start an agent on any active server. If you do not specify a server when you start an agent, the agent is started on the server that you are signed on to. To start an agent on the next available server, in the Start On column for the agent, enter <ANY>.

If an agent is running when the server goes down, the agent starts automatically when the server is restarted.

The LICENSE_METRIC table records the number of concurrent users for each product license. You can check tables by using the Database Query object of the Administrator Console. The LICENSE_METRIC table takes a snapshot every 10 minutes. The amount of data in the table is normally small. If you want to trim the table, consult your security administrator about your information retention policy.

Agent configuration tables

The Agent Startup and Agent Registry tables contain the details that help you to configure the process agents in IBM TRIRIGA.

The configuration that determines the starting of agents is stored in the AGENT_STARTUP table of the IBM TRIRIGA database.

When a request to start an agent is made, an entry is added to the AGENT_REGISTRY table. When an agent stops, its status in the registry is updated. The Agent Registry table is available to all servers in the installation and is the source of the current activity information that is displayed in the Agent Manager object.

When the status of an agent changes, an INFO entry is written to the server log and contains information about the state transition, for example:

```
INFO [com.tririga.platform.agent.AgentManager](http-0.0.0.0-8001-3) Start requested
for CleanupAgent on server337.
INFO [com.tririga.platform.agent.BaseAgentThread](CleanupAgent) CleanupAgent on ser
ver337 is now running.
INFO [com.tririga.platform.agent.AgentManager](http-0.0.0.0-8001-3) Stop requested
for CleanupAgent on server337.
INFO [com.tririga.platform.agent.BaseAgentThread](AgentHeartbeatThread) CleanupAgen
t on server337 is now stopped.
```

The AGENTS_NOT_ALLOWED property in the TRIRIGAWEB.properties file for a server identifies agents that cannot be started on that server. The Agent Manager does not allow a user to start an agent that is listed in the AGENTS_NOT_ALLOWED property for that server where the properties file resides. If a user tries to start an agent that is in the AGENTS_NOT_ALLOWED property, an INFO message is written to the

server log and the agent is not started. If an entry in the AGENTS_NOT_ALLOWED property does not correspond to an existing agent, a warning message is written to the server log.

The Agent Startup table includes the agent type, the host name, and the configuration. The Agent Startup table is the source of the TRIRIGAWEB.properties information that is displayed in the Agent Manager.

If a single-instance agent is started while another instance of the same agent is running, the request fails, and a warning is written to the log file.

Threads management

To control the number of threads that are started for each agent, use the Threads Manager in the Administrator Console.

You can also use the Threads Manager to control the number of threads that are allocated to the IBM TRIRIGA CAD Integrator - Publisher (AutoCAD) when a drawing is attached. A single thread requires one connection to the database.

The total number of threads for any one agent cannot be more than 100. Large values for maximum threads can slow performance across the entire system. As a starting point, a typical maximum number of threads across all servers connected in a system should not be set to more than two to three times the core CPU core count of the database server.

For example, if the database has two Dual Core Xeon CPUs, the core CPU count is four. If a single workflow agent is connected, a maximum thread limit of eight is a starting point to tuning threads. If two workflow agents are connected to the same database, each server would have four maximum threads, for a total of eight between the two.

Workflow agents

Workflow agents pick up and process workflow events that are published by their designated users and groups. You can designate IBM TRIRIGA application users and groups for a workflow agent in the Workflow Agent Manager object of the Administrator Console.

The same user or group can be designated to multiple workflow agents. Priority is given to users and groups that have an agent that is configured for them. You can restrict an agent to the User and Group List, which prevents the agent from processing events that are posted by unassigned users and groups. You can also reset the restricted User and Group List settings, which allows you to remove settings for a server that is no longer in the current environment.

When an agent is configured for specific users, it picks up valid user events in the following order:

1. If the agent is configured exclusively for one or more users, it picks up any available events.
2. If the agent is configured for users non-exclusively, the agent keeps other agents from processing events for the specified users while it processes any available events for the specified users and other users.
3. If an agent is not configured for specific users, it picks up any available events as it is unrestricted.

Valid events are events that satisfy the following conditions:

- The event is not currently being processed.
- No other event is being processed for the same record.
- The event is not for a user that already has the maximum number of events being processed by this agent.

The User and Group List in the Workflow Agent Manager is initially empty. To add users, you click the **Add Users** action. After you select users and click **OK**, the names are displayed in the User and Group List. To add groups, you click the **Add Groups** action. After you select groups and click **OK**, the names are displayed in the User and Group List.

After names are added to this list, the **Restrict to User and Group List** action appears. Click this action to prevent the agent from processing events by users and groups who are not assigned to this agent. The agent is exclusive to the assigned users and groups.

To remove the restriction on the agent, click the **Do Not Restrict to User and Group List** action. The agent then processes events that are not only owned by its users and groups, but also owned by users and groups who are not assigned to any agent.

If multiple workflow agents exist, the Settings for other Agents section shows a read-only list of agents that are not running on the current application server.

Tip:

You run multiple workflow servers to allow workflow processing to be done in a manner that is fair to all users, not necessarily to increase the throughput of the number of workflows that are completed.

Adding more workflow agents to an environment can slow down processing, and cause undesirable results if workflows are not written with multi-threading in mind.

It is a best practice to assign secondary workflow agents to specific power users that tend to run more workflows than normal users. If the secondary workflow agents are left wide open, a set of workflow instances are picked up in parallel, and some can be processed out of order. Increasing the number of threads on a single process server results in higher throughput than splitting the threads across two servers. Typically, the bottleneck of performance in an environment is the database server rather than the process servers.

If you already have a system that is deployed with multiple workflow agents, consider either stopping the secondary agents and increasing the threads on the primary workflow agent server to be the sum of the threads across the other servers, or restricting the secondary agents so that they are exclusive for the set of power users.

Chapter 4. Managing databases

The Database Manager object in the Administrator Console displays database settings and used database space. You can view the actual time on the database and server, and you can run cleanup tools and reports. For IBM DB2® and Oracle Database, the database character set and character length semantic are displayed. For Microsoft SQL Server, the database collation and whether multibyte support is enabled are displayed.

Viewing Oracle AWR reports

If you are using Oracle Database, you can view an Automatic Workload Repository (AWR) report for the two most recent snapshots of the Oracle database in the IBM TRIRIGA Administrator Console. The AWR report is displayed in the Database Manager object of the Administrator Console in a section labeled **Latest Oracle AWR Report**.

Before you begin

To view the AWR report in the TRIRIGA Administrator Console, you must have sysdba access to the database schema.

