



Automated Upgrade Tool

AUT Release Notes

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Preface

The Oracle|Agile documentation set includes Adobe® Acrobat™ PDF files. The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) (<http://www.oracle.com/technology/documentation/agile.html>) contains the latest versions of the Oracle|Agile PLM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Oracle|Agile Documentation folder available on your network from which you can access the Oracle|Agile documentation (PDF) files.

Note To read the PDF files, you must use the free Adobe Acrobat Reader™ version 7.0 or later. This program can be downloaded from the [Adobe Web site](http://www.adobe.com) (<http://www.adobe.com>).

The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) (<http://www.oracle.com/technology/documentation/agile.html>) can be accessed through Help > Manuals in both the Agile Web Client and the Agile Java Client. If you need additional assistance or information, please contact [support](http://www.oracle.com/agile/support.html) (<http://www.oracle.com/agile/support.html>) (<http://www.oracle.com/agile/support.html>) for assistance.

Note Before calling Agile Support about a problem with an Oracle|Agile PLM manual, please have ready the full part number, which is located on the title page.

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Readme

Any last-minute information about Oracle|Agile PLM can be found in the Readme file on the [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) (<http://www.oracle.com/technology/documentation/agile.html>).

Agile Training Aids

Go to the [Oracle University Web page](http://www.oracle.com/education/chooser/selectcountry_new.html) (http://www.oracle.com/education/chooser/selectcountry_new.html) for more information on Agile Training offerings.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Upgrading with AUT

This chapter includes the following:

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You can upgrade your database to Agile PLM 9.2.2.3 if you have any of the following products currently installed:

- Product Collaboration 8.5 SP1-SP7
- Product Service and Improvement 8.5 SP1-SP7
- Program Execution 8.5 SP2
- Product Cost Management 8.5 SP1
- Agile 9.0 SP1-SP7
- Agile 9.1 SP1-SP4
- Agile 9.2
- Agile 9.2.0.1
- Agile 9.2.0.2
- Agile 9.2.1
- Agile 9.2.1.1
- Agile 9.2.1.3
- Agile 9.2.1.4
- Agile 9.2.1.5
- Agile 9.2.1.6
- Agile 9.2.2
- Agile 9.2.2.1
- Agile 9.2.2.2

The upgrade tool takes inputs from a property file and completes the upgrade using your existing database as the source database, while the newly created 9.2.2.3 database is the destination database.

Downloading the Software

The automated upgrade tool software can be downloaded from the Agile Support Website (<http://www.oracle.com/agile/support.html>). The software should be downloaded to your destination database server.

Extract the AUT.zip file to a local drive. After the AUT is extracted, all of the files are located in an AUT directory on the local drive. In this document, this directory is known as the AUT_HOME.

Note	As a result of SQL script optimization, the size of the AUT.zip file is now reduced to approximately 40 MB (earlier 100 MB), enabling faster download.
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The aut.properties File

The aut.properties file, located in the \$AUT_HOME\config directory, contains user-supplied information on the source and destination databases. The source database parameters contain information about the database to be upgraded. The destination database parameters contain information about the user and host details of the database where the source database is being upgraded. These parameters are used by the database scripts during the upgrade process.

Defining the aut.properties Parameters

The aut.properties is divided into the following sections:

- Source Details—the database you are upgrading
- Destination Details—the Agile PLM 9.2.2.3 database
- Averify Details—how averify errors are handled
- Import Warnings—how import warnings are handled
- 8.5 Only Details—which Agile 8.5 components you are upgrading

Each parameter is followed by an example displaying the correct format for each parameter value. You must complete the source and destination details in order for the AUT to proceed with the upgrade.

Source Details

Parameter	Value definition
src.jdbc.url	The JDBC connection string to the source database. The format is jdbc:oracle:thin@<SOURCE_DB_HOST_NAME>:<PORT>:<SID> where <i>SOURCE_DB_HOST_NAME</i> is the hostname of the source database, <i>PORT</i> is the listener port of the source database (1521 is the default), and <i>SID</i> is the database instance.

