

Oracle Utilities Load Analysis

Installation Guide

Release 1.11.1.1 for Windows

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Preface

Welcome to Oracle Utilities Load Analysis

This preface is designed to help you understand the contents and purpose of this manual, as well as the other resources available to you.

Welcome

Client/Server Oracle Utilities Load Analysis (also called Oracle Utilities Load Analysis) is a suite of software programs for the collection, management, and analysis of load research data.

What Does this Guide Cover?

This guide explains how to install Oracle Utilities Load Analysis as a stand-alone, or as a client/server/web system in a LAN environment that may use multiple versions of Windows. If you have another type of LAN, contact Oracle Support personnel at <http://metalink.oracle.com>.

Who is this Guide For?

This guide is intended for the Oracle Utilities Load Analysis System Administrator. It assumes that you are familiar with Windows, and that you know how to perform administrative tasks such as mapping drives and sharing directories.

Conventions Used in this Manual

This guide assumes that you have a working knowledge of your computer and network, as well as their operating conventions. For information about Windows operating conventions, see your Windows documentation.

The following conventions are used in this guide:

Mouse Buttons:

All instructions refer to the left mouse button unless otherwise indicated. Use the *right* mouse button only when specifically instructed.

Typographic Conventions:

Information that you type is shown in a typeface called Courier New, which looks like typewriter type. For example: `Oracle Utilities`.

The names of keys you press are represented by small capital letters. For example: ENTER. Occasionally, in this manual and on the Oracle Utilities Load Analysis interface, you will see two key names with a plus sign (+) between them. This indicates that you should press and hold down the keys in the order specified and release them together. For example, ALT+F5 means that you should press the ALT key and, while holding it down, press F5.

A sequence of menu commands you select is represented by the name of each menu or command followed by a small arrow, in **boldface** type. For example, **File->Print** means select **File** from the desktop or window menu bar, then **Print** from the pull-down menu that appears.

How to Get Help

Customer Support

You can contact Oracle Support personnel at <http://metalink.oracle.com>. My Oracle Support offers you secure, real-time access to Oracle experts on the complete Oracle Utilities Load Analysis system. It also provides ground breaking personalized & proactive support capabilities that help reduce unplanned down time and improve system stability. Leverage the Internet for immediate access to 24/7 support and get the critical and timely information you need for running your business.

Additional Documentation

Additional references for Oracle Utilities Load Analysis are available in on-line (.pdf) versions at <http://www.oracle.com/technetwork/indexes/documentation/>.

For example, the *Oracle Utilities Load Analysis User's Guide* describes how to submit jobs using Oracle Utilities Load Analysis. The *Oracle Utilities Load Data Analysis User's Guide* and *Load Data Management User's Guide* describe the features, functions, and operation of individual Oracle Utilities Load Analysis programs. The *Oracle Utilities Load Analysis Quick Reference Guide* is a concise summary of program names, input file commands and parameters, standard codes, and other important information for the basic Oracle Utilities Load Analysis system and its extensions.

User Feedback

This document will be refined and updated over time. We would appreciate your help in improving it. If you have suggestions for adding new topics or for clarifying existing explanations, please let us know by calling the Oracle Support.

Chapter 1

Installing the Oracle Utilities Load Analysis Application Software

This chapter provides step-by-step instructions for setting up Oracle Utilities Load Analysis on a Windows peer-to-peer network.

You should allot approximately two hours for installation and one hour for testing.

About the Oracle Utilities Load Analysis Network Architecture

Note: Oracle Utilities Load Analysis is not backwards compatible with other Oracle Utilities products. Therefore, Oracle Utilities Load Analysis users who have another Oracle Utilities application installed should upgrade the other Oracle Utilities application to prevent compatibility issues with either application. It is highly recommended that you keep Load Analysis separate from other applications to avoid upgrade/patch incompatibilities.

Oracle Utilities Load Analysis runs on a Windows, and has been designed to make optimal use of resources in a distributed computing environment. The networked version of Oracle Utilities Load Analysis requires a minimum of two machines:

- **Client Workstations:** Windows 7 personal computers on which users interact with the Oracle Utilities Load Analysis system. Users submit jobs, view output, and apply graphing and reporting tools using a point-and-click Graphical User Interface (GUI).

Each user's version of Control and Environment files (input and configuration files), as well as small Direct Input files, can be stored locally on the user's Client Workstation.

There must be at least one Client Workstation on the network, but there may be several more.

- **Server:** This computer is the computational engine of the system. It uses the Windows 2008 operating system to run the Oracle Utilities Load Analysis application programs.

This computer also serves as the central storage area for the Oracle Utilities Load Analysis product suite. The Server may also store files that must be accessed by all users, such as the "Common files," or the Sequencer files and inputs, and files that can require a large amount of storage space, such as the "Production Input files" (interval data files) and job results and reports "owned" by individual users in their own directories.

Installing Oracle Utilities Load Analysis in Stand-Alone Mode

You can use the instructions in this chapter to install Oracle Utilities Load Analysis on a single Windows workstation. This is only recommended if you are testing the product or your circumstances require this architecture. In this architecture Windows 7 or 2008 may be used as the base operating system. *Whenever the instructions for the stand-alone version differ from the main body of the text, you'll be alerted with this symbol: ☞.*

As you install the Server and Client software on the one machine, think of the process as setting up a virtual Server and a virtual Client. When you use the Windows mapping and sharing capabilities, you are creating a virtual network inside your workstation. You share some of the “server” directories and map “client” drive letters to them. In this way the two sets of Oracle Utilities Load Analysis software (Server and Client) function just as they would on physically separate, networked machines. This type of setup is helpful when testing new versions of the software. You may need to install the loopback adapter on this machine.

