

# HP OpenView Configuration Server Using Radia

for the AIX, HP-UX, Linux, and Solaris operating systems

Software Version: 4.2

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## Database Migration Guide

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# 1 Upgrading the Radia Database

Use this chapter to upgrade your current Radia Database.

- ▶ Be sure to back up your existing database before beginning the upgrade process.

Before you upgrade your Radia Database, it is strongly recommended that you use the Verify Database Utility—which is a non-invasive database analysis tool—to check the status and integrity of the elements in the Database. In general, it is recommended that you periodically verify the status of your Database and perform any necessary maintenance or cleanup.

Once your existing Database has been verified and you have performed any recommended maintenance, you will use the Database Difference Utility to compare your existing Radia Database to the new Radia Database. This utility creates a file that contains the verbs that will be used to update your Database. You will review this file and specify what changes to include or exclude. Then, you will follow several procedures, included in this chapter, to create the new Database.

## Pre-requisites for the Radia Database

- Radia Configuration Server 4.5.4 or above

## System Requirements for the Radia Database

- HP-UX PA-RISC 2.0 (optimized).
- Red Hat Linux ES 2.0 or above
- Solaris 5.7 or above
- AIX 4.3.x or above
- You must have free space that is equal to two times the size of your Radia Database.

- ▶ The locations and directory names presented below are only suggestions used to help with the database upgrade procedure.

## Using the Verify Database Utility

When using the Verify Database Utility to check the status and integrity of the elements in the Database, you will:

- Create a backup copy of your current Radia Database.
- Run the Verify Database Utility to verify the contents of your Database.
- Review the resulting log and perform the recommended maintenance.



The Verify Database Utility is to be used with the Radia Database only. It cannot be used with EDM Databases.

#### To use the Verify Database Utility

- 1 Stop the Radia Configuration Server service.

```
(#cd /opt/Novadigm/ConfigurationServer/)
```

- 2 Create a new directory, such as `mydatabase`, that you will use to store a backup of your Radia Database.

```
(#mkdir mydatabase)
```

- 3 Copy your Radia Configuration Server database directory to the newly created `mydatabase` directory. The default database location is:

```
/opt/Novadigm/ConfigurationServer/DB
```

- 4 Create a directory within the `mydatabase` directory to store the Verify Database Utility, such as `/exe`.

Your directory structure should appear similar to the following:

```
/opt
|-----/Novadigm
      |-----/ConfigurationServer
            |-----/mydatabase
                  |-----/DB
                        |-----/exe
```

- 5 Create a backup copy of your `EDMPROF` file (`.edmprof.orig`, for example).
- 6 Extract the contents of the Verify Database Utility zip file found in the `migrate_db` directory (`hpo_ams_vrfydb.tar` for HP-UX, `sol_ams_vrfydb.tar` for Solaris, `linux_ams_vrfydb.tar` for Linux or `aix_ams_vrfydb.tar` for AIX) to the `/exe` directory. Verify permissions before continuing.

This zip file contains:

- ZEDMAMS
- Eight library files

- 7 Use a text editor and open the `EDMPROF` file.
- 8 Go to the `[MGR_DIRECTORIES]` section and use the `DBPATH` argument to specify the path to the backup of your Radia Database.

```
[MGR_DIRECTORIES]
DBPATH = /opt/Novadigm/ConfigurationServer/mydatabase/DB
REXX_PATH = /opt/Novadigm/ConfigurationServer/rexx
METHOD_PATH = /opt/Novadigm/ConfigurationServer/bin
```

- 9 Save and close the file.
- 10 Open a command prompt and change to the directory where you stored the Verify Database Utility (such as `/opt/ConfigurationServer/mydatabase/exe/`).
- 11 To ensure the `BEHAVIOR` class follows standard naming conventions, run the following command against the database you will be migrating (such as `/opt/MyDatabase/exe/`):



```
./ZEDMAMS VERB=EDIT_CLASS_PREFIX,FILE=PRIMARY,DOMAIN=SOFTWARE,CLASS=
BEHAVIOR,PREVIEW=NO,KEEPDATE=YES,FIELD=CLASTYPE,VALUE=T
```