Parameter	Value definition
src.jdbc.driver	The database driver of the source database. The default is oracle.jdbc.driver.OracleDriver.
src.db.user	The database user of the source database.
src.db.password	The encrypted database password of the source database. Use the encryptpwd utility located in the \$AUT_HOME\bin directory to encrypt the password.
src.tns.name	The TNS entry name in the Oracle Home of the source database.
src.oracle.home	<p>The Oracle Home of the source database. This value can be a mapped drive on the system where the AUT is run which points to the shared folder on the host machine.</p> <hr/> <p>Note Use either double back slashes or a forward slash for directory separation, for example, d:/oracle/ora92.</p> <hr/>
src.db.backup	Back up or do not back up the database into a dump file. If true, then the source database is backed up by exporting the database user into a dump file located at \$AUT_HOME\workingdir\AgileSrcDbBackup.dmp. If you are also upgrading a Product Cost Management or Program Execution database, their respective dump files are named Agile85pcmBACKUP.dmp and Agile85peBACKUP.dmp.

Destination Details

Parameter	Value Definition
dest.jdbc.url	The JDBC connection string to the destination database. The format is jdbc:oracle:thin@<DESTINATION_DB_HOST_NAME>:<PORT>:<SID> where <i>DESTINATION_DB_HOST_NAME</i> is the hostname of the destination database, <i>PORT</i> is the listener port of the destination database (1521 is the default), and <i>SID</i> is the database instance.
dest.jdbc.driver	The database driver of the destination database. The default is oracle.jdbc.driver.OracleDriver.
dest.db.user	The database user of the destination database.
dest.db.password	The encrypted database password of the destination database. Use the encryptpwd utility located in the \$AUT_HOME\bin directory to encrypt the password.
dest.db.system.user	The user of the system account on the destination database instance.
dest.db.system.password	The encrypted password of the system user account on the destination database instance.
dest.tns.name	The TNS entry name in the Oracle Home of the destination database.

Parameter	Value Definition
dest.oracle.home	<p>The Oracle Home of the destination database. This value can be a mapped drive on the system where the AUT is run which points to the shared folder on the host machine.</p> <hr/> <p>Note Use either double back slashes or a forward slash for directory separation, for example, d:/oracle/ora92.</p> <hr/>
sourceEqualsDest	<p>Determines if the source database is upgraded to the destination database with or without the database user. If true, then the source database is upgraded without exporting and importing the database user to the destination database. This means that the same user is upgraded instead of upgrading to a different user on the destination database. This does NOT apply if your source and destination databases are on different versions of the Oracle database. Also, when this value is set to true, the AUT does not import and export unless a value for the src.db.backup parameter is specified.</p> <p>If this parameter is set to true, the following destination database details are not required:</p> <ul style="list-style-type: none">•dest.jdbc.url•dest.jdbc.driver•dest.db.user•dest.db.password

Averify Details

Parameter	Value Definition
averify.error.count	<p>Specifies the number of averify errors to occur before the AUT stops the upgrade.</p> <p>Specify -1 to ignore the errors and continue with the upgrade.</p>

Import Warnings

Parameter	Value Definition
ignore.imp.warnings	<p>Decide if the AUT ignores the import warnings or not while importing the database. If set to true, the warnings are ignored.</p> <p>AUT will stop if there is a critical error.</p>

File Manager Internal Locator Details

Parameter	Value Definition
file.manager.internal.locator	Specifies the location of the file manager. The content_url column in the files table is upgraded with an encrypted URL based on the file type. This URL is used after upgrading for full text search configuration. The format is <a href="http://<FILE_MANAGER_HOST>:<PORT>/Filemgr/AttachmentServlet">http://<FILE_MANAGER_HOST>:<PORT>/Filemgr/AttachmentServlet .

Destination Version

Parameter	Value Definition
dest.version	The version of the upgraded Agile PLM database.

Language Details

Parameter	Value Definition
i18n.lang	Specifies the language of the operating system where the database is located. The values are English, Japanese, Chinese, or French.