Procedure

1. Select **Database Manager** in the Administrator Console..
2. If you see a message such as `The database name schema can not select from one or more of the following Oracle sys tables`, follow the instructions on the screen for running the grant commands. The commands provide the permissions to the schema so that the Oracle AWR report is displayed directly in the TRIRIGA Administrator Console.

Results

The AWR report is displayed after the **Database Admin Tasks** and **Database Space** sections in a section labeled **Latest Oracle AWR Report**. The report might take a short time to generate and display.

What to do next

The AWR report is included in the error report file bundle with other troubleshooting data that is created when you select **Must Gather Tool** in the Administrator Console.

Chapter 5. Administering DataConnect jobs

The DataConnect object in the Administrator Console displays business objects that have DataConnect staging tables. You can also use the DataConnect object to manage DataConnect jobs.

Business objects with staging tables

DataConnect tasks interpret data from external sources and places the data into staging tables. In the DataConnect object of the Administrator Console, you can view the business objects that have staging tables.

These business objects can be used in a DataConnect task to move data or update data from an external source.

When you expand the data, you can view the fields that are part of the staging table. These fields are shown in the format *IBM TRIRIGA field name-Database field name*, for example, `triPaidByParentLevel0TX-triPaidByParentLevel2`. Field definitions are useful for identifying the corresponding staging table fields for inbound data.

DataConnect jobs

DataConnect jobs are set up outside of IBM TRIRIGA, for example, in the Integration object. The DataConnect agent checks for ready jobs in the DC_JOB table.

In the Administrator Console, in the DataConnect object, you can manage existing DataConnect jobs. If a job is in the ready state, that job is run during the next DataConnect agent cycle. You can place a new job into the ready state by clicking **Ready Job**.

If the workflow completes but the job does not complete, the job is placed in a waiting or processed state, and you can fail that job. A failed job is not deleted but can be placed into the ready state by clicking **Retry Job**.

When you delete a job, both the job and its staging table entries are deleted, and the job cannot be tried again. You cannot delete a job that is being processed.

When you force a cleanup, obsolete and completed jobs are deleted if they are older than a specified number of days. This number of days is set in the DC_HISTORY_RETENTION_DAYS property of the TRIRIGAWEB.properties file.

Chapter 6. Administering logs

Several tools in the Administrator Console facilitate the management of logs in IBM TRIRIGA Application Platform. You can use the **Platform Logging** object to enable real-time debug-level logging for platform features. You can use the **Error Logs** object to view a summary of errors that occurred, including database errors and major exceptions.

Platform logging

If you need to troubleshoot system problems, you can use the Platform Logging object of the Administrator Console to enable debug-level logging at real time. For example, if workflows are slow, you can enable debugging for the workflow logs. You can also check the performance timings by using the Platform Logging object of the Administrator Console, or by using the Performance Analyzer.

You set logging level in the Administrator Console, in the Platform Logging object. You can then test and analyze performance, such as extended formula performance, query performance, and workflow performance. Any changes that are made in the Platform Logging object are kept in temporary memory. When the server is restarted, the system reverts to the `log4j.xml` configuration settings.

You can roll most of the log files, which renames the current log file with the current date and time, and starts a new log file.

You can add your own custom log categories in the `CustomLogCategories.xml` configuration file that is in the `config` folder of the IBM TRIRIGA installation, for example, `C:\Tririga\config\CustomLogCategories.xml`.

Note: In the Performance Monitor object in the Administrator Console, from the Key Metrics section, you can also click **Record to Log** to save the current metrics (such as heap memory utilization) to a log file for future analysis. This log file is named `systemmetrics.log`.

Checking the performance timing logs

As an administrator or application developer, you want to know why performance is slow. You can check the performance timings by using the Platform Logging object of the Administrator Console, or by using the Performance Analyzer.

About this task

To use the Performance Analyzer in the product, go to **Tools > Utilities > Performance Analyzer Manager**. The Performance Analyzer is a platform tool that allows you to enable performance logging, and helps you to analyze and diagnose issues in system performance without importing the information into a spreadsheet or database. For more information on the Performance Analyzer, see [Performance Analyzer on the IBM TRIRIGA wiki](#).

To use the Platform Logging object of the Administrator Console, perform the following procedure. You can enhance the analysis of the performance timings information by limiting the number of users while you test.

Procedure

1. In the Administrator Console, open the Platform Logging object.
2. In the right pane, under the Performance Timings category, select the objects whose performance you want to test.
3. If you need multiple steps, in the **Write to log** field, add a time stamp to the log file.
4. In the **Logging Actions** section, click **Apply**.

Results

All options that you select are saved in a tab-delimited file called `performance.log`.

What to do next

You can import the information into a spreadsheet or database, and analyze this data. For example, you can sort the spreadsheet columns by duration, and view the longest-running queries.

The server log file

The `server.log` file contains messages that can help you to debug your system. A message in the log file can be an error, a warning, an information-only message, or a debug message. You can configure the level of information you see in this log by using the **log4j** command for your server.

Because of the large volume of information you might encounter in a log, do not set logging to debug level in run time.

The segments in the `server.log` file can be followed by a Java stack trace. These lines in the `server.log` file begin with `at com.tririga...`

Data Modeler error messages

The `server.log` file contains error messages that relate to the Data Modeler.

State does not exist in BO

Log Type: Exception Header

```
ERROR com.tririga.platform.metadata.MetadataNotFoundException:  
No state named '$$$' exists on this Business Object:
```

Resolution area

Data Modeler

Issue

A state is found in the metadata that was removed from the system.

Suggested action

In the Data Modeler, review the business object in question. Revise and republish the business object to synchronize the metadata.

Example

The 'new' state was removed from the system and is now invalid.

```
ERROR  
[com.tririga.design.web.process.smartrecord.SmartSectionActions]  
com.tririga.platform.metadata.MetadataNotFoundException:  
No state named 'new' exists on this Business Object:  
BoImpl[name=cstTestBusinessObject,id=10003454,module=ModuleImpl  
[name=Test Module,id=21218]]
```

Years cannot be negative

Log Type: Exception Header

```
ERROR DurationException: Years cannot be negative.
```

Resolution area

Data Modeler

Issue

The end date is before the start date, or the end date is null.

Suggested action

Find the duration formula and look for the start date and end date values.

Example

```
ERROR
[com.tririga.architecture.util.Duration]
EXCEPTION com.tririga.architecture.util.DurationException:
Years cannot be negative.
```

Dependency of field not found

Log Type: Exception Header

```
WARN A dependency of this field could not be found:
```

Resolution area

Data Modeler

Issue

A formula on a business object is not properly stated.