12 Rename `zedmams.log` to `zedmams_edit_class.log`.

13 Run the Verify Database Utility. The following is a sample command that you might use to verify the integrity of all of the domains in the Database:

```
ZEDMAMS VERB=VERIFY_DATABASE,DOMAIN=ALL,LOGFILE=verifydb.log,DEPTH=
RESOURCE,ZFILE=verifyzfile.sh
```

14 Save a copy of `verifydb.log`.

**Table 1 Parameters for Verify Database Utility**

Parameter	Explanation
VERB	Specifies the verb that you are running. In this case, you must use <code>VERIFY_DATABASE</code> .
DOMAIN	Specifies the domain that you want to verify. <code>DOMAIN=ALL</code> Verifies all domains, except for the <code>PROFILE</code> domain, which cannot be verified using this utility. <code>DOMAIN=DomainName</code> Verifies the domain that you specify, such as <code>SOFTWARE</code> .
LOGFILE	An optional parameter that can be used to specify the name of the log that contains information about the status of your database. By default, the log file is <code>ZEDMAMS.log</code> . This log is stored in the same directory as the Verify Database Utility.
DEPTH	Use the depth parameter to restrict the verification in the database. The following are acceptable values: <ul style="list-style-type: none"> <li>• resource</li> <li>• instance</li> <li>• class</li> <li>• domain</li> </ul> Usage: <code>depth=(Domain/class/instance/resource)</code>
ZFILE	Use the <code>zfile</code> parameter to create a batch file with all of the verbs reported in the <code>veify_database</code> log to fix the inconsistencies in the database. Output can be executed using the following command. (Note: <code>ZFILE</code> is case sensitive): <code>ZEDMAMS ZFILE (FILENAME)</code> Type a fully qualified path and filename to designate the batch file.



The Verify Database Utility may run for several minutes or several hours depending on the size of your Database.

15 Open the log (by default, `ZEDMAMS.log.verifydb.log` in our example above) to review information about the state of your Radia Database. For more information about any of the verbs in the recommended solutions see the HP Technical Support web site.



While reviewing output, note that two classes SVR4DEP and SDDEP will be removed. Be sure to allow these classes to be removed from your database by leaving those lines uncommented.

16 Review `verifyzfile.sh`.

17 When satisfied, run the following command:

```
/ZEDMAMS ZFILE "verifyzfile.sh"
```

18 Save the log file (copy `zedmams.log` to `zedmams.ZFILE.log`).

19 After performing the recommended solutions, run the Verify Database Utility again and then review your `ZEDMAMS.LOG` file to ensure that the issues have been resolved.

Messages containing Improper Instance Name in the ZEDMAMS log file can be ignored. A sample message follows:

```
<18:02:04:308> Improper Instance Name <SAMPLE_INSTALL_REX> in  
Component Class <PRIMARY.SOFTWARE.BEHAVIOR>
```



Run the Verify Database Utility as many times as needed to assist you in determining the health of your database.

If you continue to package and publish to your production Database, be sure that create another backup copy and run the Verify Database Utility again immediately before performing the upgrade. This ensures that all potential issues are analyzed.

After you start the Configuration Server with the migrated database, the Configuration Server log file may contain many duplicate object IDs within the Base Instance. These messages can be ignored. An example message follows:

```
ERROR, DUPLICATE OBJECT ID <DABCB40992AB> FOUND WHILE ADDING  
<PRIMARY.SOFTWARE.BEHAVIOR._BASE_INSTANCE_>
```

## Using the Database Difference Utility

Use the Database Difference Utility to compare your existing Radia Database to the new Radia Database. You will need to do the following:

- Create export decks of your existing Radia Database.
- Run the Database Difference Utility to compare your export decks (created from your backup Database) against the new export decks (provided to you by HP for the new Radia Database).
- Review and edit the resulting file, which contains the verbs that will be used to update your Database.