Getting Ready

This section provides an overview of the pre-installation steps involved in installing Oracle Utilities Load Analysis.

Verify that Your Hardware and Software Meets Requirements

Before beginning the installation process, be sure to verify that your system meets the minimum requirements outlined in the *Oracle Utilities Energy Information Platform Installation Guide*.

Note: Relational Database Management System software, such as Oracle 11g, is required for this version.

In addition to the stated requirements, Oracle Utilities Load Analysis servers (and machines used for “stand-alone” mode) should have the following available disk space:

- For interval data databases, use this guideline: 1 year of 15-minute data for 1000 channels requires approximately 248MB. If statistics are to be written to the database, allow an additional 25%.
- 3 MB minimum for “Common files”, or more depending upon how you manage your data. At least 5 GB is recommended.
- 500 MB (minimum) for each user's job output. You should interview the users to understand how many reports they wish to store on the server. Each report folder requires 500KB to 5 MB or more. At least 10 GB is recommended.

Make Sure that Your Network is Connected and Working (for Networked Version)

Make sure that each Client Workstation can access the shared directories on the Server and has read/write access to the folders mentioned in the Configuration Guide.

Check Your Oracle Utilities Load Analysis Download

Check the contents of your Oracle Utilities Load Analysis download for the following:

- **Installation download that includes:**
 - Oracle Utilities Energy Information Platform Lite installation/setup
 - Oracle Utilities EIP_LITE 1.6.1.xx.x.msi
 - setup.exe
 - Oracle Utilities Load Analysis (web) installation/setup
 - Oracle Utilities LA 1.6.1.xx.x.msi
 - Server installation/setup
 - Server.exe
 - Client Workstations installation/setup
 - Client.exe
 - Oracle Utilities Load Analysis Documentation (*.PDF)
 - Database scripts

If you are missing any of these materials, please contact Oracle Support.

Prepare Database Server for the Oracle Utilities Data Repository

You must prepare a database server that will host the Oracle Utilities Data Repository. See **Database Server** on page 2-5 in the *Oracle Utilities Energy Information Platform Installation Guide* for database server hardware and software requirements. See **Installing Relational Database Management System Software** on page 2-12 in the *Oracle Utilities Energy Information Platform Installation Guide* for more information about setting up and installing the database server software. Please note that Oracle Utilities Load Analysis supports only Oracle as a database server.

Create the Oracle Utilities Data Repository Database Schema

You must create the database schema for the Oracle Utilities Data Repository. If you are upgrading your Load Analysis system your database should already be created. However, you should still review this section for additional information.

This section describes how to install and verify the Oracle Utilities Load Analysis database tables and data in the Oracle Utilities Data Repository, including:

- **Installation Requirements**
- **Installing the Database**
- **Upgrading the Load Analysis Database Schema from Versions Prior to 1.11.x**
- **Verifying the Database**

Note: This section assumes that you have created the Oracle Utilities Data Repository schema as described in **Chapter 3: Oracle Utilities Data Repository Schema Creation** of the *Oracle Utilities Energy Information Platform Installation Guide*.

Installation Requirements

The following are required in order to install the Oracle Utilities Load Analysis tables and data into the Oracle Utilities Data Repository:

- The Oracle Utilities Data Repository (v1.6.1.xx.0) schema must have been installed on the database instance on which you plan to run Oracle Utilities Load Analysis.
- The **addLA.cmd** file. This database script adds the Oracle Utilities Load Analysis database tables and data to the Oracle Utilities Data Repository.
- The **updateLA.cmd** file. This database script updates the tables and data used by Oracle Utilities Load Analysis in the Oracle Utilities Data Repository. See **Upgrading the Load Analysis Database Schema from Versions Prior to 1.11.x** on page 1-5 for more information.

Installing the Database

Installing the Oracle Utilities Load Analysis database involves installing the Oracle Utilities Load Analysis database schema into the Oracle Utilities Data Repository. Please note that MS-SQL is not supported with Load Analysis.

Installing the Oracle Utilities Load Analysis Schema

Before you can install the Oracle Utilities Load Analysis schema, you must install the Oracle Utilities Data Repository schema. This is what we call the “base schema” which will be modified by addLA.cmd described below. For more information, see the *Oracle Utilities Energy Information Platform Installation Guide*.

To install the Oracle Utilities Load Analysis schema, open a command prompt and run the addLA.cmd script. This script uses the following syntax:

```
addLA.cmd [-d <database>] [-own <owner name>] -opw <owner password>
```

Parameter	Description
<database>	The name given to the instance as specified in the TNSNAMES.ORA file. This parameter is optional and if not specified, the script will connect to the default Oracle database.
<owner name>	The name of the user which will own the database objects. This parameter is optional. If not specified, the default user PWRLINE will own database objects.
<owner password>	The chosen password for the PWRLINE schema owner.

Like the base schema database tables and indexes, the Oracle Utilities Load Analysis objects are created in the default tablespace of the PWRLINE user with default sizing parameters. If these defaults are required to be changed then the scripts may be edited.

Note: The PWRLINE user is the owner of all of the database tables. The PWRLINE_USER role has read and write access, but does not have permissions to work with security database tables. For more information on these roles, see **Chapter 3: Oracle Utilities Data Repository Schema Creation** in the *Oracle Utilities Energy Information Platform Installation Guide*.