Suggested action

Identify the business object and field, update the formula in Data Modeler, and republish the business object.

Example

The formula for the **triContractPaymentsNU** field, on the triRealEstateContract business object, in the triContract module, does not evaluate.

```
WARN
[com.tririga.platform.metadata.domain.BoImpl]
A dependency of this field could not be found:
BoFieldImpl[name=triContractPaymentsNU,id=2373,Section=BoSectionImpl
[name=RecordInformation,id=BoSectionId[categoryId=1,subCategoryId=8],
Business Object=BoImpl[name=triRealEstateContract,id=10002490,module=
ModuleImpl[name=triContract,id=21]]]] [MID-3164363956]
```

Formula for field not parsed

Log Type: Exception Header

```
Applying default formula. Could not parse formula for field:
```

Resolution area

Data Modeler

Issue

A formula on a business object is not properly stated.

Suggested action

Identify the business object and field, update the formula in Data Modeler, and republish the business object.

Example

The formula for the **triFasbPVofRentNU** field, on the triRealEstateContract business object, in the triContract module, does not evaluate.

```
WARN
[com.tririga.platform.metadata.domain.BoFieldImpl]
Applying default formula. Could not parse formula for field:
BoFieldImpl[name=triFasbPVofRentNU,id=2375,Section=BoSectionImpl
[name=RecordInformation,id=BoSectionId[categoryId=1,subCategoryId
=8],Business Object=BoImpl[name=triRealEstateContract,id=10002490,
module=ModuleImpl[name=triContract,id=21]]]] [MID-2514886854]
```

Error getting field for SO

Log Type: Exception Header

```
WARN Error getting field for SO - field not found.
```

Resolution area

Data Modeler or Form Builder

Issue

Fields cannot be loaded for a business object, because the field metadata does not exist. A business object has a defined field, but that field does not exist in the system.

Suggested action

Remove the field from the business object. Review all mappings and forms for that business object. Revise and republish the necessary objects.

Example

The triCommunicationRecord business object has a **cstMatchedSAMTX** field that is invalid.

```
WARN
[com.tririga.design.smartobject.dataaccess.SmartObjectAttributeDAOAnsi]
Error getting field for SO - field not found.
Section='RecordInformation' Field='cstMatchedSAMTX' From SO ID='4895427'
name='null' BO name='triCommunicationRecord' id=10004546, Module id=20820
[MID-3333779126]
```

Error processing GUI metadata mapping

Log Type: Exception Header

```
WARN Error processing GUI Metadata mapping.
```

Resolution area

Data Modeler or Form Builder

Issue

The Form field does not exist for a form mapping, or a form mapping references a field on a business object that does not exist.

Suggested action

To remove the field from the form mapping, revise and republish the form. If multiple forms exist for a business object, review the workflow and ensure that the business process is followed for the proper forms.

Example

In the **cstTicket - Synchronous - OnChange** workflow, during the **Do Not Require Steps to Reproduce** task, the form is not updated because the **Steps to Reproduce** field does not exist.

```
WARN
[com.tririga.platform.workflow.template.guiametamap.GUIFieldMap]
Error processing GUI Metadata mapping. WFTaskStepImpl.WFTaskStepRO[137224,
Do Not Require Steps to Reproduce,Modify Metadata,23,
WFTemplateImpl.WFTemplateRO[ID=14565895,Version=5,Name=cstTicket
- Synchronous - OnChange Type]]. MapEntryBase[mapId=137224,wfTemplateId=
14565895,wfTemplateVersion=5,guiTabName=NewGeneral,guiSectionName=General,
guiFieldName=Steps to Reproduce,propertyValue=false,taskMapData=<null>,
initialized=true]. Caused by: com.tririga.platform.metadata.
MetadataException: No field id found with name: Steps to Reproduce.
Section: General Tab: NewGeneral GUI Name: HelpDeskTicket[MID-1004518520]
```

Failed to obtain metric category

Log Type: Exception Header

```
WARN Failed to obtain a list of triMetricCategory from application metadata
repository. This error indicates the platform version is ahead of the appli
```

```
cation version. The system is expecting the new metadata structure that does not exist in the current application version.
```

Resolution area

Data Modeler

Issue

The Report Manager can run metric reports, but the application does not include the business objects that are required to support the functionality.

Suggested action

When you want to implement IBM TRIRIGA Workplace Performance Management, upgrade the application to 9.6 or higher. If you are not using IBM TRIRIGA Workplace Performance Management, this warning can be ignored.

Example

```
WARN
[html.en.default.reportTemplate.reportTemplateDesc]
Failed to obtain a list of triMetricCategory from application metadata repository. This error indicates the platform version is ahead of the application version. The system is expecting the new metadata structure that does not exist in the current application version.[MID-2565267038]
```

Conflict of object names

Log Type: Exception Header

```
WARN Name of object being saved conflicts with existing object. Name: ''.
```

Resolution area

Data Modeler

Issue

The user attempted to save a record that has the same unique name as an existing record.

Suggested action

Identify the business object with conflicts and validate the unique identifier that is used for the mapped name is valid. If not, update the mapped name and republished the business object. This update does not change the names of existing records. Review the workflows that create records for the business object and ensure that the proper data is mapped into the create task for the record to be uniquely identified when the record is created.

Example

A record for the cstBidDocument business object in the Bid module is saved with the name ''.

```
WARN
[com.tririga.platform.smartobject.service.BaseSmartObjectService]
Name of object being saved conflicts with existing object. Name: ''.
Existing object: SmartObjectImpl[ID=10650471,Business
Object=BoImpl[name=cstBidDocument,id=10003095,
module=ModuleImpl[name=Bid,id=35]]] New object being saved:
SmartObjectImpl[ID=13120040,Business Object=BoImpl[name=cstBidDocument,
id=10003095,module=ModuleImpl[name=Bid,id=35]]][MID-317597477]
```

No business object mapping found

Log Type: Exception Header

```
WARN No BO Mapping (IBS_SPEC_TYPE_FIELD_MAP) found for BO:
```

Resolution area

Data Modeler

Issue

A business object is defined but might not be in a valid published state.

Suggested action

Identify and republish the business object.

Example

```
WARN
[com.tririga.platform.metadata.dataaccess.BoDaoImpl]
No BO Mapping (IBS_SPEC_TYPE_FIELD_MAP) found for BO:
BoImpl[name=Inbox Folder,id=103516,module=ModuleImpl[name=Mail,id=17]]
This is typically required in order for a BO to be published.
[MID-1159340835]
```

Not adding field to section

Log Type: Exception Header

```
WARN Not adding field with name '$$$' to section :
```

Resolution area

Data Modeler

Issue

A business object has a field that is not linked with a database column.