## Creating Export Decks of Your Existing Database

Create the following export decks from your existing Database:

- **Radia Database Classes (.XPC)**  
Used with the Database Difference Utility to compare your existing Radia Database against the new Database. Later, this is the source class deck that is imported into the new Database.

- **Radia Database Instances (.XPI)**  
This is the source instance deck that is imported into the new Database.
- **Radia Database Resources (.XPR)**  
This is the source resource deck that is imported into the new Database.



Use the export decks as a:

- Base for your comparison against the Radia Database.
- Back-up file of your current Radia Database.

#### To create an export deck of your current Radia Database

- 1 Create a new directory, such as `/opt/ConfigurationServer/CurrExpDeck`.
- 2 Make sure the Radia Configuration Server service is stopped.
- 3 Change the directory to where you stored the Verify Database Utility, which contains the latest ZEDMAMS, such as `exe`.
- 4 Create three export decks—one deck for the classes, one deck for the resources and one deck for the instances—in the directory that you created.



Each time you run ZEDMAMS, a new log file is created (by default `ZEDMAMS.log`). If you would like to save the individual log files from each ZEDMAMS session, either rename or move the default log file after you run ZEDMAMS, or use the ZEDMAMS logfile parameter and specify a new log file name.

For example, after creating an export deck for your classes, rename the `ZEDMAMS.log` file to `zedmams.xpc.log`.

- For example, to create an export deck for your classes named `oldexport.xpc`, type:

```
./ZEDMAMS VERB=EXPORT_CLASS, FILE=PRIMARY, PREVIEW=NO, OUTPUT=/opt/ConfigurationServer/CurrExpDeck/OLDEXPORT.XPC
```

Review the `ZEDMAMS.LOG` file (located in the directory where you stored the Verify Database Utility, (such as `/opt/ConfigurationServer/mydatabase/exe`) to ensure that there were no errors, and that your export completed with RC 0.

Save the log file (copy `zedmams.log` to `zedmams.XPC.log`).

- For example, to create an export deck for your instances named `oldexport.xpi`, type:

```
./ZEDMAMS VERB=EXPORT_INSTANCE, FILE=PRIMARY, PREVIEW=NO, OUTPUT=/opt/ConfigurationServer/CurrExpDeck/OLDEXPORT.XPI
```

Review the `ZEDMAMS.LOG` file (located in the directory where you stored the Verify Database Utility, (such as `/opt/ConfigurationServer/mydatabase/exe`) to ensure that there were no errors, and that your export completed with RC 0.

Save the log file (copy `zedmams.log` to `zedmams.XPI.log`).

- For example, to create an export deck for your resources named `oldexport.xpr`, type:


```
./ZEDMAMS VERB=EXPORT_RESOURCE, FILE=PRIMARY, PREVIEW=NO, OUTPUT=/opt/ConfigurationServer/CurrExpDeck/OLDEXPORT.XPR
```



You may receive the warning "no resource found". These warnings are reported on the instances, which have no resources (non data-bearing instances).

Review the ZEDMAMS.LOG file (located in the directory where you stored the Verify Database Utility, (such as /opt/ConfigurationServer/mydatabase/exe) to ensure that there were no errors, and that your export completed with RC 0 or RC 4.

Save the log file (copy zedmams.log to zedmams.XPR.log)

 It may take a long time to create export decks of your entire Radia Database.

Now, you can use the Database Difference Utility to compare your existing Radia Database with the new Radia Database.

## Comparing Databases

Use the Database Difference Utility (dbdiffc.tcl) to compare the two class export decks.

To compare the databases

1 Create a new directory such as /opt/ConfigurationServer/mydatabase/DBDiff.

2 Copy the following upgrade materials files into this directory.


- Your .XPC file (such as oldexport.xpc)
- The HP .XPC file (CORE.XPC from migrate\_db directory).
- Operating specific tar files (xxx\_dbdiff.tar) which includes
  - dbdiffc.tcl
  - nvdkit.exe

3 Navigate to the directory that you created:

(/opt/ConfigurationServer/mydatabase/DBDIFF).