Database Parameters

The following database parameter settings are recommended to improve performance:

```
optimizer_index_caching=100
optimizer_index_cost_adj=1
```

Upgrading the Load Analysis Database Schema from Versions Prior to 1.11.x

If you are upgrading Oracle Utilities Load Analysis from a previous version, you must upgrade the Load Analysis database schema. Oracle recommends that this database upgrade be done only if you have significant investment in the security configuration or significant interval data already in Oracle tables from previous versions. Oracle supplies, upon request, a utility that dumps interval data from interval tablesets from previous versions and loads the data into a new 1.11.1.0.0 tables.

The following database upgrade scripts are included in the Load Analysis installation package:

- The **updateLA.cmd** file. This database script updates the tables and data used by Oracle Utilities Load Analysis in the Oracle Utilities Data Repository. This script can only be used when upgrading the following schema version.

v1.10 Schema Version	v1.11 Schema Version
v1.10.0.0.0	v1.11.0.3.0

If you are upgrading from a different schema version, contact Oracle Global Customer Support. The version of your schema may be discovered using a select all from the LSVERSION table.

Upgrading the Oracle Utilities Load Analysis Schema

Open a command prompt and run the update.cmd script. This script uses the following syntax:

```
updateLA.cmd [-d <database>] [-own <owner name>] -opw <owner password>
```

Parameter	Description
<database>	The name given to the instance as specified in the TNSNAMES.ORA file. This parameter is optional and if not specified, the script will connect to the default Oracle database.
<owner name>	The name of the user which will own Oracle Utilities database objects. This parameter is optional. If not specified, the default Oracle Utilities user PWRLINE will own database objects.
<owner password>	The chosen password for the PWRLINE schema owner.

Verifying the Database

Verifying the Oracle Utilities Load Analysis database involves verifying the Oracle Utilities Load Analysis database schema in the Oracle Utilities Data Repository.

Verification - Load Analysis Tables

To verify that the Oracle Utilities Load Analysis schema tables are in place use the following procedure:

1. Log into the database using the PWRLINE user.
2. Verify that the following tables exist in the database:
 - LSAXDB
 - LSCHALDB
 - LSCDALDB
 - LSCVMSGALDB
 - LSCEDITALDB
 - LSCHALDBA
 - LSCDALDBA
 - LSCHCLDB
 - LSCDCLDB
 - LSCVMSGCLDB
 - LSCEDITCLDB
 - LSCHCLDBA
 - LSCDCLDBA
 - LSCHCLDBA
 - LSCDELDB
 - LSCVMSGELDB
 - LSCHSLDB
 - LSCDSLDB
 - LSCVMSGSLDB

- LSCHGLDB
- LSCDGLDB
- LSCVMSGGLDB
- LSCHRLDB
- LSCDRLDB
- LSCVMSGRLDB
- LSCHCLDB2
- LSCDCLDB2
- LSCVMSGCLDB2
- LSCEDITCLDB2
- LSCHCLDB2A
- LSCDCLDB2A
- LSCHGLDB2
- LSCDGLDB2
- LSCVMSGGLDB2
- LSTOUSCHEDULE
- LSTOUPERIOD
- LSSEASONSCCHEDULE
- LSSEASONPERIOD
- LSSEASONDATE
- LSLASTRATA
- LSLASAMPLEPOINT
- LSLAPERIOD
- LSLASAMPLEBILLEDENERGY
- LSLASTRATAPERIOD
- LSLAPEAKS
- LSLAPARAMETER

Appendix B: Oracle Utilities Data Repository Load Analysis Database Schema in the *Oracle Utilities Load Analysis Configuration Guide* includes a diagram of the Oracle Utilities Load Analysis database schema (v1.11.0.3.0) that provides details regarding the table and columns in the Oracle Utilities Load Analysis schema, as well as the relationships between these tables in the Oracle Utilities Data Repository.

Overview of the Oracle Utilities Load Analysis Installation Process

The remainder of this chapter explains how to set up and install Oracle Utilities Load Analysis on a Windows network or workstation. The following procedure describes the installation process:

1. Installing Software and Data on the Server
 - a. Install Oracle Utilities Energy Information Platform LITE with EIP Load Analysis.
 - b. Install Oracle Utilities Load Analysis Server software.
 - c. Create empty directories on the Server.
 - d. Share Server directories.
 - e. Prepare read-only default Common files.
 - f. Set up user IDs and access privileges in CSLSTAR.USR.
 - g. Update the CSLSTAR.SRV File.
 - h. Update the CSLSTAR.GLB File.
 - i. Set up web server configuration files
 - j. Start the Oracle Utilities Load Analysis Server software.
2. Installing Client Software on Each Workstation
3. Completing Setup of Client Workstations
 - Set Preferences for the Workstation
 - Testing the Software
4. Final Steps

Installing Software and Data on the Server

This section outlines the steps involved in installing software and data on an application or web server, including:

- **Install Energy Information Platform Software**
- **Install Oracle Utilities Load Analysis Web Server Software**
- **Install Oracle Utilities Load Analysis Server Software**
- **Creating Empty Directories on the Server**
- **Sharing Server Directories**
- **Preparing Read-Only Default Common Files on the Server**
- **Setup of User IDs and Access Privileges**
- **Updating Values in CSLSTAR.SRV**
- **Updating Paths in CSLSTAR.GLB**
- **Set Up Web Server Configuration Files**
- **Installing Client Software on Each Workstation**

Install Energy Information Platform Software

Your installation package includes an installation program for installing the Oracle Utilities Energy Information Platform LITE software. Refer to the *Oracle Utilities Energy Information Platform Installation Guide* for detailed instructions for installing the Oracle Utilities Energy Information Platform.