Suggested action

Identify the business object and field. Revise and republish the business object.

Example

The Bid Response Analysis Line Item business object cannot handle the **DM_FILE_NAME** field in the **Documents** section.

```
WARN
[com.tririga.platform.metadata.dataaccess.BoDaoImpl]
Not adding field with name 'DM_FILE_NAME' to section :
BoSectionImpl[name=Documents,id=BoSectionId[categoryId=2,subCategoryId=1],
Business Object=BoImpl[name=Bid Response Analysis Line Item,id=10000045,module=ModuleImpl[name=Line Item,id=27]]] Reason: Field, 'DM_FILE_NAME' is not backed by a database field.[MID-1778354461]
```

UOM source is not UOM managed.

Log Type: Exception Header

```
WARN The UOM Source for this field is not UOM Managed.
```

Resolution area

Data Modeler

Issue

A field is identified to have a Unit of Measure source field, but the source field does not store units of measure.

Suggested action

Identify the business object and field, update the UOM Source in Data Modeler, and republish the business object.

Example

The formula for the **triDefaultCapacityNU** field, on the triSpace business object, in the Location module, does not evaluate because one of the fields used as a source UOM (**triCapacityNU**) does not store UOM.

```
WARN
[com.tririga.platform.metadata.domain.BoFieldImpl]
The UOM Source for this field is not UOM Managed. This field:
BoFieldImpl[name=triDefaultCapacityNU,id=1188,
Section=BoSectionImpl[name=RecordInformation,id=BoSectionId[categoryId=1,
subCategoryId=6],Business Object=BoImpl[name=triSpace,id=10002873,
module=ModuleImpl[name=Location,id=6]]]] UOM Source Field:
BoFieldImpl[name=triCapacityNU,id=1119,
```

```
Section=BoSectionImpl[name=RecordInformation,id=BoSectionId[categoryId=1,
subCategoryId=6],Business Object=BoImpl[name=triSpace,id=10002873,
module=ModuleImpl[name=Location,id=6]]][MID-276069112]
```

Business object does not exist

Log Type: Exception Header

```
WARN triThreshold Business Object does not exist.
```

Resolution area

Data Modeler

Issue

The Report Manager can run Metric Reports, but the application does not include the business objects that are required to support the functionality.

Suggested action

When you want to implement IBM TRIRIGA Workplace Performance Management, upgrade the application to 9.6 or higher. If you are not using IBM TRIRIGA Workplace Performance Management this warning can be ignored.

Example

```
WARN
[html.en.default.reportTemplate.reportTemplateDesc]
triThreshold Business Object does not exist.[MID-75369837]
```

Invalid locator metadata

Log Type: Exception Header

```
WARN Trouble setting the locator field because the locator metadata is
invalid; setting with the linked object's name instead.
```

Resolution area

Data Modeler or Workflow Builder

Issue

The Data Modeler uses a field for a locator that is different from the field that is mapped into the field in a workflow.

Suggested action

Review the field that is used in the Data Modeler for the locator to ensure the proper mapping. Update and republish the mapping. Locator fields are sometimes used for multi-object mappings and this warning might be seen in this scenario and can be ignored.

Example

The Notification business object in the Mail module has a RefObject locator. The RefObject locator is mapped to the linked record name instead of the identified field from the Data Modeler. This warning can be ignored.

```
WARN
[com.tririga.platform.smartobject.domain.field.LocatorField]
(WFA-2.5:1837189 - 13119943 APPROVE_HIDDEN:14821226 IE=14821226)
Trouble setting the locator field because the locator metadata is invalid;
setting with the linked object's name instead.
Locator field: BoFieldImpl[name=RefObject,id=1021,
Section=BoSectionImpl[name=AdditionalDetail,id=BoSectionId[categoryId=1,
subCategoryId=6],Business Object=BoImpl[name=Notification,id=107324,
module=ModuleImpl[name=Mail,id=17]]][MID-1263122157]
```

UOM source does not exist

Log Type: Exception Header

```
WARN UOM Source for field does not exist:
```

Resolution area

Data Modeler

Issue

A field has a source units of measure (UOM) field that is defined, but the source field cannot be found.

Suggested action

Review the field and ensure that the proper UOM definitions exist. Revise and republish the business object.

Example

The **triLtBrokerageCommissionNU** field, on the triAssetLease business object, in the triContract module has an invalid UOM source.

```
WARN
[com.tririga.platform.metadata.domain.BoFieldImpl]
UOM Source for field does not exist:
BoFieldImpl[name=triLtBrokerageCommissionNU,id=1560,
Section=BoSectionImpl[name=RecordInformation,id=BoSectionId[categoryId=1,
subCategoryId=8],Business Object=BoImpl[name=triAssetLease,id=10008550,
module=ModuleImpl[name=triContract,id=21]]] This is being allowed for
backward compatibility, but will likely cause issues in further processing.
The Business Object Field should be fixed to point to a valid UOM Source.
[MID-769296686]
```

Missing expression

Log Type: Exception Header

```
WARN Expression is missing for . boId = ##### Field = #####
```

Resolution area

Data Modeler

Issue

An extended formula is indicated but is not defined, or a variable is not defined.

Suggested action

Use the SQL statements to identify the business object and field:

```
select * from ibs_spec_type where spec_template_id=#####;
```

Update and publish.

triTimeZonesCL field does not exist

Log Type: Exception Header

```
WARN com.tririga.platform.smartobject.InvalidFieldRequestException:
No field named 'triTimeZonesCL' exists on this Business Object in the
general sections:
```

Resolution area

Data Modeler

Issue

An application is attempting to use the scheduling custom tasks in workflow, but the calling business object does not have the **triTimeZonesCL** field, which is required to properly use the functionality.

Suggested action

Revise the identified business object and add the **triTimeZonesCL** field.

Example

The `cstTimeCalculator` business object in the `triHelper` module is missing the `triTimeZonesCL` field.

```
WARN
[com.tririga.architecture.web.process.reserve.ReserveUtils]
com.tririga.platform.smartobject.InvalidFieldRequestException: No field
named 'triTimeZonesCL' exists on this Business Object in the general
sections:BoImpl[name=cstTimeCalculator,id=10005047,
module=ModuleImpl[name=triHelper,id=21720]]
```

No value found single lookup

Log Type: Exception Header

```
WARN No value found in single lookup
```

Resolution area

Data Modeler

Issue

An HTML form report attempted to access a field that does not exist in the underlying business object.