4 Run the Database Difference Utility. The following is an example of the command line that you must run.

```
./nvdkit dbdiffc.tcl CUSTOMER_CLASS_DECK=oldexport.xpc,DEFAULT_CLASS_DECK=FILENAME.XPC,BATCH_OUT=OUTPUT.sh,DELETE=Y
```

 The command prompt will be displayed for a few minutes before data begins to see scroll, indicating the creation of the output.sh file.

**Table 2 Required arguments for the Database Difference Utility**

Argument	
CUSTOMER_CLASS_DECK	The filename of the export deck that you created from your existing Database.
DEFAULT_CLASS_DECK	The filename of the HP export deck (CORE.XPC).
BATCH_OUT	The name of the file that contains a list of the verbs to be executed after you review the file. Several text files will be created in the same directory where this file is stored. These files represent the new classes that will be added to the Database.

Argument	
DELETE	If a field or class exists in the Customer XPC file, but does not exist in the HP supplied XPC file: Set DELETE=Y to delete the fields or classes. Set DELETE=N to keep the fields or classes.

- 5 Use a text editor to open the output file (specified in the BATCH\_OUT argument), such as `output.sh`.
- 6 Review this file and determine what changes you would like to keep. If you want to comment out any changes, place an asterisk (\*) in front of the verbs that you do not want to run.



While reviewing output, note that two classes SVR4DEP and SDDEP will be removed. Be sure to allow these classes to be removed from your database by leaving those lines uncommented.

Below is a table that defines some of the most common ZEDMAMS verbs that you will encounter when reviewing the output file.

**Table 3 Common Verbs in the Output File**

Verb	Description
ADD_FIELD	Adds a variable at the end of a template. This verb has a KEEPDATE= option which allows for an update of a variable without updating the ZOBJDATE/ZOBJTIME of the Base_Instance.
CHANGE_FIELDNAME	Changes variable names in the class template. This verb has a KEEPDATE= option which allows for an update of the class without updating the ZOBJDATE/ZOBJTIME instance.
CHANGE_FLD_VALUE	Changes a template's variable length, type Configuration Server, and client flags. This verb has a KEEPDATE= option which allows for the value to be updated without updating the ZOBJDATE/ZOBJTIME instance.
CHANGE_INS_FIELD	Changes one field in each instance of a class and verifies connects. This verb has a KEEPDATE= option which allows for the field to be updated without updating the ZOBJDATE/ZOBJTIME instance.
CHANGE_INST_DATA	Globally changes data in instance records by class. This verb has a KEEPDATE= option which allows for the instance to be updated without updating the ZOBJDATE/ZOBJTIME instance.
COPY_FIELD	Copies attribute data to a new attribute or to an existing attribute. This verb has a KEEPDATE= option which allows for the field to be updated without updating the ZOBJDATE/ZOBJTIME instance.
DELETE_FIELD	Deletes an attribute from a template. This value does not alter the ZOBJDATE/ZOBJTIME instance.

Verb	Description
DELETE_CLASS	Deletes a class from the database.

- 7 Save and close the file.

Once you have determined the differences between the base Radia Database and your current Database, you are ready to update your existing Radia Database.

## Creating a New Database Directory

In this section, you will create a new directory for your new database.

To create a new database directory

- 1 Navigate to your Configuration Server directory. The default location is:

```
/opt/Novadigm/ConfigurationServer/
```

- 2 Create a new directory, such as `/opt /Novadigm/ConfigurationServer/New_DB`.

— Within this new directory, create two additional directories:

```
/opt /Novadigm/ConfigurationServer/New_DB/PRIMARY
```

```
/opt /Novadigm/ConfigurationServer/New_DB/RESOURCE
```



These directories must be named PRIMARY and RESOURCE and the names must be capitalized.

- 3 Backup your `EDMPROF` file.
- 4 Use a text editor to open `EDMPROF`.
- 5 Find the argument `DBPATH` in the `[MGR_DIRECTORIES]` section and change the value to point to the new Database directory that you created.

```
[MGR_DIRECTORIES]
```

```
DBPATH = /opt/Novadigm/ConfigurationServer/New_DB
```

```
REXX_PATH = /opt/Novadigm/ConfigurationServer/rexx
```

```
METHOD_PATH = /opt/Novadigm/ConfigurationServer/bin
```

- 6 Save and close the file.

