Oracle® Fusion Middleware

Release Notes for Oracle Data Integrator

12*c* (12.2.1.2.0)

E77154-01

September 2016

This document describes known issues associated with Oracle Data Integrator and includes information regarding post-installation patches. It includes the following sections:

1 Oracle Data Integrator 12.2.1.2.0 ReadMe File

A ReadMe file is included in your distribution. It is located in the top level directory of the zip. The ReadMe file includes information about this release (features, prerequisites, install/uninstall instructions). You must use the ReadMe file to install ODI 12.2.1.2.0 Please read the entire ReadMe file before proceeding.

2 Oracle Data Integrator Console Issues and Workarounds

This section contains information on the following:

2.1 Accessibility Settings are Not Working

Accessibility settings can only be applied to the components whose accessibility settings are not managed at the ADF level. [20584947]

2.2 Starting Oracle Data Integrator Studio on Windows Operating Systems

On Windows operating systems only the user who installed ODI can start ODI studio. No other user has privileges to start ODI Studio. [23070381]

3 Configuration Issues and Workarounds

This section contains information on the following issues:

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3.1 Importing 11g Master Repository XML into 12c removes instance level permissions

If you import 11g master repository XML into 12c using XML file import, the object instance level permissions are lost. If needed, you must grant the object instance level permissions to the users again after completing the upgrade. [23608304]

Note: Upgrading repositories using file import/export option is not supported. You must use the Upgrade Assistant to upgrade the repositories.

3.2 SAP Extraction Programs

As part of the 12c upgrade, SAP KMs will use GUID based program names and function group names. Due to this SAP extraction programs either need to be redeployed or all interfaces must have the old program name set. [14538105]

3.3 11g RKM SAP ERP and 11g RKM SAP BW not supported in Legacy mode

The UI mode of 11g RKM SAP ERP and 11g RKM SAP BW do not work in ODI 12c legacy mode. Either use non-UI mode or upgrade to latest SAP connector version. [14523712]

3.4 999 is a Prohibited Master Repository ID

999 is a prohibited master repository ID and should not be used. [21083009]

3.5 Domain Assisted Schema Upgrade (DASU) Does Not Pre-populate ODI Supervisor Credentials

In the Oracle Fusion Middleware Upgrade Assistant, when the **All Schemas Used by Domain** option is selected, the Supervisor credentials for ODI are not pre-populated in the first instance as the domain does not contain them. If there are multiple ODI schemas, the Upgrade Assistant populates the user entry using the first set of credentials. [20323393]

3.6 Unable to Schedule Job to OracleDIAgent when Client and Server are in Different Time Zones

A job cannot be scheduled to OracleDIAgent when the client (studio and agent) and server (repository) are set to different time zones. [23216335]

To sync the time zone for studio, perform the following steps:

1. Go to Studio home and edit the studio configuration file `$ODI_HOME/studio/bin/odi.conf`.
2. Set the AddVMOption `-Duser.timezone` to the repository-based time zone.

To sync the time zone for agent (managed server), perform the following steps:

1. Modify the WebLogic domain environment settings for your domain in the following files:

- n On UNIX platforms: `setDomainEnv.sh`

- n On Windows platforms: `setDomainEnv.cmd`

2. Within the file, edit the EXTRA_JAVA_PARAMETERS environment variable definition by adding the following Java argument: `-Duser.timezone=required timezone`

For example, on Windows, set:

```
set EXTRA_JAVA_PARAMETERS=%EXTRA_JAVA_PARAMETERS% -Duser.timezone=GMT
```

4 Design-Time Environment Issues and Workarounds

This section contains information on the following issues:

- n Section 4.1, "Preferences that are Not Used in Oracle Data Integrator Appear in ODI Studio"
- n Section 4.2, "Attributes are Not Copied when Duplicating a New Datastore"
- n Section 4.3, "Unable to Generate a Scenario Using the Client Library Package"
- n Section 4.4, "Non-ASCII Characters in a Hive Table are Not Displayed Properly"
- n Section 4.5, "Editing Expanded Submap of Dimension or Cube component"
- n Section 4.6, "SCD2_CURRENT_FLAG is not used by ODI in current built-in pattern"

4.1 Preferences that are Not Used in Oracle Data Integrator Appear in ODI Studio

Preferences that are not used in ODI are getting picked up from the JDeveloper IDE by default and these features appear in ODI Studio > Tools > Preferences. [21656747]

4.2 Attributes are Not Copied when Duplicating a New Datastore

If you attempt to duplicate a newly created datastore with attributes without first closing the tab of the newly created datastore, the attributes are not copied.