8.5 Only Details

Parameter	Value Definition
isPC	Each of the parameters must have a value if the source database is either 8.5 or 8.5 SPx only. Set the parameter to true for the components that are installed on the source database and to false for the components that are not installed.
isPSI	
isPCM	
isPE	

Parameter	Value Definition
username.migration.action	<p>Determine how you want the Agile users in the source database to appear in the destination database. The value is set as the number of one of the following choices:</p> <ol style="list-style-type: none">1. FIRSTNAME LASTNAME2. LASTNAME FIRSTNAME3. FIRSTNAME, LASTNAME4. LASTNAME, FIRSTNAME5. None of the above. FIRSTNAME will be migrated to LASTNAME. <p>If your database contains mixed cases, choose the option that reflects the format for most of your users. The remaining users must be migrated manually after the upgrade.</p>
gmt.timezone.difference	<p>The GMT time zone of your database. The database and Agile application server must be on the same GMT time zone. The GMT time zone format is six characters, (+ or -)hh:mm, for example, GMT would be -00:00.</p>

Note If you are upgrading from Product Cost Management or Program Execution only, leave all Source detail properties blank in the aut.properties file.

Running the Automated Upgrade Tool

Before running the AUT:

- Make sure you have completed all of the pre-requisites listed in “Preparing for the Upgrade”.
- On Solaris, change the user permissions on all of the files under AUT_HOME in order for the upgrade log files to be created and the shell scripts under AUT_HOME/bin to be run.
- Edit the property file with the correct values for your upgrade. See “Understanding the Property Files” for more information

To run the AUT:

Go to the \$AUT_HOME\bin directory and run the aut.bat (Windows) or aut.sh (Solaris) script.

Checking the Status of the Upgrade

You can monitor the status through the log files that are generated during the upgrade. The \$AUT_HOME\logs directory contains all of the upgrade-related log files. AUT.log is the main log file for the upgrade. Separate directories are created for the logs generated by averify and the database scripts. These log files are located in the averifylogs and oracle subdirectories.

Troubleshooting the Upgrade

The following list describes some problems that can occur during the database upgrade:

What if I can't resolve my TNS service name?

If the TNS service name cannot be resolved, then the service name specified in the aut.properties file is not correctly defined in the tnsnames.ora file.

Perform the following checks to fix the error:

- Verify that a tnsnames.ora file exists and is in the correct place. See your Oracle documentation for more information on the required name and location.
- Verify that the service name exists in one of the tnsnames.ora files. Add the service name, if necessary.
- Make sure there are no syntax errors in the tnsnames.ora file, especially unmatched parentheses or stray characters.

Why did I receive an Invalid User Name or Password error in the AUT.log file?

You may receive this error if the database connection was not successful. The following Oracle error messages may be displayed:

EXP-00004: invalid username or password

Cause: An invalid username or password was specified.

Action: Retry with a valid username and password.

ORA-01017: invalid username/password; logon denied

Cause: An invalid username or password was entered in an attempt to log on to Oracle. The username and password must be the same as was specified in a GRANT CONNECT statement. If the username and password are entered together, the format is username/password.

Action: Enter a valid username and password combination in the correct format.

What errors would I see if an import fails?

An import can end abnormally due to some of the following reasons:

IMP-00009: abnormal end of export file

Cause: The export file is probably from an aborted Export session.

Action: If so, retry the export and import.

IMP-00013: only a DBA can import a file exported by another DBA

Cause: The privileges needed to import an export file generated by a database administrator do not exist. Only a database administrator can import such files.

Action: The source and destination database users should have the same roles and privileges. Because the source database has the DBA role, the database destination should also have the role. If you do not want the destination database to have the DBA role, then remove the role from the source database and retry the upgrade.

IMP-00041: Warning: object created with compilation warnings

Cause: The object in the SQL statement following this error was created with compilation errors. If this error occurred for a view, it is possible that the base table of the view was missing or

altered.

Action: This is a warning. The object may have to be recompiled before being used.

Why is AUT hanging?

AUT may not be hanging. Processes may be running that seem to take longer than others. For example:

- Indexes may be missing on the source database. If this is the case, averify may be running slowly.
- The import may be taking a longer time because it's a large database.