Suggested action

Edit the HTML form, look for the section and field name that is referenced in the error, and correct the field.

Example

```
WARN
No value found in single lookup using XPathExpr:
'//Project-Project-RecordedBy//PeopleFullName'
```

Workflow builder error messages

The `server.log` file contains error messages that relate to the Workflow Builder.

No hit for workflow template

Log Type: Exception Header

```
INFO (WFA:3340769 - 5712774 cstProvisionalBooking:27648718) No hit
in cache for Workflow Template ID: 14313328. In order to get the cache
current, restart your app server.
```

Resolution area

Workflow Builder

Issue

A workflow was retired but is still being called.

Suggested action

Find workflow by using the ID that is used in the metaschema:

```
Select * from wf_lookup where wf_template_id='#####';
```

Revise and publish the workflow.

Example

The Workflow Template ID indicates which workflow is being called.

```
INFO
[com.tririga.architecture.cache.WFCache]
(WFA:3340769 - 5712774 cstProvisionalBooking:27648718) No hit in cache
for Workflow Template ID: 14313328. In order to get the cache current,
restart your app server.
```

Workflow task error

Log Type: Exception Header

```
WARN Call workflow task encountered error.
```

Resolution area

Workflow Builder

Issue

A workflow does not exist or is not currently published.

Suggested action

Review the calling workflow and see whether the step is still necessary, or find out why the called workflow is missing. Make sure that the called workflow is currently published. Revise and republish the necessary workflows.

Example

```
Call workflow task encountered error. Task: TaskStep:
Call Workflow(38) WFTID=19118076.14 TSID=205820
Label='Call a Subflow' EventAction='',
Calling WF: ID: 19118075 Version: published,
Exception: com.tririga.platform.workflow.template.exception.
WFTemplateLoadingException:
  Problem loading Workflow Template for ID: 19118075 Version:
  published....
  Caused by: com.tririga.platform.workflow.template.exception.
  WFTemplateNotFoundException:
    Workflow template not found in lookup table for ID: 19118075
  ...
  Caused by: org.springframework.dao.EmptyResultDataAccessException:
    Incorrect result size: expected 1, actual 0
```

Cannot reverse financial transaction

Log Type: Exception Header

```
WARN CANNOT REVERSE PREVIOUS TRANSACTIONS
```

Resolution area

Workflow Builder

Issue

An application is attempting to use the financial transaction function to reverse previous financial transactions. A financial reference object is not associated with the record, so the object is unable to find previous transactions to reverse.

Suggested action

Review the process and ensure that when the financial transaction is being processed it has a financial reference object.

Example

The financial transaction record 13119972 does not have a financial reference object.

```
WARN
[com.tririga.platform.finance.service.FinanceServiceImpl]
(WFA-2.5:1837189 - 13119943 De-Associate:14821223 IE=14821223)
CANNOT REVERSE PREVIOUS TRANSACTIONS: This financial transaction,
13119972, is not associated to an object so no previous transactions
can be reversed.
```

Error evaluating condition expression

Log Type: Exception Header

```
WARN Error evaluating condition expression - returning FALSE.
```

Resolution area

Workflow Builder

Issue

Switch conditions cannot be loaded, because they are invalid.

Suggested action

Revise the workflow. Review and update the conditions. Republish the workflow.

Example

The workflow `cstBidDocument - onChange - Update UOM` has an invalid Switch condition.

```
WARN
[com.tririga.platform.workflow.runtime.condition.Condition]
Error evaluating condition expression - returning FALSE.
Condition[ID=55383,Expr='substring (p0 , 10 , 10 ) == "A" ||
substring (p1 , 10 , 10 ) == "H" || substring (p2 , 10 , 10 ) == "G"
|| substring (p3 , 10 , 10 ) == "L"',Parameters=[p0 = , p1 = , p2 = ,
p3 = ]]. Workflow Info: WFTemplateImpl.WFTemplateRO[ID=18749944,
Version=2,Name=cstBidDocument - onChange - Update UOM], TaskStep:
WFTaskStepImpl.WFTaskStepRO[135720,,Switch,14,
WFTemplateImpl.WFTemplateRO[ID=18749944,Version=2,
Name=cstBidDocument - onChange - Update UOM]][MID-739830450]
```

Mapping into target field not allowed

Log Type: Exception Header

```
Mapping into the target field is not allowed because the field is
within a Live Link section.
```

Resolution area

Workflow Builder

Issue

A field is being mapped into a live link section. Only the section mapping is used for a live link section.

Suggested action

Revise the workflow, open the task, open the workflow map, clear the field map for the live link section, and save workflow map. Publish the workflow.

Example

Workflow ID 10014934 version 17 has an invalid section map to the Line Item Summary History business object for the **RecordedBy** section.

```
WARN
[com.tririga.platform.workflow.template.sofieldmap.MapEntry]
Mapping into the target field is not allowed because the field is
within a Live Link section.
The mapping is being discarded.MEFieldToField[MapEntry Field-to-Field,
Type=10,SrcField=1037,TgtField=1037,Map=SOFieldMapImpl.
SOFieldMapRO[ID=1968,WFTemplate=10014934.17]]. TARGET:
BoFieldImpl[name=StateProv,id=1037,
Section=BoSectionImpl[name=RecordedBy,id=BoSectionId[categoryId=1,
subCategoryId=7],Business Object=BoImpl[name=Line Item Summary
History,id=10000072,module=ModuleImpl[name=Line Item,id=27]]]]
[MID-3898920414]
```

Invalid locator metadata

Log Type: Exception Header

```
WARN Trouble setting the locator field because the locator metadata
is invalid; setting with the linked object's name instead.
```

Resolution area

Data Modeler or Workflow Builder

Issue

The Data Modeler uses a field for a locator that is different than the field that is being mapped into the field in a workflow.

Suggested action

Review the field used in the Data Modeler for the locator to ensure the proper mapping. Update and republish the mapping. Locator fields are sometimes used for multi-object mappings, and this warning may be seen in this scenario and can be ignored.