As a workaround, save and close the newly created datastore with attributes before selecting **Duplicate Selection**. [21572433]

4.3 Unable to Generate a Scenario Using the Client Library Package

If you attempt to generate a scenario for a map using the client library package, the following error is displayed:

```
java.lang.NoClassDefFoundError: groovy/lang/Binding
```

As a workaround, copy `MW_HOME/oracle_common/modules/groovy-all-2.3.7.jar` locally and add the jar file to the classpath. [21510593]

4.4 Non-ASCII Characters in a Hive Table are Not Displayed Properly

Non-ASCII characters in a Hive table that is based on a utf-8 encoded file are not displayed properly. As a workaround, specify `-J-Dfile.encoding=utf8` and start ODI Studio to view Non-ASCII characters in a Hive table. [19632983]

4.5 Editing Expanded Submap of Dimension or Cube component

You are not allowed to edit the expanded map of a dimension or cube component. The changes done in expanded map is not persisted and are not saved. [23110100]

4.6 SCD2_CURRENT_FLAG is not used by ODI in current built-in pattern

In the Dimension Editor when you are navigating from Levels Table -> Level Attributes Table, the SCD2 (Slowly Changing Dimensions) Setting drop-down list displays **Current Record**, as one of its values. The current record value is not used in the current built-in pattern of ODI. [23239046]

5 Technologies and Knowledge Module Issues and Workarounds

This section contains information on the following issues:

5.1 LKM Hive to File Direct Fails when Exporting to HDFS

When executing a mapping using LKM Hive to File Direct, it fails and the following error is displayed:

```
ODI-1227: Task Unload Hive data-LKM Hive to File Direct- fails on the source connection HIVE_DATA_SERVER
```

This is caused due to Hive bugs, HIVE-5672 and HIVE-6410, which cause the INSERT OVERWRITE statement to fail when writing to HDFS. Please note that these Hive bugs are already fixed and the issue is resolved when upgraded to a recent version of CDH and Hortonworks. [21529011]

5.2 Log Files are Deleted Even in Case of Failure when Using the OdiOSCommand on Oozie

Many KMs that use OdiOSCommand use the `OUT_FILE`/`ERR_FILE` parameters to redirect output into log files.The directory for such files is based on the KM option `TEMP_DIR`, which uses a default value of `System.getProperty("java.io.tmpdir")`. This causes ODI on Oozie to use an Oozie job temporary directory, which gets cleaned up on job completion, irrespective of whether or not the job was successful. This results in the log files not being available after execution.

As a workaround, when executing on Oozie, overwrite the KM option `TEMP_DIR` to a specific temporary directory. [21232650]

5.3 Oozie Initialization Fails

Oozie initialization fails and the following error is displayed:

```
java.io.IOException: E0504 : App directory <dir_name> doesn't exist OR ODI-1028: There are issues with the
Log Retriever components. No Log Retriever flow with name <name> is running.
```

The issue occurs on pure CDH5.4.0+ pseudo/multi node clusters.

As a workaround,

1. Make sure that oozie share lib is already created using the following command:

   ```
   oozie-setup sharelib create -fs hdfs:///user/oozie -locallib <path to local folder
   [oozie-sharelib-yarn]>
   ```

   > **Note:** Folder oozie-sharelib-yarn is local to the oozie setup. After creating the sharelib, you can verify the sharelib on HDFS at the location hdfs:///user/oozie/share/lib/lib_<timestamp>

2. Add the following properties to oozie-site.xml. These properties are needed for Oozie to obtain the hadoop configuration files to access HDFS. In the first property value, add the path after "*="

   ```
   <property>
   <name>oozie.service.HadoopAccessorService.hadoop.configurations</name>
   <value>*=<replace_this_with_path_to_hadoop_configuration_folder
   For Example:/etc/hadoop/conf></value>
   <value>*=<replace_this_with_path_to_hadoop_configuration_folder
   For Example:/etc/hadoop/conf></value>
   </property>
   <property>
   <name>oozie.service.WorkflowAppService.system.libpath</name>
   <value>hdfs:///user/oozie/share/lib</value>
   </property>
   ```

3. Restart your oozie and hadoop services. [21410186]

5.4 Error Displayed During Oozie Initialization

There is an issue with the `OdiLogRetriever.properties` file and the `oozie.coord.application.path` value does not get appended to it and the following error is displayed: [21410186]

```
E0504: App directory doesn't exist
```

5.5 SQOOP KMs Fail on Oozie

KMs using SQOOP fail when executed on Oozie on a CDH version prior to 5.4.1.