Install Oracle Utilities Load Analysis Web Server Software

We recommend installing the Load Analysis application server on the same machine as the Oracle Utilities Energy Information Platform. This section describes how to install the Oracle Utilities Load Analysis software.

Installing Energy Information Platform LITE

To install the Oracle Utilities Load Analysis software with the Oracle Utilities Energy Information Platform, use the following procedure:

1. Check that all prerequisites have been met, such as the installation of the proper versions of:
 - MSXML
 - Oracle Client (installed and checked)
 - IIS

For more information, see the *Oracle Utilities Energy Information Platform Installation Guide*.

2. Unzip and navigate to the Installs folder created by the Energy Information Platform installation package. This folder contains the following:
 - Client.exe: This is the Client install and should be installed on each client attempting to access the server.
 - Server.exe: This is the application server installation package.
 - Two folders for EIP LITE with Load Analysis:
 - EIP: This folder contains the following files:

- 1.6.1.21.0L.EIP_LITE.zip, which contains Setup.exe and Oracle Utilities EIP_LITE 1.6.1.21.0.msi. (This is the base EIP setup package.)
 - LA: This folder contains:
 - Oracle Utilities LA 1.6.1.21.0.msi which is the Web-based Load Analysis product. This file must be copied to the same folder as the setup.exe mentioned in the EIP folder prior to running setup.exe.
3. Navigate to the Install folder created by the Oracle Utilities Load Analysis installation package (1.6.1.xx.x.LA.zip). This file contains the following files:
 - Oracle Utilities LA 1.6.1.xx.x.msi
 4. Copy the “Oracle Utilities LA 1.6.1.xx.x.msi” file into the same directory as the Energy Information Platform files containing the setup.exe file.

The directory should now contain following:

 - Oracle Utilities EIP_LITE 1.6.1.xx.x.msi
 - setup.exe
 - Oracle Utilities LA 1.6.1.xx.x.msi
 5. Double-click the setup.exe file.

A dialog opens asking you to confirm the products you wish to install. Confirm that there are two products listed. Click **Yes** to continue with the installation. Click **No** to cancel the installation.
 6. Proceed with the installation (starting at Step 3) as outlined in **Chapter 4: Installing the Oracle Utilities Application Software** in the *Oracle Utilities Energy Information Platform Installation Guide*.

Install Oracle Utilities Load Analysis Server Software

Your installation package includes an installation program for installing the Oracle Utilities Load Analysis Server software onto the Windows Server.

How to install the server software:

1. Navigate to the directory containing the installation program, Server.exe.
2. Run Server.exe. (We recommend always accepting the defaulted options and paths. If you change the path you must make note of the exact path you use. This path will be required when performing upgrades and installing patches.)

The setup program guides you through the remainder of the process with on-screen instructions.
3. The “Welcome” screen is displayed. Click **Next** to begin the installation.
4. The “License Agreement” screen is displayed. Click on the button to accept the terms and click **Next**.
5. The “Customer Information” screen is displayed. Enter the optional information as appropriate and click **Next**.
6. The “Destination Folder” screen is displayed. If desired, change the destination folder for the installation from C:\ to another drive. Click **Next**. (**Note:** From here on, these instructions will assume an install directory of C:\.)
7. The “Setup Type” screen is displayed. Select “Typical” or “Custom” and click **Next**. (Oracle Utilities recommends that you select the “Typical” setup type.)
8. The “Ready to Install” screen displays. Click **Install**.

9. An informational “Installing” screen displays.
10. When the installation is complete, click **Yes** to restart the system.

Creating Empty Directories on the Server

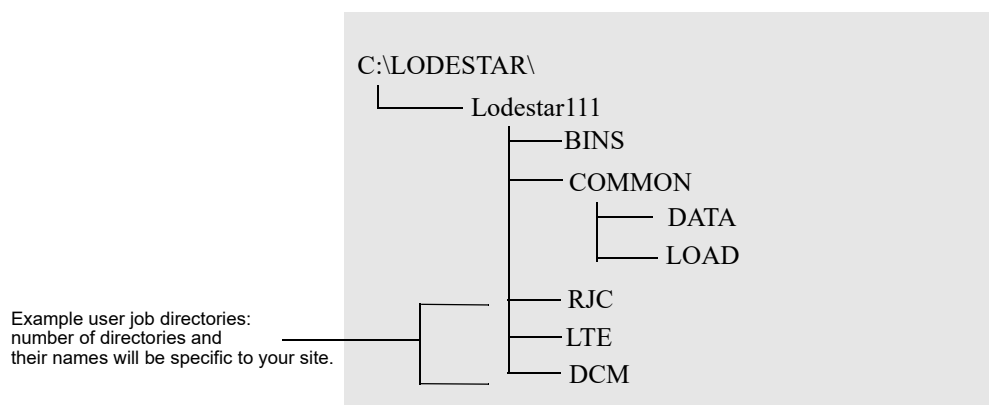
The next step in the installation process is to manually create empty directories on the server to hold job output files, read-only default common files, and validation files, as described below.

Job Directories

You must create one sub-directory under Lodestar111 for each Oracle Utilities Load Analysis user's job output. *Each sub-directory's name must exactly match the user's Oracle Utilities Load Analysis User ID (which you will set up in "Setup of User IDs and Access Privileges on page 1-15").* These IDs will be for Oracle Utilities Load Analysis logon only; they do not have to match the LAN logon. For simplicity, it's recommended that you use each user's three initials.