## Importing Your Class Deck

In this section, you will import your source class deck (XPC) into the new database. This provides a starting point for your new Database.

To import the source deck into the Database

- 1 If desired, copy your source class deck (XPC), (such as

```
/opt/ConfigurationServer/CurrExpDeck/oldexport.xpc)
```

into the `/exe` directory you created earlier.


- 2 Change directory to `/opt/ConfigurationServer/mydatabase/exe`.
- 3 Type:
 

```
./ZEDMAMS VERB=IMPORT_CLASS,FILE=/opt/ConfigurationServer/CurrExpDeck/OLDEXPORT.XPC,PREVIEW=NO
```


The filename used in this example represents the name of the export deck that you created earlier. If you did not copy this file, be sure to include the fully qualified path in the command line.
- 4 Press **Enter**.
- 5 Review the ZEDMAMS.LOG to ensure that there were no errors, and that your import completed with RC 0.
- 6 Save the log file (copy `zedmams.log` to `zedmams.ImportXPC.log`).

## Running the Database Difference File

In this section, you will run the Database Difference file that you created when you ran the Database Difference Utility.

-  Be sure that you have reviewed this file thoroughly and commented out any verbs that you do not want to be executed.

To run the text input file

- 1 Go to the directory where your BATCH\_OUT file (such as `/opt/ConfigurationServer/mydatabase/dbdiff/output.sh`) is stored. Remember, this directory will also contain several files that represent the new classes that will be added to the Database.
- 2 Copy `output.sh` to the `/opt/ConfigurationServer/mydatabase/exe` directory.
  -  You do not need to copy the text files to the BIN directory. The `output.sh` file contains a fully qualified path for these files.
- 3 Change directory to the `/opt/ConfigurationServer/mydatabase/exe` and type:
 

```
./ZEDMAMS ZFILE "output.sh"
```

where `output.sh` is the name of the file that you specified in the BATCH\_OUT parameter when you ran the Database Difference Utility.

Note that ZFILE must be in all caps.
- 4 Press **Enter**.
- 5 Review and save the ZEDMAMS.LOG to ensure that there were no errors, and that your import completed with RC 0 (copy `zedmams.log` to `zedmams.ImportZFILE.log`).

## Importing the Instances and Resources to the Database

Finally, you must import the remaining source export decks that you created earlier, to finish building the Database.

## To import the instance and resource decks

- 1 Copy the `.XPI` and `.XPR` files from the `CurrExpDeck` directory into the `/opt/ConfigurationServer/mydatabase/exe` directory.
- 2 Change directory to `/opt/ConfigurationServer/mydatabase/exe` and type:  
**`./ZEDMAMS VERB=IMPORT_INSTANCE, FILE=OLDEXPORT.XPI, TIME=OLD, PREVIEW=NO`**



Each time you run ZEDMAMS, a new log file is created (by default `ZEDMAMS.log`). If you would like to save the individual log files from each ZEDMAMS session, either rename or move the default log file after you run ZEDMAMS, or use the ZEDMAMS logfile parameter and specify a new log file name.

The filename used in this example represents the name of the export deck that you created earlier.

- 3 Press **Enter**.
- 4 Review and save the `ZEDMAMS.LOG` to ensure that there were no errors, and that your import completed with RC 0 (copy `zedmams.log` to `zedmams.ImportXPI.log`).
- 5 When the instances have been imported, type:

**`./ZEDMAMS VERB=IMPORT_RESOURCE, FILE=OLDEXPORT.XPR, PREVIEW=NO`**

The filename used in this example represents the name of the export deck that you created earlier.

- 6 Press **Enter**.
- 7 Review and the `ZEDMAMS.LOG` to ensure that there were no errors, and that your import completed with RC 0 (copy `zedmams.log` to `zedmams.ImportXPR.log`).
- 8 Run the Verify Database utility and make sure no errors are reported in the log file other than Improper Instance Name errors, which can be ignored).
- 9 Start the Configuration Server.
- 10 To confirm the upgrade completed successfully, perform a Client Connect (e.g., open the Software Manager catalog). If you receive the same results as you did prior to the upgrade, then the upgrade was successful.