Example

The Notification business object in the Mail module had a RefObject locator. The RefObject locator is mapped to the linked record name instead of the identified field from the Data Modeler. This warning can be ignored.

```
WARN
[com.tririga.platform.smartobject.domain.field.LocatorField]
(WFA-2.5:1837189 - 13119943 APPROVE_HIDDEN:14821226 IE=14821226)
Trouble setting the locator field because the locator metadata
is invalid; setting with the linked object's name instead.
Locator field: BoFieldImpl[name=RefObject,id=1021,
Section=BoSectionImpl[name=AdditionalDetail,
id=BoSectionId[categoryId=1,subCategoryId=6],
Business Object=BoImpl[name=Notification,id=107324,
module=ModuleImpl[name=Mail,id=17]]][MID-1263122157]
```

Workflow SmartObject field mapping

Log Type: Exception Header

```
WARN Workflow SmartObject field mapping.
```

Resolution area

Workflow Builder

Issue

A field or section in a workflow field mapping does not exist in the underlying business object.

Suggested action

Revise the workflow. Open the task. Open, review, and save the workflow map. Publish the workflow.

Example

Workflow ID 10328588 version 3, task Modify Records, has an invalid section map for the **Team Members** section into the Capital Project business object in the Project module.

```
WARN
[com.tririga.platform.workflow.template.sofieldmap.SOFieldMapImpl]
Workflow SmartObject field mapping.
MEObjectToSection[MapEntry Object-to-Section,Type=30,
TgtSectionCategory=12,TgtSectionSubCategory=1,TgtField=1,
Map=SOFieldMapImpl.SOFieldMapR0[ID=10853,WFTemplate=10328588.3]].
Mapping FROM: BoImpl[name=External Contact,id=106849,
module=ModuleImpl[name=People,id=7]],
TO: BoImpl[name=Capital Project,id=107010,
module=ModuleImpl[name=Project,id=19]].
TaskStep: Modify Records(28) WFTID=10328588.3 TSID=133061
Label='Modify Records' EventAction='Append'.
Cause: com.tririga.platform.metadata.MetadataNotFoundException:
No section with name 'Team Members' exists on this Business Object:
BoImpl[name=Capital Project,id=107010,
module=ModuleImpl[name=Project,id=19]][MID-3776864463]
```

Workflow task handler error

Log Type: Exception Header

```
WARN Workflow task handler error while triggering action
```

Resolution area

Workflow Builder

Issue

A state transition is performed that is not valid for the current state of the record on which the workflow is running.

Suggested action

Review the business object in question and check that the action or transition is still there. If the state transition is not there, you can add the state transition, and revise and republish the business object. If the state transition is there, the workflow might be called on a record that is not in an appropriate state for this transition to occur. Review your processes to ensure that records are in the proper state before the workflow runs.

Example

In the xxx workflow, the cstCalculateEnd task, the workflow is trying to run the cstCalculateEnd state transition. The cstCalculateEnd state transition is not a valid transition from the current state of the record.

```
WARN
Workflow task handler error while triggering action 'cstCalcuatEnd'.
TaskStep: Trigger Action(31) WFTID=16680680.10 TSID=138571
Label='cstCalculateEnd' EventAction='cstCalcuatEnd'.
Cause: com.tririga.platform.metadata.MetadataNotFoundException:
No transition exists on this Business Object from current state
'BoStateImpl[Name=triActive,Business
Object=BoImpl[name=cstTimeCalculator,id=10005047,
module=ModuleImpl[name=triHelper,id=21720]]]'
with transition name of 'cstCalcuatEnd'.
```

Database error messages

The server.log file can contain error messages that relate to databases, such as DB2, Oracle, and SQL Server.

DB2 SQL error example

Log Type: Exception Header

```
WARN/ERROR DB2 SQL Error: SQLCODE=#### SQLSTATE=#####
```

Resolution area

DB2database

Issue

An SQL exception was encountered. The value of SQLCODE is based on the cause of the exception.

Suggested action

Examine the message in the server.log and find the line that starts with SQLCODE. To determine the cause, look up the SQLCODE in the online documentation for your DB2 version. The issues can be varied, from being out of space to invalid SQL.

Example 1

This code indicates that the database has run out of space in the file system:

```
2014-07-02 21:07:15,498 ERROR
[com.tririga.architecture.workflow.dataaccess.
WFTemplateDAO](http-0.0.0.0-8001-4)
com.ibm.db2.jcc.am.SqlIntegrityConstraintViolationException: DB2 SQL Error:
SQLCODE=-289 SQLSTATE= 57011

Search for SQLCODE=-289 SQLSTATE=57011
```

The DB2 error code -289 indicates that the database has run out of space on the file system.

Example 2

In this example, the S_POLINE business object and its staging table do not exist.

```
2014-07-02 12:14:55,759 ERROR
[com.tririga.platform.admin.dataaccess.
```

```
DBScriptRunnerDAOImpl](http-0.0.0.0-8001-3)
com.ibm.db2.jcc.am.SqlSyntaxErrorException: DB2 SQL Error: SQLCODE=-204,
SQLSTATE=42704, SQLERRMC=TRIDATA.S_POLINE, DRIVER=4.16.24
com.ibm.db2.jcc.am.SqlSyntaxErrorException: DB2 SQL Error: SQLCODE=-204,
SQLSTATE=42704, SQLERRMC=TRIDATA.S_POLINE, DRIVER=4.16.24

Search for SQLCODE=-204 SQLSTATE=42704
Object does not exist.
```

Other error messages in the server log file

The `server.log` file contains error messages that relate to Form Builder, Report Manager, user error, HTTP protocols, and currency conversion.

DataConnect errors

See the Possible Errors section in the DataConnect chapter of *Application Building for the IBM TRIRIGA Application Platform 3: Data Management*.

WFA:3340769 - 2289501

Log Type: Exception Header

```
(WFA:3340769 - 2289501 Associate:26451634)
```

Issue

This information can be included in any error.

Suggested action

Decode the error snippet.

Example

```
(WFA:3340769 - 2289501 Associate:26451634)
```

To locate the information in the database, use the following SQL:

```
select * from user_credentials where user_id=3340769;
select * from ibs_spec where spec_id=2289501;
select * from wf_event where event_id=26451634;
```

If no rows are returned, try the following SQL:

```
select * from wf_event_history where event_id=26451634;
```

Invalid Object ID for dispatch

Log Type: Exception Header

```
ERROR Invalid Object Id specified for dispatch. Object Id was null.
```

Resolution area

User training

Issue

User clicked inside a window before the Java™ code finished loading.

Suggested action

Users need to wait for the Java to load before they click inside a window.

Example

```
ERROR
[com.tririga.web.process.ProcessRouter]
Invalid Object Id specified for dispatch. Object Id was null.
```

HTTP protocol error

Log Type: Exception Header

```
INFO - [com.tririga.web.filter.AuthenticationFilter]
```

Resolution area

HTTP protocol

Issue

A user process caused an issue with IBM TRIRIGA HTTP security. For example, the user might navigate to a link when not logged in or when a session is expired. Causes might include timeout or attempting to log in more than once with the same user account.