Note: User IDs CANNOT contain any spaces or blanks nor contain the following characters: /:*"<>|."

For example, if you had three Oracle Utilities Load Analysis users identified as RJC, LTE, and DCM, the complete directory structure so far would be:



Note: For stand-alone installations, rather than creating multiple job directories under Lodestar111, create just one job directory under Lodestar111 and give it your own User ID.

Sharing Server Directories

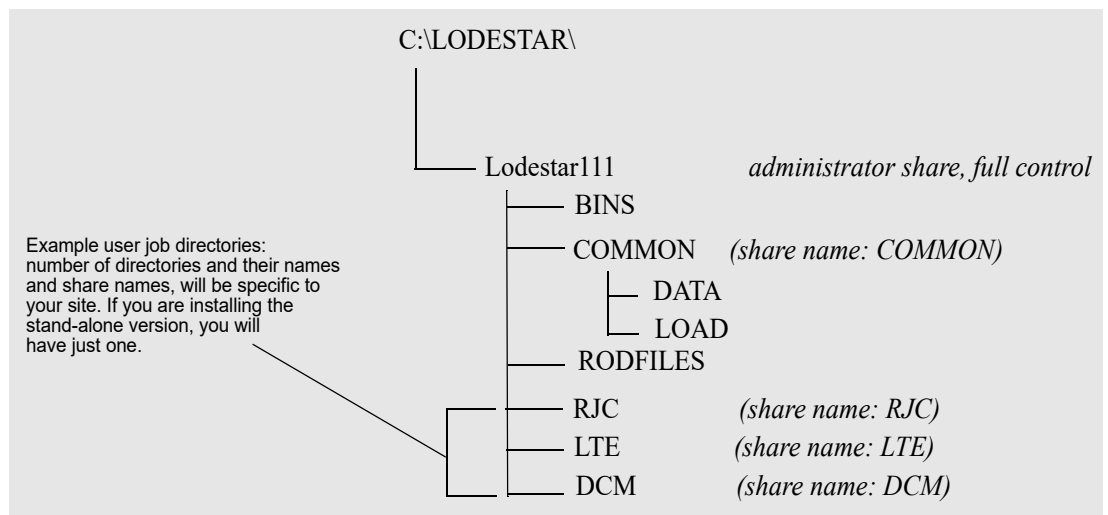
Now, you must share some of the directories just installed on the Server, so that the Client Workstations can locate them and the administrator has proper control. (*If you are installing in stand-alone mode, see note at left.*)

1. First, share the COMMON directory. Give all Oracle Utilities Load Analysis users “full control” to COMMON.
2. Next, share each user’s job directory—giving full control to only the user who owns the directory. *Each share name must match the user's job directory name **exactly**.* For example, the share name for a user job directory called RJC must be RJC. This is the default.

Reminder: In order to secure the system, be sure that all Oracle Utilities Load Analysis users have full control (found under “permissions”) to COMMON, and that individual users have sole full control of their shared job directories.

3. *Optional.* To facilitate support of your system, we recommend that you share the Lodestar111 directories to only the individual who will act as the administrator, and give that person “full control.” This allows the administrator of the system to apply patches and hot fixes.

The completed Oracle Utilities Load Analysis directory structure on the Server is illustrated below:



Note: For stand-alone installations, ignore the instructions in Sharing Server Directories above, except Step 2. In other words, share your job directory with yourself. Your directory structure should match that illustrated below, except that you should have just one user job directory (with the same name as your User ID).

Setting up Configuration and Default files

You will need to setup and configure several configuration files to reflect your site. Before you can start updating configuration files, you will need to place them in their proper directories.

There are several example folders with supplied configuration and default files that you will need to install. To install supplied configuration files, copy the contents from these folders as follows:

From	To
BINS\Example_cfg	BINS\
*CFG\examples	CFG\
COMMON\DATA\examples	COMMON\DATA\
*COMMON\LOAD\examples	COMMON\LOAD\
RODFILES\examples	RODFILES\
*SEQFILES\examples	SEQFILES\
*SEQINP\examples	SEQINP\

*Optional

The last two folders deal with the sequencer which is an automation tool. If you plan to utilize this tool, you should also share these folders to the users that need them so that they may edit, add and delete files for these folders from their client software.

Preparing Read-Only Default Common Files on the Server

Oracle Utilities Load Analysis has been designed to incorporate *read-only default versions* of four Common files: the Holiday File (TGY31C.HOL), the Time-Of-Use Schedule File (TGY31D.TOU), the Season File (TGY31E.SEA), and the User-Specified Day File (TGY31F.USD). These files are protected from accidental or unauthorized modification because they are typically used by all Oracle Utilities Load Analysis users, and should consistently reflect the policies of your company. You can find more information about these files in the *Oracle Utilities Load Analysis Load Data Management User's Guide, Chapter Five*.

The Oracle Utilities Load Analysis installation package comes with Oracle Utilities-supplied versions of these four read-only default files. *For the initial installation, it is recommended that you install the supplied versions, as described below.* Once the software has been installed successfully, you can replace them with your own versions using the instructions in **Chapter 1** of the **Oracle Utilities Load Analysis Configuration Guide**.

Setup of User IDs and Access Privileges

In this section, you will modify the CSLSTAR.USR file on the Server to establish each user's logon ID and program/database access.

There are two classes of Oracle Utilities Load Analysis users: *system administrators* have unrestricted access to all programs and databases, and *users* have access to non-administrative programs. In particular, only administrators can perform server setup functions.

