

Oracle ILM Assistant Installation Guide

Version 1.4

This document provides instructions for installing and running Oracle Information Lifecycle Management (ILM) Assistant.

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1 What's New in 1.4

No new features have been included.

The following problems have been resolved:

- Fails to install under Application Express 3.2
- Installation fails under alternate character sets
- Installation guide incorrectly refers to APEX users when logging into the ILM Assistant
- Merging partitions now respects merge threshold value of zero.

2 Known Problems

There are no known problems at this time.

3 Upgrading ILM Assistant

The following steps should be used only when upgrading an existing installation of the ILM Assistant. If you have an existing ILM Assistant installation, please following the instructions for installing the ILM Assistant.

3.1.1 Before You Upgrade

The upgrade procedure must reconstruct the ILM Assistant repository. This operation will preserve your existing data with the exception of lifecycle events. Lifecycle events can be restored after the upgrade by doing an event scan within the ILM Assistant.

3.1.2 Upgrade Procedure without File System Extensions

An Oracle database administrator must run many of the steps below. In the examples below, the SYS user is assumed to be a database administrator. This procedure can only be used if you currently have no 3rd party ILM Assistant file system extensions installed.

1. Copy the .zip file containing the appropriate kit to the directory in which you will perform the installation. Unzip the .zip file.
2. Install the new kit. You may wish to spool the installation session to a file so that you can easily check to see if there were problems during the installation.

```
sqlplus "sys/<password> as sysdba"  
@ilma_upgrade apex_password connect saved-data-file  
exit
```

where:

- **apex_password** is the password for the Application Express database user. [Details](#)
- **connect** is the Oracle Net connect string to the database. If this is a local install, use none or NONE.
- **saved-data-file** will be used to generate a script to restore your saved ILM Assistant data. The upgrade procedure will create the script and automatically execute after a successful update. The file will remain in the specified directory location after the upgrade procedure terminates. **You must include the full directory path in the specification.** If the '.sql' file extension is not provided in the specification, one will be appended.

Example

```
sqlplus "sys/my_fake_pwd as sysdba"  
@ilma_upgrade MY_APEX_PWD none d:\my_scripts\my_ilma_backup.sql
```

3. Execute the post-installation procedure as described in section [Post Installation / Upgrade](#).

3.1.3 Upgrade Procedure with File System Extensions

This procedure must be used when upgrading an existing ILM Assistant installation containing 3rd party ILM Assistant file system extensions.

An Oracle database administrator must run many of the steps below. In the examples below, the SYS user is assumed to be a database administrator.

1. Copy the .zip file containing the appropriate kit to the directory in which you will perform the installation. Unzip the .zip file.
2. If you have an existing ILM Assistant installation with data you wish to preserve, export your ILM Assistant data as described in [Exporting ILM Assistant Data](#). This step is optional.

Be careful not to lose or destroy the output file, or you will not be able to restore your data in [Step 8](#).

3. Uninstall any previous installation of ILM Assistant. Uninstalling ILM Assistant removes all Application Express users in the ILM_TOOLKIT workspace. You may wish to make a note of these users so that you can manually recreate them in [Step 5](#). This step may be skipped if you have no prior ILM Assistant installation.

```
sqlplus "sys/<password> as sysdba"  
@ilma_uninstall apex_password connect  
exit
```

where:

- **apex_password** is the password for the Application Express database user. [Details](#)
- **connect** is the Oracle Net connect string to the database. If this is a local install, use none or NONE.

4. Install the new kit. You may wish to spool the installation session to a file so that you can easily check to see if there were problems during the installation.

```
sqlplus "sys/<password> as sysdba"  
@ilma_install apex_password tablespace connect  
exit
```

where:

- **apex_password** is the password for the Application Express database user. [Details](#)
- **tablespace** is the tablespace in which to store the ILM Assistant database objects created by this installation. [Details](#)
- **connect** is the Oracle Net connect string to the database. If this is a local install, use none or NONE.