As a workaround, set KM option `EXTRA_HADOOP_CONF_PROPERTIES` to `--skip-dist-cache`. Another workaround for this issue is to upload all SQOOP jars into the HDFS directory reported in `FileNotFoundException`. [21232570]

For example:

```
hdfs dfs -mkdir -p /opt/cloudera/parcels/CDH-5.3.0-1.cdh5.3.0.p0.30/jars
hdfs dfs -copyFromLocal
/opt/cloudera/parcels/CDH-5.3.0-1.cdh5.3.0.p0.30/jars/*
/opt/cloudera/parcels/CDH-5.3.0-1.cdh5.3.0.p0.30/jars
```

5.6 Teradata and SQL Server Do Not Allow ORDER BY in Subqueries

Teradata and SQL Server do not allow ORDER BY in subqueries. [20873100, 20816875]

5.7 Disregard Failed to set setXIncludeAware(true) for parser warnings

When you execute Pig or Oozie workflows through ODI, you may encounter warning messages such as, Failed to set setXIncludeAware(true) for parser, regarding xml parsing failures in the ODI logs or studio console. This error occurs when JAVA xerces parser gets used for PIG execution, as the default implementation doesn't support XIncludeAware feature in xml parsing.

As a workaround, add xmlparserv2.jar in classpath of the Pig Dataserver. [21238180]

5.8 Pig Does Not Provide Implicit Type Conversion

When specifying constant expressions, the datatype for the constant must exactly match the attribute datatype because Pig does not provide implicit type conversion. For example, if the attribute is defined as DOUBLE, the constant expression for this attribute should be set to 999.0 instead of 999. [20808984]

5.9 Mapping Execution Fails in Pig

When a mapping is processed using Pig and there is an Aggregate component in the Pig staging area, the Having clause must be set differently from similar mappings for SQL-based technologies. [20723728]

5.10 Complex Aggregation Not Supported by Pig Latin

When using the Aggregate component in Pig staging, you cannot specify a complex expression in an aggregate function, for example, `SUM(source.col1 + source.col2)`. This kind of aggregation is called "complex aggregation" and Pig Latin does not support this. If complex expression is needed, the Expression component must be added to the mapping ahead of the Aggregate component. [20302859]

5.11 Mapping Editor May Not Display All Template IKMs

The Mapping Editor may not correctly list the imported Template IKMs for selection. To list the imported IKMs, you must change the **Target Integration** type from its default (**Control Append**) to either **Incremental Update** or **None**. [20583432]

5.12 Date Comparison May Not Work as Expected if the Date is a String Datatype

In the Spark project, if the source file uses File technology, ODI converts the Date into a string datatype. This may cause the Date comparison to fail. [20029929]

5.13 LKM File to Oracle (External Table) Limitation

When executing a mapping, it may fail at the Create Work View task and the following error may be displayed:

```
ODI-1228: Task Create work view-LKM File to Oracle (EXTERNAL TABLE)- fails on the target connection SVR2_
ORACLE.
Caused By: java.sql.SQLSyntaxErrorException: ORA-00955: name is already used by an existing object
```

This happens when the work table name is truncated to meet the maximum length specified in Oracle DB. To resolve this issue, check the **Use unique Temporary Object Names** option in the Physical Mapping tab. [20142371]

5.14 XKM SQL Distinct Limitation

When a mapping is created with Oracle as source and Oracle as target using a Distinct component and the XKM SQL Distinct is selected in the DISTINCT node, the mapping fails and the following error is displayed:

```
The physical node DISTINCT_ cannot be supported by technology Oracle on execution unit src_UNIT of mapping
Mapping New_Mapping[11] owning folder=ODIOGG.First Folder
```

To resolve this issue, upgrade the topology information so Support Distinct Operator is set to `True`. [20234590]

5.15 The UNION_DISTINCT Pig Operator Does Not Remove Duplicate Outputs

The UNION Pig operator uses the following modifiers to specify the uniqueness characteristic: [20368827]

- unspecified – Perform a DISTINCT operation on output

- DISTINCT – Perform a DISTINCT operation on input, but not output

- ALL – Do not perform a DISTINCT operation on input or output

5.16 Log Level and Log File Not Displayed in the Complex File Dataserver Properties

When creating a Complex File dataserver, the log level (ll) and log file (lf) properties are not displayed in the Properties tab. [20377218]

5.17 BinaryType Data Type Not Supported in Spark 1.1

The Hive datatype, BinaryType, is not supported in Spark 1.1. When using LKM Hive to Spark with Spark 1.1 the following error is displayed in the Spark execution log: [20260906, 20391714]

```
HIVE ValueError: not supported type: <type 'bytearray'>
```

5.18 Hive Complex Datatypes Not Supported by LKM Spark to Hive

The following Hive complex datatypes are not supported:

- MapType

- UnionType

- ArrayType

Using these complex datatypes causes an unknown issue. [20141453, 20391743]

5.19 Unable to Store Alias Error in Pig

If the mapping execution in Pig fails and the `Unable to store alias` error is displayed, the `pig.optimizer.rules.disabled` property for the Pig server should be set to `FilterLogicExpressionSimplifier`. [20520865]

5.20 KMs Replaced During Repository Upgrade

By default, all loaded KMs in the repository are replaced during repository upgrade, irrespective of whether they are modified or not. Do not upgrade the KMs during repository upgrade.