Suggested action

Log back in to the IBM TRIRIGA application and go through the steps that were followed before this error.

Example

A request was made for `templateScriptsCached.jsp` through some process but the session expired and the page is no longer accessible.

```
INFO
[com.tririga.web.filter.AuthenticationFilter]
(http-0.0.0.0-8001-2) Error in AuthenticationFilter:
requestURL(/html/en/default/js/templateScriptsCached.jsp)
is not part of the excluded filters, userId is less than one,
HttpRequestHeader=[host=localhost:8001, user-agent=Mozilla/5.0
(Windows; U; Windows NT 5.1; en-US; rv:1.9.0.8) Gecko/2009032609
Firefox/3.0.8, accept=*/, accept-language=en-us,en;q=0.5,
accept-encoding=gzip,deflate, accept-charset=ISO-8859-1,utf-8;
q=0.7,*;q=0.7, keep-alive=300, connection=keep-alive, referer=http://
localhost:8001/html/en/default/common/sessionExpirationGeneral.jsp,
cookie=JSESSIONID=yWl4MJ9suRDqAFS7PLANFw**, ]
```

Cannot parse parameter in formula

Log Type: Exception Header

```
WARN Could not parse parameter in formula:
```

Resolution area

Report Manager

Issue

An extended formula is trying to use a query to resolve a parameter, but the query or field in the query cannot be found.

Suggested action

Add the query or the field to the query.

Example

An extended formula is attempting to use the query `triInvoiceLineItem - Advanced Formula - triPaid - Associated to Current Record`, in the `triNewInvTotalNU` field.

```
WARN
[com.tririga.platform.smartobject.util.formula.ExtendedFormulaParser]
Could not parse parameter in formula:
ExtendedFormulaDefnImpl [Formula=b, Params={b=ExtendedFormulaParmDefnImpl
[Name=b, Value=[QUERY][{triCostItem}{triInvoiceLineItem}
{triInvoiceLineItem - Advanced Formula - triPaid - Associated to
Current Record }][RecordInformation]{triNewInvTotalNU}]]}]
[MID-2164297393]
```

GUI field has a different field type than business object

Log Type: Exception Header

```
Gui field has a different field type than backing bo.  
Using field type of BO.
```

Resolution area

Form Builder

Issue

A form has a field that no longer exists.

Suggested action

Identify the forms for the business object that uses the listed field. Revise the form. In Form Builder, remove the field from the tree view of the form layout. Add the field back to the form. Publish the form.

Example

The **Note** field, on the triBSIFailureImpactA business object, is identified as a text field in a form but another field type in the Data Modeler.

```
WARN  
[com.tririga.platform.error.ErrorHandler]  
Gui field has a different field type than backing bo.  
Using field type of BO.  
BO=[name=triBSIFailureImpactA, id=10003740]  
FieldType=[BoField=Note, GuiFieldType=Text][MID-4251286743]
```

Backing business object field does not exist

Log Type: Exception Header

```
WARN Not adding field, '$$$', to GUI Section because backing  
Business Object field does not exist:
```

Resolution area

Form Builder

Issue

A form has a field that no longer exists.

Suggested action

Identify the form and field. Revise the form. In Form Builder, remove the field from the tree view of the form layout. Add the field back to the form. Publish the form.

Example

The **Active Start Date** field, on the **Key** GUI, **General** tab, **KeySpecification** section, is invalid.

```
WARN  
[com.tririga.platform.metadata.dataaccess.GuiMetadataDaoImpl]  
Not adding field, 'Active Start Date', to GUI Section because  
backing Business Object field does not exist:  
GuiSectionMetadataImpl[Name=KeySpecification, ID=11, GUI  
Tab=GuiTabMetadataImpl[Name=General, ID=1,  
GUI=GuiMetadataImpl[Name=Key, ID=10000083]]][MID-1871134927]
```

Invalid query filter

Log Type: Exception Header

```
WARN Not using invalid query filter:
```

Resolution area

Report Manager

Issue

A query has a filter for a field that does not exist.

Suggested action

Identify the query and filter. In Report Manager, remove the filter. Save the query.

Example

The filter for the **triPaidDA** field, on the triPaymentLineItem - Display - Received Accounts Receivable records associated as Has Payment query, in the triCostItem module, is invalid.

```
WARN
[com.tririga.platform.metadata.dataaccess.BoQueryMetadataDaoImpl]
Not using invalid query filter:
BoQueryFilterMetadataImpl[Left side section=RecordInformation,
Left side field=triPaidDA,Operator=Equals,Right side
value=$$RUNTIME$$,Query=BoQueryMetadataImpl[ID=19845,
Name=triPaymentLineItem - Display - Received Accounts Receivable
records associated as Has Payment,Module=triCostItem]] Caused by:
No field named 'triPaidDA' exists on this Business Object in the
general sections: BoImpl[name=triPaymentLineItem,id=10004638,
module=ModuleImpl[name=triCostItem,id=27]][MID-2170122156]
```

triTesting column does not exist

Log Type: Exception Header

```
WARN Adding DB column, triTesting, since it does not exist and
the BO expects it to be there.
```

Issue

This warning is logged during a publish.

Suggested action

The message in the log entry indicates what needs to be enabled in order for that entry to exist.