Your Radia Database upgrade is now complete.



If you currently use Distributed Configuration Servers and have recently upgraded your Radia Database, the first time you synchronize your servers you must use CRC differencing. The default synchronization method (Control Differencing) is not sufficient. For instructions on how to change the differencing method, refer to the section, Differencing Techniques, in the Release Notes and Addendum for EDM DMA v4.04, available on the HP Technical support Web site.





The connection to the client computer will fail if any object in storage is larger than 6k bytes. A Radia client cannot receive a heap size larger than 6k bytes (or 247 attributes). This does not include the README field, since the README field is not included in the transfer.

Use the System Explorer to view actual instance sizes. Note that the object size may grow if more variables are added to the object.

**To avoid a client connection failure during data transfer:**

Turn on the STATS [MGR\_TRACE] option to print the size of the persistent object. The Configuration Server reports the object-size when it is deleted. Monitor this for any object that may grow larger than the current limit of 6k bytes.

Additionally, the VAR trace option will display variable sizes that are being added to an object.

For more information, refer to the *Radia Configuration Server Guide*.

## Radia 4.2 Database Changes

### Client Domain

- SAP class, new attribute added: NETTTL
- SETTINGS class, new attribute added: NETTTL
- SETTINGS class, new attribute added: FLUSHU


### SOFTWARE Domain

- SD class, new attribute added: INSTOPTS



## 2 Validating the Radia Database

The following errors provide information about structural issues that may be present in your Database.

-  Unmated instances are instances that exist with no connection to a resource.

**Table 4 Domain Validation**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
VERIFY DOMAIN <> CANNOT VALIDATE DMA INSTANCE COUNT. <b>High</b> impact for DMA Customers. <b>Low</b> impact for non-DMA Customers.	Run: ZEDMAMS VERB=REFRESH_DMA,PREVIEW=NO
VERIFY DOMAIN < > DMA INSTANCE COUNT DOES NOT EQUAL ACTUAL INSTANCE COUNT. <b>High</b> impact for DMA Customers. <b>Low</b> impact for non-DMA Customers.	Run: ZEDMAMS VERB=REFRESH_DMA,PREVIEW=NO

**Table 5 Class Validation**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
MISSING TEMPLATE IN CLASS < >. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > HAS MISSING _BASE_INSTANCE. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > HAS INVALID _BASE_INSTANCE. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
VERIFY CLASS < > CANNOT READ DMA CLASS CONTROL INFORMATION. (INVALID CLASS). <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
CLASS < > PREFIX SIZE LESS THAN EXPECTED. (INVALID CLASS). <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > PREFIX CONTAINS INVALID DATES. <b>Low</b> impact. For internal use only.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > PREFIX SIZE < > LESS THAN EXPECTED. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
DATABASE VERSION MISMATCH FOR CLASS < > <b>High</b> impact. Corrupt Class.	Delete the class. Restore the class from the last known good template for that class.
CLASS TEMPLATE FIRST ENTRY NOT FOUND. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
CLASS TEMPLATE < > TEMPLATE FIRST ENTRY NAME < > DOES NOT MATCH CLASS NAME.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > TEMPLATE SIZE MISTMATCH. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.
CLASS < > HAS HEAP SIZE < > WHICH IS GREATER THAN SUPPORTED MAXIMUM. <b>High</b> impact for resolution process and integrity of the class.	Delete the class. Restore the class from the last known good template for that class.

**Table 6 Class Validation**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solutions</b>
CLASS < > HAS MISSING _NULL_INSTANCE.* <b>Low</b> impact.	Policy needs to be reviewed to see if the instance is used. Administrator can create a _NULL_ instance in the class if necessary.
CLASS < > HAS INVALID _NULL_INSTANCE.* <b>High</b> impact.	Delete the class. Restore the class from the last known good template for that class.