The following are the workarounds to upgrade the KMs:

n   If you have SAP KMs, you must not upgrade the KMs during repository upgrade. The new SAP KMs require new ODI SAP components. Using new SAP KMs with old ODI SAP components causes any SAP mappings to fail.

As a workaround, uncheck **Replace KMs with Mandatory Updates** when upgrading the ODI repositories. To upgrade SAP KMs, follow the upgrade instructions given in the *Application Adapters Guide for Oracle Data Integrator* for the respective ODI SAP adapter.

n   If you have any custom KMs, the customizations are lost if you upgrade the KMs during repository upgrade.

As a workaround, uncheck Replace **KMs with Mandatory Updates** when upgrading the ODI repositories. After you upgrade the repositories, manually replace only those KMs that you want to upgrade.

5.21 Erroneously Published SDK API Classes Removed from the 12*c* Javadocs

Due to a bug in Javadoc generation, 41 internal classes were erroneously published in the 12.1.2, 12.1.3, and 12.1.3.0.1 public SDK API Javadocs. These classes were intended for internal use and have been removed from the 12*c* public SDK APIs. The classes removed from the 12*c* Javadocs are listed below and if you are using any of these classes in your program, correct your program and remove their usage: [21700125]

n   `AdapterException`

n   `ComponentDefinitionParser`

n   `ComponentRegistryHelper`

n   `ExecutionUnit.GenerationType`

n   `FCONamedObject`

n   `FCOPropertyOwner`

n   `FCORoot`

n   `IMapReferenceOwner`

n   `IMappingObject.SyncState`

n   `IModelObjectChange`

n   `IModelObjectChange.ChangeType`

n   `IObjectAdapterFactory`

n   `LocationAdapterBase`

n   `MapAttribute.ConnectionTypeInfo`

n   `MapAttribute.ConnectionTypeSelector`

n   `MapAttribute.DefaultConnectionTypeSelector`

- MapComponent

- MapComponentOwner

- MapComponentType.uidef

- MapPhysicalDesign.ContextualComponentTreeNode

- MapPhysicalDesign.ExecutionUnitConfiguration

- MapPhysicalDesign.ExecutionUnitGraph

- MapPhysicalDesign.ExecutionUnitGraphNode

- MapPhysicalDesign.MapPhysicalDesignConfig

- MapPhysicalDesign.NodeConfiguration

- MapPhysicalDesign.PushDirection

- MapPhysicalNode.RMCStackPropertyManager

- MapRootContainer

- MappingGenericTechnology.MappingLanguage

- MappingGenericTechnology.MappingLanguageElement

- MappingGenericTechnology.MappingSubLanguage

- NamedObject

- OdiComponent

- OdiInterface.IPersistenceComparable

- PropertyOwner

- ResourceLoader

- ResourceLoader.ResourceCandidate

- ReusableMappingComponent.RMCConnectorPointDelegate

- Root

- RootIssue.TextPos

- TargetLoadOrderException

5.22 Erroneous Records Handling Removed from ODI 11*g* and 12*c* Documentation

ODI File Driver does not have Erroneous Records Handling capabilities in releases 11*g* and 12*c*. The section on Erroneous Records Handling has been removed from ODI documentation for releases 11*g* and 12*c*. This will, however, be restored in a future release. [23182473]

6 Post-install Patch Information for Oracle Data Integrator 12*c*

After installing Oracle Data Integrator 12*c* (12.2.1.2.0), perform the following steps:

1. Make a backup of your ODI repository schema.

2. Upgrade all ODI repositories associated with the installation using the Upgrade Assistant. See your Upgrade documentation for detailed upgrade instructions.

> **Warning:** Once the ODI repository is upgraded it cannot be reverted back even if you remove the patch. So make sure you make a proper backup of your existing ODI repository so that it can be restored if you remove this patch in the future for any reason.

3. For setting up new domains with this patch, follow the instructions in *Installing and Configuring Oracle Data Integrator*.

4. Clearing of the JDev cache is required for all installations where the ODI Client is to be launched:

   - For Unix platforms

     Locate `system12.2.1.2.0` in your **Home** directory and remove it.

     For example: `rm -rf $HOME/.odi/system12.2.1.2.0`

   - For Windows platforms:

     Locate `system12.2.1.2.0` in your **Home** directory and remove it.

     For example: `delete C:\Users\<username>\AppData\Roaming\odi`

5. Start ODI Studio.

6. Depending upon the installation type, start Standalone Agent or all servers (AdminServer and all Managed server(s)).

7 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.