In order for you to complete the installation process and maintain the system in the future, give yourself administrator status. You can grant administrative privileges to others if you choose (there can be more than one system administrator, but *there must be at least one*). At this point in the process, you are only required to set yourself up as an administrator so that you can proceed with the installation; you can modify other settings later using the Graphical User Interface on the client machine.

Note: When you create a database user, you should grant them access to the PWRLINE_USER role. The PWRLINE user is the owner of all of the database tables. The PWRLINE_USER role has read and write access, but does not have permissions to work with security database tables outside of the application. For more information on these roles, see **Chapter 3: Oracle Utilities Data Repository Schema Creation** in the *Oracle Utilities Energy Information Platform Installation Guide*.

How to establish user IDs and access privileges for system administrators and users:

1. On the Server, locate the file CSLSTAR.USR in the Lodestar111\BINS directory. If this file does not exist, copy the example version of the file into the BINS folder. *Right-click* on the file. Go to "Properties". In "Attributes", clear the "Read-only" box.
2. Open CSLSTAR.USR using Notepad or another editor.
3. For each system administrator, add the following line:

```
userid ADMIN
```

where *userid* is the user's logon ID for Oracle Utilities Load Analysis (*the same ID that you assigned to the user's job directory in **Creating Empty Directories on the Server** on page 1-12*). For example, if your ID were "RJC", you would type: RJC ADMIN.

Remember, there **must** be at least one system administrator.

- 3b. *Optional.* For each remaining non-administrator user, add the following line:

```
userid ALL;ALL
```

where *userid* is the user's logon ID for the Oracle Utilities Load Analysis Graphical User Interface (*the same ID that you assigned to the user's job directory*). For example, if the user's ID were "LTE", you would type: LTE ALL;ALL.

Note: The ALL;ALL value gives the user access to all non-administrative databases and programs. Once the installation is complete, you can revise the file to restrict access for each user on a program-by-program and database-by-database basis. (Instructions are provided in **Chapter 1** of the **Oracle Utilities Load Analysis Configuration Guide**.)

4. Save the file with your changes.

Updating Values in CSLSTAR.SRV

You also need to update two commands in another configuration file, CSLSTAR.SRV. These modifications will make it possible for you to start the application successfully.

How to update values in CSLSTAR.SRV:

1. On the Server, locate the file CSLSTAR.SRV in the Lodestar111\BINS directory. If this file does not exist copy the example version of the file into the BINS folder.
2. Open CSLSTAR.SRV using Notepad or another editor.
3. Locate the JOBRESOURCE command in the file. This command identifies the location of Oracle Utilities Load Analysis on the Server. It comes with a default value; update the value to match your Server's computer name, identity, or static IP address.

You can specify the server's identity as any one of the following formats:

Hostname:

JOBRESOURCE \\servername

This is the current standard setting where the value is simply the server name prepended with two backslashes (\\).

Fully Qualified Domain Name:

JOBRESOURCE \\servername.domain.net

Use this as your server's identity if your network requires fully qualified domain name to connect.

IP Address:

JOBRESOURCE \\xx.xxx.xxx.xx

You can use your server's IP address if this is the only way other computers can find your server on your network.

Keep in mind whichever format is chosen, all your client workstations will have to use the same convention to connect to the server.

Note: The double back-slashes (\\) before the computer name or identity are required.

Tip: You can find the name by double-clicking the Network icon in the Windows Control Panel. Your computer's name is displayed on the Identification tab.

4. Save the file with your changes.

Updating Paths in CSLSTAR.GLB

You need to update some commands in a third configuration file, CSLSTAR.GLB.

How to update paths in CSLSTAR.GLB:

1. On the Server, locate the file CSLSTAR.GLB in the Lodestar111\BINS directory.
2. Open CSLSTAR.GLB using Notepad or another editor.
3. Update the values for only the following commands, to reflect your current configuration:

RODFILES: The path on the Server to the directory that you set up for the default versions of the read-only default Common files in **Creating Empty Directories on the Server** on page 1-12. For example:

```
RODFILES d:\LODESTAR\Lodestar111\RODFILES
```

JOBDRIVE: The letter of the Server's local drive where the user job directories reside. Optional comments follow the ' mark. For example:

```
JOBDRIVE d ' these are optional comments
```

JOBPATH: The full path to the directory that you set up to contain the users' job directories. For example:

```
JOBPATH C:\LODESTAR\Lodestar111
```

LOADDIR: The path to the LOAD directory on the Server. This location is usually in Common\Load. For example:

```
C:\LODESTAR\Lodestar111\COMMON\LOAD\
```

COMMONFILES: The path to the DATA directory on the Server. For example:

```
C:\LODESTAR\Lodestar111\COMMON\DATA\
```

SEQINPFILS: The path to the SEQINP directory on the Server. For example:

```
C:\LODESTAR\Lodestar111\SEQINP\
```

SEQUENCERFILES: The path to the SEQFILES directory on the Server. For example:

```
C:\LODESTAR\Lodestar111\SEQRFILES\
```

4. Save the file with your changes.

Updating Database Definitions in CSLSTAR.DB

Database definitions are stored in the CSLSTAR.DB file.

How to update databases in CSLSTAR.DB:

1. On the Server, locate the file CSLSTAR.DB in the Lodestar111\BINS directory.
2. Open CSLSTAR.DB using Notepad or another editor.
3. Update the values to include any custom Interval Tablesets your system has already defined or that you are planning to define.
4. Save the file with your changes.

Set Up Web Server Configuration Files

Note: This section applies when using the Load Analysis web server application.