Example

```
sqlplus "sys/my_fake_pwd as sysdba"  
@ilma_install MY_APEX_PWD ILM_ASSISTANT none
```

5. This installation creates the Application Express workspace ILM_TOOLKIT.
6. Execute the post-installation procedure as described in section [Post Installation / Upgrade](#).
7. Re-install any 3rd party ILM Assistant file system extensions. See the documentation provided by your file system vendor for any additional installation information.
8. If you have ILM Assistant data from your previous ILM Assistant installation that you wish to restore, run the file you created in [Step 2](#):

```
sqlplus "sys/<password> as sysdba"  
@<your-data-file-specification>.sql  
exit
```

Please note that restoring previous ILM Assistant data will not restore lifecycle events. Lifecycle events will only be restored by an Event Scan operation within the ILM Assistant.

4 Installing ILM Assistant

The following steps should be used only when installing the ILM Assistant for the first time. If you have an existing ILM Assistant installation, please following the instructions for upgrading the ILM Assistant.

4.1.1 Before You Install

Make sure you have the following software installed and running in your environment:

- Oracle Database version 9.2 or higher
- Oracle Application Express version 2.2 or higher

Also make sure that the Oracle initialization parameter `JOB_QUEUE_PROCESSES` is set to a value of at least 1.

Gather the following information in preparation for your installation of ILM Assistant:

- The current password of the Application Express schema owner. For Application Express version 3.2 or greater, this is the Oracle user `APEX_nnnnnn`. For Application Express versions prior to 3.2, the Oracle user is `FLWS_nnnnnn`. By default, this is the password that was specified for the Application Express installation procedure. However, it is possible that a DBA has since changed the password for account. The current password is required for the ILM Assistant installation procedure.
- The tablespace in which to store ILM Assistant database objects. This installation creates the Oracle user `ILM_TOOLKIT` into which ILM Assistant database objects are installed. You need to specify the tablespace to use as the default tablespace for the `ILM_TOOLKIT` user. If you specify a tablespace that exists, the ILM Assistant installation uses it. If you specify a tablespace that doesn't exist, the ILM Assistant installation creates it and uses it.

4.1.2 Installation Procedure

An Oracle database administrator must run many of the steps below. In the examples below, the `SYS` user is assumed to be a database administrator.

1. Copy the .zip file containing the appropriate kit to the directory in which you will perform the installation. Unzip the .zip file.
2. If you have an existing ILM Assistant installation with data you wish to preserve, export your ILM Assistant data as described in [Exporting ILM Assistant Data](#). This step is optional.
Be careful not to lose or destroy the output file, or you will not be able to restore your data in [Step 6](#).
3. Uninstall any previous installation of ILM Assistant. Uninstalling ILM Assistant removes all Application Express users in the `ILM_TOOLKIT` workspace. You may wish to make a note of these users so that you can manually recreate them in [Step 5](#). This step may be skipped if you have no prior ILM Assistant installation.

```
sqlplus "sys/<password> as sysdba"
```

```
@ilma_uninstall apex_password connect
exit
```

where:

- **apex_password** is the password of the Application Express schema owner. [Details](#)
 - **connect** is the Oracle Net connect string to the database. If this is a local install, use none or NONE.
4. Install the new kit. You may wish to spool the installation session to a file so that you can easily check to see if there were problems during the installation.

```
sqlplus "sys/<password> as sysdba"
@ilma_install apex_password tablespace connect
exit
```

where:

- **apex_password** is the password for the Application Express database user. [Details](#)
- **tablespace** is the tablespace in which to store the ILM Assistant database objects created by this installation. [Details](#)
- **connect** is the Oracle Net connect string to the database. If this is a local install, use none or NONE.

Example

```
sqlplus "sys/my_fake_pwd as sysdba"
@ilma_install MY_APEX_PWD ILM_ASSISTANT none
```

5. This installation creates the Application Express workspace ILM_TOOLKIT.
6. If you have ILM Assistant data from your previous ILM Assistant installation that you wish to restore, run the file you created in [Step 2](#):

```
sqlplus "sys/<password> as sysdba"
@<your-data-file-specification>.sql
exit
```

Please note that restoring previous ILM Assistant data will not restore lifecycle events. Lifecycle events will only be restored by an Event Scan operation within the ILM Assistant.

7. Execute the post-installation procedure as described in section [Post Installation / Upgrade](#).

5 Post Installation / Upgrade

After a successfully executing the installation or upgrade scripts, a required post-installation script must be executed. The script has been excluded from the main installation / upgrade scripts because of its potential time demand. The purpose of the script is to prepare any internal caching tables for use by the ILM Assistant. If the local application environment contains many schemas, tables or tablespaces, the script may take hours to complete, so careful planning is necessary. Typically, the script may run for 3 minutes for every 350 tables defined in the database.