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solutions</b>
<p>VERIFY CLASS &lt; &gt; INSTANCE COUNT IS ZERO.</p> <p><b>High</b> impact. Affects the System Explorer and resolution process.</p>	<p>Run: ZEDMAMS VERB=REFRESH_DMA,PREVIEW=NO</p>
<p>VERIFY CLASS &lt; &gt; CANNOT VALIDATE DMA INSTANCE COUNT.</p> <p><b>High</b> impact. Affects the System Explorer and resolution process.</p>	<p>Run: ZEDMAMS VERB=REFRESH_DMA,PREVIEW=NO</p>
<p>VERIFY CLASS &lt; &gt; DMA INSTANCE COUNT DOES NOT EQUAL ACTUAL INSTANCE COUNT.</p> <p><b>High</b> impact. Affects the System Explorer and resolution process.</p>	<p>Run: ZEDMAMS VERB=REFRESH_DMA,PREVIEW=NO</p>
<p>INSTANCE SIZE LESS THAN MINIMUM REQUIRED.</p> <p><b>High</b> impact. Affects the System Explorer and resolution process.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>

**Table 7 Instance Validation**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
<p>INSTANCE SIZE DOES NOT MATCH CLASS TEMPLATE.</p> <p><b>High</b> impact. The instance is corrupt.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>ZRSCDATE NOT FOUND BUT RESOURCE FLAG SET IN CONTROL INFO.</p> <p><b>No</b> impact.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>WARNING: UNMATED INSTANCE &lt; &gt; DOES NOT HAVE CORRESPONDING DATA.</p> <p><b>Medium</b> impact. Resource is missing for an instance</p>	<p>Determine the impact the resource has on your database.</p> <p>If the resource is non-critical, delete.</p> <p>If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</p> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
<p>RESOURCE &lt; &gt; SIZE &lt; &gt; IS INVALID FOR ASSOCIATED INSTANCE &lt; &gt;.</p> <p><b>High</b> impact. Damaged Resource.</p>	<p>Determine the impact the resource has on your database.</p> <p>If the resource is non-critical, delete.</p> <p>If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</p> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>
<p>RESOURCE &lt; &gt; ACTUAL SIZE &lt; &gt; NOT EQUAL TO SIZE &lt; &gt; IN ASSOCIATED INSTANCE.</p> <p><b>High</b> impact. Damaged Resource.</p>	<p>Determine the impact the resource has on your database.</p> <ul style="list-style-type: none"> <li>• If the resource is non-critical, delete.</li> <li>• If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</li> </ul> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>
<p>ERROR: OPENING RESOURCE &lt; &gt; FOR INSTNACE &lt; &gt;.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>ERROR: UNABLE TO READ PREFIX FOR RESOURCE &lt; &gt; FOR ASSOCIATED INSTANCE &lt; &gt;.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>RESOURCE &lt; &gt; ACTUAL SIZE &lt; &gt; DOES NOT MATCH EXPECTED SIZE &lt; &gt; FOR ASSOCAITED INSTANCE.</p> <p><b>High</b> impact. Damaged Resource.</p>	<p>Determine the impact the resource has on your database.</p> <ul style="list-style-type: none"> <li>• If the resource is non-critical, delete.</li> <li>• If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</li> </ul> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
<p>RESOURCE &lt; &gt; PREFIX CLASS NAME &lt; &gt; DOES NOT MATCH ITS ASSOCIATED INSTANCE &lt; &gt;.</p> <p><b>High</b> impact. Damaged Resource.</p>	<p>Determine the impact the resource has on your database.</p> <ul style="list-style-type: none"> <li>• If the resource is non-critical, delete.</li> <li>• If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</li> </ul> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>
<p>RESOURCE &lt; &gt; PREFIX INSTANCE NAME &lt; &gt; DOES NOT MATCH ITS ASSOCIATED NAME &lt; &gt;.</p> <p><b>High</b> impact. Damaged Resource.</p>	<p>Determine the impact the resource has on your database.</p> <ul style="list-style-type: none"> <li>• If the resource is non-critical, delete.</li> <li>• If the resource is critical, set the ZSERVICE.REMOVAL attribute to A and redeploy. (Setting the REMOVAL attribute to A abandons the resource, relinquishing Radia control.)</li> </ul> <p>Note: Deleting a resource may have adverse affects on other Radia components. Before deleting a damaged resource, make sure it will not affect any existing components.</p>
<p>RESOURCE &lt; &gt; COMPRESSED SIZE &lt; &gt; NOT EQUAL TO SPACE &lt; &gt; IN VARIABLE &lt; &gt; OF ASSOCIATED INSTANCE &lt; &gt;.</p> <p><b>Medium</b> impact. ZCMPSIZE Variable may be compromised.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>RESOURCE &lt; &gt; SIZE &lt; &gt; NOT EQUAL TO SIZE &lt; &gt; IN VARIABLE &lt; &gt; OF ASSOCIATED INSTANCE &lt; &gt;.</p> <p><b>Medium</b> impact. ZRSCSIZE Variable may be compromised.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>
<p>RESOURCE &lt; &gt; CRC &lt; &gt; NOT EQUAL TO CRC &lt; &gt; IN VARIABLE &lt; &gt; OF ASSOCIATED INSTANCE &lt; &gt;.</p> <p><b>Medium</b> impact. ZRSCCRC Variable may be compromised.</p>	<p>Delete the class. Restore the class from the last known good template for that class.</p>