What should I do if AUT suddenly exits?

Check the AUT.log file. If no information is available, then the AUT could not start because of invalid settings. Check the pre-requisites and the contents of the aut.properties file before retrying.

If I have database connection problems, what Oracle errors will I get?

Database connection errors can occur if the SQL connection to the source or destination database is lost. Make sure that the database connections are available before running the AUT. If connection problems occur, you may see some of the following Oracle error messages:

ORA-01034: ORACLE not available

Cause: Oracle was not started. Possible causes include the following:

- The SGA requires more space than that was allocated for it.
- The operating system variable pointing to the instance is improperly defined.

Action: Refer to accompanying messages for possible causes and correct the problem mentioned in the other messages. If Oracle has been initialized, then on some operating systems, verify that Oracle was linked correctly.

ORA-01089: immediate shutdown in progress - no operations are permitted

Cause: The SHUTDOWN IMMEDIATE command was used to shut down a running Oracle instance, terminating any active operations.

Action: Wait for the instance to be restarted or contact the database administrator.

ORA-01090: shutdown in progress - connection is not permitted

Cause: The SHUTDOWN command was used to shut down a running Oracle instance, disallowing any connects to Oracle.

Action: Wait for the instance to restart or contact the database administrator.

ORA-12541: TNS: no listener

Cause: The connection request could not be completed because the listener is not running.

Action: Ensure that the supplied destination address matches one of the addresses used by the listener - compare the tnsnames.ora entry with the appropriate listener.ora file (or tnsnav.ora if the connection is by way of an interchange). Start the listener on the remote machine.

I received an ORA-00955 error in my AUT.log file. What should I do?

ORA-00955: name is already used by an existing object

Cause: An attempt was made to create a database object (such as a table, view, cluster, index,

or synonym) that already exists. A user's database objects must have distinct names.

Action: Enter a unique name for the database object or modify or drop the existing object so it can be reused.

You can ignore this in the Agile schema because the object already exists. The upgrade process takes care of dropping the object and recreating it if there are any changes.

I received an ORA-00904 error. What should I do?

ORA-00904: MS_JAVA ". "LONGNAME":Invalid Identifier.

Solution: Log in as the sys user and run the \$ORACLE_HOME\javavm\install\initdbj.sql script.

I received an ORA-01555 error. What should I do?

ORA-01555: "snapshot too old (rollback segment too small" when using Automatic Undo Management (AUM).

Solution: The UNDO tablespace is too small. Increase the size of the UNDO tablespace. Note that the UNDO tablespace should be large enough to store the undo data generated by active transactions as well as those preserved to honor the undo retention setting.

Increase the value of the Undo_retention parameter. This is important for systems running long queries. The parameter's value should at least be equal to the length of the longest running query on a given database instance. This can be determined by querying the V\$UNDOSTAT view once the database has been running for a while:

```
SQL> select max (maxquerylen) from v$undostat;
```

How long does it take the AUT to run?

The amount of time it takes the AUT to run depends on the database size. The amount of time needed to upgrade is also based on the database version of the source database. Import and export steps can be avoided by using the sourceEqualsDest property which also reduces the time.

Maintenance and Updates

Before you upgrade your database, you should always make sure you are using the latest version of the AUT. Changes to scripts such as averify may occur after the initial version has been released. To ensure your database is correctly upgraded, always check the Agile Support website for updates.

If updates are needed to the AUT, you can always find the latest version on the Agile Support Web Site (<http://www.oracle.com/agile/support.html>). Download the AUT.zip file and extract the file contents into the same directory where you originally extracted the files.

Updating File Attachments

If the file.manager.internal.locator property was not specified in the aut.properties file during upgrade, searches for attachment content in Agile PLM may not return up-to-date results, as the content_url column in the database is not updated.

To update the content_url column anytime after the database upgrade, specify this location in the aut.properties file (all other details remain the same) and run AUT again with the following command:

<AUT_HOME>/AUT/bin> aut execute-fts-post-tasks-921

Note	Ensure that the sourceEqualsdest parameter is set to true.
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