To execute the script:

```
sqlplus "sys/<password> as sysdba"  
@ilma_post_install  
exit
```

6 Optional ILM Assistant Demonstration Data

There is a separate kit available that loads and unloads ILM Assistant demonstration data. You can download it from the same Oracle Technology Network (OTN) location as this ILM Assistant kit.

Loading ILM Assistant demonstration data is optional. It is useful for getting started with ILM Assistant and understanding what ILM Assistant can do.

7 Running ILM Assistant

The ILM Assistant is invoked inside a browser by navigating to the defined URL. The URL format is specified by your particular Application Express installation. In all formats of the URL, the Application Express application identifier for the ILM Assistant is **737677**.

Example using a URL and an HTTP server to access the ILM Assistant:

```
http://mynode.mydomain.com:7777/pls/apex/f?p=737677
```

See the **Oracle® Application Express Installation Guide** for more details on specifying the correct URL.

Once you successfully connect to the ILM Assistant via the browser, it will prompt you for an Oracle database username and password. You can use any Oracle user having the appropriate privileges or one of the users you created by [following these steps](#).

8 Creating Users

The ILM Assistant requires an Oracle database user and password to authorize usage.

The database user must have the following privileges to use the ILM Assistant:

For 9i:

- ALTER ANY TABLE
- ALTER TABLESPACE
- DROP ANY TABLE
- MANAGE TABLESPACE

For 10g or later:

- ADVISOR
- ALTER ANY TABLE
- ALTER TABLESPACE
- DROP ANY TABLE
- MANAGE TABLESPACE

The ILM Assistant also requires execution privileges for specific internal packages. To grant the necessary execution privileges, a SQL*Plus script has been provided to do the required work:

```
sqlplus "sys/<password> as sysdba"  
@grant_privs <oracle-user-name>  
exit
```

Note: this script will only grant privileges on ILM Assistant packages. Also, the ILM Assistant **does not** expose any user data.

9 Exporting ILM Assistant Data

The ILM Assistant includes a SQL*Plus script that will in turn generate a script to reconstruct your ILM Assistant data in a new or upgraded ILM Assistant application. The generated script contains calls to ILM Assistant to create the following entities:

- Logical Storage Tiers
- Lifecycle Definitions
- Managed Table Definitions
- Simulated Table Definitions
- Signed Result Set Definitions
- Policy Notes
- Preferences
- Lifecycle Events

The following procedure will generate an ILM Assistant data script:

```
sqlplus "sys/<password> as sysdba"  
@ilma_export <your-data-filename>.sql  
exit
```

You must include the **full directory path** in the output file specification. If the '.sql' file extension is not provided in the specification, one will be appended.

The export routine will temporarily create a SQL DIRECTORY object for the purpose of creating the target script. Once the export operation finishes, the directory object will be dropped. If, for some reason, the directory object does not get dropped, just execute a DROP DIRECTORY ILM\$\$TEMP command from SQL*Plus.

The generated script should be executed while connected as SYS.

Example

```
sqlplus "sys/my_fake_pwd as sysdba"  
@ilma_export d:\my_scripts\my_ilma_backup.sql
```

10 Uninstalling the ILM Assistant

If you wish to completely remove the ILM Assistant from you data, perform the following steps:

1. (Optional) Save existing ILM Assistant data. If you wish to preserve any data from the ILM Assistant, you should export your ILM Assistant data as described in [Exporting ILM Assistant Data](#).
2. Execute the uninstall procedure. This will remove the application and delete the database user ILM_TOOLKIT, including the ILM Assistant repository.

```
sqlplus "sys/<password> as sysdba"  
@ilma_uninstall apex_password connect  
exit
```

where:

- `apex_password` is the password for the Application Express database user. [Details](#)
- `connect` is the Oracle Net connect string to the database. If this is a local install, use none or NONE.

11 Reporting Problems

Please report any problems with the ILM Assistant on the Oracle Technology Network (OTN) ILM Assistant forum:

<http://forums.oracle.com/forums/forum.jspa?forumID=250>

12 Suggested Enhancements

Please submit an email to the Product Manager at Hermann.Baer@oracle.com