If you are using the Load Analysis web server application, you must set up configuration files used by the Energy Information Platform web server. See **Configuring a Web Server** on page 4-13 in the *Oracle Utilities Energy Information Platform Installation Guide* for more information.

Note: When setting up the LSReportMonitor.CFG.XML file for use with Load Analysis, you must specify the “LoadAnalysis” report type in the REPORT_TYPES element. See **LSREPORTMONITOR.CFG.XML** on page 2-36 in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information about this file.

In addition, you must also set up the LoadAnalysis.cfg.xml file to specify the locations of the Common Load and Common Data directories used by the Oracle Utilities Load Analysis web application. See **LoadAnalysis.cfg.xml** on page 1-12 in the *Oracle Utilities Load Analysis Configuration Guide* for more information about this file.

Starting the Server Software

Start the Oracle Utilities Load Analysis Server Software through the CSLSSERVER.EXE shortcut on the Windows desktop. *If you get a message saying that the microkernel is already loaded, simply acknowledge the message and close the message box by clicking **OK**.*

Two windows open — one labeled “cslsrvr.exe”, the other “cslsserver.exe”. *Both programs must remain running from here on for Oracle Utilities Load Analysis to function. **Do not quit either program while you intend to run Oracle Utilities Load Analysis.*** However, it’s OK to minimize the windows.

If your server does not start and show these two windows, refer to the .log file in the BINS folder for any messages.

Note: After initial testing and setup, you may wish to run the server as a Service. Refer to **Appendix A: Oracle Utilities Load Analysis Service**.

Installing Client Software on Each Workstation

Your installation package includes an installation program for loading the Oracle Utilities Load Analysis Client software onto each Client Workstation.

At each Client Workstation:

1. Navigate to the installation program.
2. Run the Client.exe program.

The setup program guides you through the remainder of the process with on-screen instructions.

The program creates a Oracle Utilities Load Analysis icon in a Program Group Window labeled “Client Server Oracle Utilities Load Analysis”.

About the Client Workstation Directory Structure: The installation program automatically sets up a directory called Lodestar111 on the Client Workstation. It has two sub-directories: BINW and DATA. BINW is automatically loaded with the GUI program executables. DATA\Examples contains sample Control and Environment files, and is available for storing your own local Control and Environment files.

Note: For stand-alone versions, the BINW and DATA directories are nested under the Lodestar111 directory. This means you have two DATA directories: one directly under Lodestar111 and one under Lodestar111\COMMON. Their functions are the same as those described for the network version.

Completing Setup of Client Workstations

You'll need to repeat all installation steps in this section for each Oracle Utilities Load Analysis Client Workstation. It is recommended that you first set up just one workstation for yourself as the System Administrator (using your Oracle Utilities Load Analysis User ID where an ID or user job directory name is requested), verify that the system is working using **Testing the Software** on page 1-22, and then return to these instructions for the other machines.

Note: In stand-alone installations, there can be just one client, so you will perform the steps in this section just once.

Mapping Drives from the Client Workstation to the Server

This step is optional, but it can serve as several useful features:

1. Verify that the Client Workstations can connect to your Server shares
2. Your users can have easy access to their files on the server.

For this step, you map two drive letters on the Client Workstation to two directories on the Server: one to a user's job directory that you had set up in **Installing Software and Data on the Server** on page 1-9, the other to Lodestar111\COMMON.

Tip: If available, map j: to your job directory and k: to COMMON (this is recommended because it's easy to remember *j* for job and *k* for common).

To verify that the mapping has been successful, do a directory listing for the COMMON directory. You should see that it contains two directories, DATA and LOAD. Next, do a directory listing for the user job directory. At this point, it should have no directories (in the future, when the user submits a job, Oracle Utilities Load Analysis will put the results of each job in a separate directory there).

Testing the Software

Now that you have installed the software, it's a good idea to test it. Once you are certain that everything is working properly, you can customize the system and begin using it in a production mode.

Testing the software consists of the following tasks:

- Log on to the server
- Enter the database connection information
- Run a report against your CLDB using the Summary Reporter Program (X440)

How to logon to the Load Analysis Server:

1. Start the Load Analysis Client application.

You should be prompted to provide your server name and user id:

2. Enter the server's identity you have provided as JOBRESOURCE value in your server's CSLSTAR.SRV file.

If you've identified your server as an IP address, enter the IP address here (ie: 192.169.70.1).
If you've identified your server as a fully qualified domain name, enter it as such here (ie: hostname.domain.net).

Next you should be prompted to enter your User Id.

3. Enter the user id you have created. The ID here should match an entry in the CSLSTAR.USR File.
4. Click OK.

You should be logged onto the server, and at the Oracle Utilities Load Analysis desktop.

How to Set Up Database Connections

At this point, your relational database should already have been created and all the necessary connection info should've been provided to you. If not, you will need to contact your DBA or the person that created the database schema for you.

At the Client Workstation:

1. Navigate to the client setup screen. Click **File→Setup**.
2. Under "Relational Database Login" enter the appropriate values.

How to Submit the "Summary Reporter" Job

At the Client Workstation:

1. Select the **X440 Summary Reporter** program within the **Reporting** tree of the Programs panel.
2. Make sure that **Example CLDB** is selected for interval database. Leave "none" for control file and "default" Environment File.
3. Click the Submit button. You see the Job Parameters window.

The Job Name is automatically supplied (the program name plus a sequential 4-digit number), but you can change it as desired. Everything else is optional. The job begins running in the Queue panel. When your job has completed successfully, the system marks it "Done" and may clear it from the screen. Before the message is cleared, note the program execution return code. A "21" code means that the job completed successfully however, no records were found. This should be expected since your database should be empty at this point.