## Checking for Orphaned Resources

Orphaned resources are resources that exist with no parent instance. The following error provides information about orphaned resources.

**Table 8 Orphaned Resource Check**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
<p>FOUND ORPHANED RESOURCE – DATA DOES NOT HAVE A CORRESPONDING PARENT INSTANCE &lt; &gt;. THIS RESOURCE WAS PREVIOUSLY PARENTED BY &lt; &gt;.</p> <p><b>Low</b> impact. This resource can be left OR you may choose to remove the unmated resource by using the ZEDMAMS VERB = DELETE_RESOURCE.</p>	<p>Run: ZEDMAMS VERB=DELETE_RESOURCE, PREVIEW=NO</p>

## Checking for Duplicate IDs

The following errors provide information about duplicate object IDs that may be present in your Database.

**Table 9 Object ID Check**

<b>ERROR MESSAGE</b> <b>Impact</b>	<b>Suggested Solution</b>
<p>DUPLICATE OBJECT ID &lt; &gt; WITHIN &lt;COMPONENT&gt; CLASS &lt; &gt; BETWEEN INSTANCE &lt; &gt; AND &lt; &gt;.</p> <p><b>High</b> impact. Possibility of corrupt data.</p>	<p>If either data is corrupted, use: ZEDMAMS VERB = DELETE_INSTANCE, PACKAGE=YES,PREVIEW=NO,DOMAIN=&lt; &gt;, CLASS= &lt; &gt;, INSTANCE =&lt; &gt;</p>
<p>DUPLICATE OBJECT ID &lt; &gt; IN INSTANCES &lt; &gt; AND &lt; &gt;.</p>	<p>If both are from PACKAGE Class: Duplicate Instance object ids in Package Class cannot be fixed. You will need to delete the package.</p> <p>If class is NOT PACKAGE: ZEDMAMS VERB= CHANGE_OBJECTID,FILE=PRIMARY,DOMAIN= &lt;&gt;,CLASS=&lt;&gt;,INSTANCE=&lt;&gt;,PREVIEW =NO</p>
<p>DUPLICATE OBJECT ID &lt; &gt; WITHIN &lt; &gt; CLASS &lt; &gt; BETWEEN INSTANCE &lt; &gt;.</p>	<p>If class is PACKAGE: Duplicate Instance object ids in Package Class cannot be fixed. You will need to delete the package.</p> <p>If class is NOT PACKAGE: ZEDMAMS VERB=CHANGE_OBJECTID,FILE=PRIMARY,DOMAIN= &lt;&gt;,CLASS=&lt;&gt;,INSTANCE=&lt;&gt;,PREVIEW =NO</p>



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