Example

The example shows logging that occurs during a publish. To see the DEBUG events, enable the Business Object Publish option on the Platform Logging object in Administrator Console, on the server where the BO Publish Agent is running.

```
2008-12-04 13:44:23,037 INFO
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Publish started for Business Object: BoImpl[name=testBo,id
=10043142,module=ModuleImpl[name=testModule,id=26323]]
2008-12-04 13:44:23,083 WARN
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Adding DB column, triTesting, since it does not exist a
nd the BO expects it to be there. Bo Field: BoFieldImpl[name=tr
iTesting,id=1001,Section=BoSectionImpl[name=General,id=BoSectio
nId[categoryId=1,subCategoryId=1],Business Object=BoImpl[name=t
estBo,id=10043142,module=ModuleImpl[name=testModule,id=26323]]]
2008-12-04 13:44:23,083 DEBUG
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) DDL Built: Sql[SQL=ALTER TABLE T_TESTBO ADD (TRITESTING
VARCHAR(150))] for Business Object: BoImpl[name=testBo,id=1004
3142,module=ModuleImpl[name=testModule,id=26323]]
2008-12-04 13:44:23,755 INFO
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Publish completed for Business Object: BoImpl[name=testBo,
id=10043142,module=ModuleImpl[name=testModule,id=26323]]
2008-12-04 13:44:23,771 INFO
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Publish started for Module: ModuleImpl[name=testModule,id=
26323]
2008-12-04 13:44:23,927 DEBUG
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Union BO in to view: BoImpl[name=testBo,id=10043142,mod
ule=ModuleImpl[name=testModule,id=26323]]
2008-12-04 13:44:23,927 DEBUG
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Union BO in to view: BoImpl[name=testModule,id=10019042
,module=ModuleImpl[name=testModule,id=26323]]
2008-12-04 13:44:23,927 DEBUG
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) DDL Built: Sql[SQL=DROP VIEW M_TESTMODULE] for Module:
ModuleImpl[name=testModule,id=26323]
```

```

2008-12-04 13:44:23,927 DEBUG
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) DDL Built: Sql[SQL=CREATE VIEW M_TESTMODULE AS SELECT S
PEC_ID SPEC_ID, SYS_PROJECTID SYS_PROJECTID, SYS_OBJECTSTATE SY
S_OBJECTSTATE, SYS_OBJECTID SYS_OBJECTID, SYS_GUIDID SYS_GUIDID,
Sys_OrgName Sys_OrgName, Sys_OrgNameObjId Sys_OrgNameObjId, Sys
_ModifiedTime Sys_ModifiedTime, Sys_PriorState Sys_PriorState,
Sys_CreatedBy Sys_CreatedBy, LastName LastName, Sys_GeographyNa
me Sys_GeographyName, Sys_GeographyNameObjId Sys_GeographyNameO
bjId, Sys_GeographyId Sys_GeographyId, Sys_Type Sys_Type1, Sys_
ReviewStatus Sys_ReviewStatus, Sys_ModifiedBy Sys_ModifiedBy, t
riControlNumberCN triControlNumberCN, Sys_Parent Sys_Parent1, S
ys_OrganizationId Sys_OrganizationId, Sys_CreatedTime Sys_Creat
edTime, Sys_LocationName Sys_LocationName, Sys_LocationNameObjI
d Sys_LocationNameObjId, triTesting triTesting, Sys_LocationId
Sys_LocationId FROM T_TESTBO UNION ALL SELECT SPEC_ID SPEC_ID,
SYS_PROJECTID SYS_PROJECTID, SYS_OBJECTSTATE SYS_OBJECTSTATE, S
YS_OBJECTID SYS_OBJECTID, SYS_GUIDID SYS_GUIDID, Sys_OrgName Sys_
OrgName, Sys_OrgNameObjId Sys_OrgNameObjId, Sys_ModifiedTime Sys_
ModifiedTime, Sys_PriorState Sys_PriorState, Sys_CreatedBy Sys_
CreatedBy, LastName LastName, Sys_GeographyName Sys_Geography
Name, Sys_GeographyNameObjId Sys_GeographyNameObjId, Sys_Geogra
phyId Sys_GeographyId, Sys_Type1 Sys_Type1, Sys_ReviewStatus Sys_
ReviewStatus, Sys_ModifiedBy Sys_ModifiedBy, triControlNumberCN
triControlNumberCN, Sys_Parent1 Sys_Parent1, Sys_Organizatio
nId Sys_OrganizationId, Sys_CreatedTime Sys_CreatedTime, Sys_Lo
cationName Sys_LocationName, Sys_LocationNameObjId Sys_Location
NameObjId, triTesting triTesting, Sys_LocationId Sys_LocationId
FROM T_TESTMODULE] for Module: ModuleImpl[name=testModule,id=2
6323]
2008-12-04 13:44:24,037 INFO
[com.tririga.platform.metadata.service.BoPublishService](Thread
-17) Publish completed for Module: ModuleImpl[name=testModule,i
d=26323]
2008-12-04 13:44:24,037 INFO
[com.tririga.platform.metadata.bopublish.BoPublishAgent](Thread
-17) Sending notification to user: [221931] Message: [Publicat
ion of testBo completed with warning(s).]

```

Chapter 7. Gathering troubleshooting data for IBM Support

When you experience an issue with IBM TRIRIGA and you open a Problem Management Record (PMR) with IBM Support, you might be asked to provide data to help IBM TRIRIGA Support to diagnose the issue.

Must Gather Tool overview

You can automatically gather key information such as log files, configuration files, and system data by using the **Must Gather Tool** in the IBM TRIRIGA Administrator Console.

The data is collected in .txt and .csv files and is compressed into a file bundle whose name consists of several fields that you complete. An example file name is 99999,999,999_Acme_2017-05-01.zip, where 99999,999,999 is the PMR number, Acme is the Company name, and 2017-05-01 is the file bundle creation date.

You can also use the Must Gather Tool to upload the compressed file directly to the IBM Enhanced Customer Data Repository (ECuRep) FTP site and automatically associate the file with your open PMR.

If you do not want to send the file directly to IBM TRIRIGA Support, you can clear the **Send Report to IBM TRIRIGA Support** check box. Change the email address in the **ECuRep Email** field from the IBM TRIRIGA Support email address, `iot_support@ecurep.ibm.com`, to the internal or external email address that you want. The email sender is the Company name that you specify and the email subject consists of `PMR number[IBM TRIRIGA Support] Must Gather Bundle from Company name`.

The data that the **Must Gather Tool** collects many items, which include the following data.

- TRIRIGA Application Platform version
- TRIRIGA build number
- Database build number
- Platform operating system
- Application server type
- Database vendor and version
- Java version and system properties
- Latest server.log file
- Latest performance.log file
- TRIRIGAWEB.properties

The **Perform Audit** option can also run SQL statements to gather performance information that helps to gain an understanding of the overall health of the system.

Creating file bundle of data for problem diagnosis

You can automatically collect data such as log files, configuration files, and system data that can help you or IBM TRIRIGA Support to troubleshoot issues.

Procedure

1. In the IBM TRIRIGA Administrator Console, select **Must Gather Tool**.
2. When the tool completes the collection process, add your name, email address, and any comments that you want under **Error Report Information**.

3. If you do not want the **Must Gather Tool** to send the report directly to IBM Support, clear the **Send Report to IBM TRIRIGA Support** check box. Replace the IBM Support address in the **EcuRep Email** field with the email address to which you want to send the report.
4. Clear the **Perform Audit** check box if you do not want to include platform audit query results.
5. Click **Submit Error Report**.
The compressed file is sent to the email address in the **EcuRep Email** field.

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