4. You can display the Results by selecting the Report.html in the lower right panel that displays the job results.

The Results panel lists all of your job directories. Oracle Utilities Load Analysis automatically creates a new directory for each job submitted. The Results panel lists all the files contained in the job highlighted in the top of the panel.

5. REPORT.HTML is a file containing all reports produced by the job run. To view it, highlight it in the Job Files panel and then double-click on it.

Oracle Utilities Load Analysis displays the report in the Windows associated application viewer/editor (this should be Internet Explorer).

6. Review the report to ensure that the job completed successfully.

Within the report, you should find:

"==> NO ACTIVE RECORDS SELECTED."

This is the expected result. The test is complete.

Final Steps

The initial installation is complete—so what's next?

Completing Setup of Remaining Client Workstations

Repeat the installation procedures for all remaining client workstations. When done, *review* the procedures for each workstation. Did you...

- create the user's job directory and share name on the Server? (See **Creating Empty Directories on the Server** on page 1-12 and **Sharing Server Directories** on page 1-13.)
- install the Oracle Utilities Load Analysis Client software (See **Installing Client Software on Each Workstation** on page 1-20.)
- set up user ID and access privileges? (See **Setup of User IDs and Access Privileges** on page 1-15, or see **CSLSTAR.USR (User IDs and Privileges)** in Chapter One of the *Oracle Utilities Load Analysis Configuration Guide*.)

Customizing the System to Your Site

You can customize the operation of Oracle Utilities Load Analysis to the specific circumstances of your facility. For instance, you can set up multiple databases, and modify default input files. You can also restrict user access to selected databases and programs, and specify when different types of jobs may run.

Refer to **Chapter 1: Customizing Oracle Utilities Load Analysis for Your Site** of the *Oracle Utilities Load Analysis Configuration Guide* for complete instructions on customizing the system.

Appendix A

Oracle Utilities Load Analysis Service

This appendix describes the Oracle Utilities Load Analysis Service, which is a Windows service that is used to start and stop the Client/Server Oracle Utilities Load Analysis system.

Installing the Oracle Utilities Load Analysis Service

The Oracle Utilities Load Analysis Service is implemented as a single executable file called “lrxsrv.exe”. It can be installed by initially configuring a file with the paths to the application (See below) and then entering the following in the command line:

```
lrxsrv -i
```

To uninstall the Oracle Utilities Load Analysis Service, enter:

```
lrxsrv -u
```

To report the installation status, enter:

```
lrxsrv -v
```

Starting and Stopping the Oracle Utilities Load Analysis Service

The service can be started and stopped via the Services applet in the Windows Control Panel. The Services applet can also configure the service for manual or automatic starting.

When the Oracle Utilities Load Analysis Service is started, it reads a configuration file and attempts to launch two or more processes; the communications server and one or more execution servers. When the service is stopped, it tries to terminate all of the processes that it launched when it was started. **Note:** While the Oracle Utilities Load Analysis Service is running, it is in an idle state and performs no actions relevant to the Client/Server Oracle Utilities Load Analysis system.

When the service starts, it attempts to launch the primary (first) process first. The service changes its working directory to the directory supplied by the PriExeDir association, and launches the primary program. The name of the primary program is the concatenation of the values of the PriExeDir and PriProgName associations. If either or both of these primary parameter values is not empty, the values are added to the command line for further handling by the primary process.

If the primary process launched successfully, the service waits about 3 seconds and then attempts to launch the secondary process (in the same way as it launched the first).

When the service is stopped, it attempts to terminate any processes it successfully launched earlier. **Note:** Processes that may have been launched by either the primary or the secondary processes are not affected by the service being stopped.

The developer version of the service also generates a few small diagnostic log files in the C:\temp directory.

The Configuration File

The configuration file is a simple text file called “cslsserv.cfg”. Before registering the service, the configuration file must be placed in the \system32 directory for a 32-bit operating system or in the SYSWOW64 directory for a 64-bit operating system. The file contains zero or more keyword/value associations, which are used to configure the service’s operation. A keyword/value association is made up of a keyword, an equal sign, and a value, all on the same line. A keyword is one of the following nine identifiers (these are not case sensitive):

ExeDir	Executable directory name
PriExeDir	Executable directory name (first process)
PriProgName	Executable file name (first process)
PriParameter1	First command line parameter (first process)
PriParameter2	Second command line parameter (first process)
SecExeDir	Executable directory name (second process)
SecProgName	Executable file name (second process)
SecParameter1	First command line parameter (second process)
SecParameter2	Second command line parameter (first process)

A **value** is either a quoted string (for example, “*value*”) or an unquoted string (for example, *value*).

White space is permitted anywhere except inside keywords, or inside values that are not enclosed in quotation marks. Blank lines are permitted.

Sample Configuration File

```
PriExeDir      = "C:\lodestar\lodestar111\BINS"
PriProgName    = "cslsrvr.exe"

SecExeDir      = "C:\lodestar\lodestar111\BINS"
SecProgName    = "cslsserver.exe"
SecParameter1  = "cslsstrt"
SecParameter2  = "service"
```

Special-Case Processing

There is some special-case processing for the ExeDir, PriExeDir, and SecExeDir keywords. If the ExeDir value is specified in the configuration file, but the PriExeDir value is not, the PriExeDir value takes on the ExeDir value. Likewise, if the PriExeDir value is specified in the configuration file, but the ExeDir value is not, the ExeDir value takes on the PriExeDir value.

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