



SQL *LIMS V3.0 CLIENT INSTALLATION AND SETUP GUIDE

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by

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for

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Checklist

Before Installing SQL*LIMS 3.0:

1. Make sure that Windows is properly installed on your client system.
2. Make sure that Oracle is properly installed on your client system. ORACLE must be installed on your system for SQL*LIMS to work
3. Read the release notes supplied on the SQL*LIMS CD ROM. This document contains the latest information about SQL*LIMS 3.0.
 - Read the read1st.wri file.
 - Read the readme.wri file.
4. Gather the information you will need to know during the installation process, as follows:
 - The name of your SQL*LIMS server.
 - The name of your Oracle SID.

About This Manual

Welcome to SQL*LIMS 3.0.

This manual provides both instructional and reference material to help you get the most from SQL*LIMS 3.0. It consists of the following:

- Installation procedures for the PC Client.
- Instructions for connecting to your server.
- Instructions for using the new SQL*LIMS 3.0 Language features.
- Reference materials for SQLLIMS.INI file parameters, their meaning and possible values.

All instructions in this manual assume you are familiar with basic PC and Oracle operations, menus, choosing commands from pull-down and pop-up menus, managing windows, moving and copying files, etc.

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Installing SQL*LIM 3.0

This part of the *SQL*LIMS V3.0 Client Installation and Setup Guide* specifies the contents of the installation CD and defines the hardware and software requirements for installing and running SQL*LIMS 3.0.

The SQL*LIMS 3.0 installation kit on CD-ROM contains the following:

- SQL*LIMS Client installation kit with Oracle runtime items.
- Oracle Developer 2000
- SQL*Net 2.1
- SQL*Net 2.1 TCP/IP
- DECnet protocol adapters

For Pathworks users, SQL*LIMS 3.0 requires Digital Pathworks version 5.0a or later.

Developer/2000 License Restrictions

The Oracle directory on the CD-ROM contains Oracle Developer/2000. Unless you purchased Developer/2000 from Oracle Corporation or from Perkin-Elmer, do not install any of the products in this directory (it is illegal). Instead, install the right-to-execute versions of all relevant Oracle products in the SQLLIMS directory on the CD-ROM.

SQL*LIMS 3.0 Installation Kit Contents

The SQL*LIMS 3.0 CD-ROM contains the following top-level directories:

- ORACLE - Developer/2000 kit
- SQLLIMS - SQL*LIMS and Oracle runtime components
- SYSMETER- Windows memory utility (for Windows 3.1)
- TCPIP32 - Microsoft TCP/IP (VxD) network adapter (Windows for Workgroups)

A readme file is included to tell you which products **MUST** be installed.

System Requirements

Minimum Hardware Requirements

Processor	486/66 Mhz
Memory	16 MB, with 12 MB swap (permanent)
Display	Super VGA 800 x 600
Disk Storage	250 MB (80 MB for SQL*LIMS and Oracle)
Network Card	3COM Etherlink III Recommended
CD-ROM	Must have a CD-ROM reader accessible by the PC Client

Minimum Software Requirements

All necessary software is included with SQL*LIMS, except the following:

Microsoft Windows version 3.1 or later

Any TCP/IP, or DECNet and Pathworks, version 5.0a or later

OR

Windows for Workgroups 3.11 (TCP/IP is included)

If DECNet protocol is used instead of TCP/IP, Pathworks version 5.0a or later is also required

Installing the SQL*LIMS 3.0 Client

This part of the manual explains, step-by-step, how to install the SQL*LIMS Client on your PC.

After you insert the CD and start the installation, the SQL*LIMS installation utility produces all necessary files and changes to your ORACLE.INI and SQLLIMS.INI files in the windows directory. The following files are installed:

- SQL*LIMS
- Oracle runtime
- what else ...?

Note: Before installing, you need the names of your SQL*LIMS server and Oracle SID.
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Installing SQL*LIMS with Oracle Runtime

Each new release of SQL*LIMS client may also contain updated Oracle software. If you are upgrading, it is best to remove the old version, then install the new version rather than install the new version over the old version

Use the SQL*LIMS/Oracle Installer, under the sqllims\install directory, to install SQL*LIMS V3.0 and tools.

To install SQL*LIMS client:

1. Insert the CD-ROM.
2. In the sqllims/install directory, double-click on orainst.exe or choose Run from the File Manager menu. to execute orainst.exe.
3. When the installer prompts for the directory where products should be installed, simply accept the defaults, c:\orawin and c:\sqllims.

The left-hand side of the screen shows all the items available on CD.

In a brand new installation, the right-hand side of the screen is blank because nothing is installed yet.

4. If you are upgrading from a previous version, choose Remove for all products shown on the right-hand side of the screen (currently installed) that have a higher revision level on the CD-ROM (such as Forms, Reports, and Graphics).
5. Select the items you want to install and choose Add.

6. Select and install SQL*Net V2.1.4 for both TCP/IP and DECnet.
7. As a minimum, select the following files which **MUST** be installed for SQL*LIMS to work.

GUI Common Files

Oracle Forms - runtime version
Oracle Graphics - runtime version
Oracle Reports - runtime version
Oracle TCP/IP Adapter - Select version 2.1.4

-or-

Oracle DECnet Adapter - For Pathworks 5.0a or higher
Oracle Terminal

Required Support Files - Select all versions

SQL*LIMS Client for Windows

SQL*Net - Select version 2.1.4

System Support Files

Tools Utilities

NOTE: You can remove any Oracle product later by selecting the product name and then choosing remove.

Together, the products require about 78 MB of disk space however, as you select each item, a line at the bottom of your screen indicates the cumulative disk space.

8. After you make your product selections, choose Install to begin installation.
9. During the installation process, the installer asks for default locations; it is best to accept the defaults provided.
10. When the installer gets to SQL*NET 2, you are prompted to select the TCP/IP vendor. **Choose the actual TCP vendor installed on your PC.** A 'compatible' product is not acceptable.

NOTE: If you are using the Microsoft TCP/IP adapter supplied with this kit, choose Microsoft Windows for Workgroups TCP/IP (VxD). Choose this adapter if you are running Microsoft Windows 95.

If you are running Pathworks with the TCP/IP adapter, it must be version 5.0a or later. Choose Digital Pathworks TCP/IP 50a.

The installer copies the selected files from the CD to your PC.

11. Choose EXIT when you are finished with the installation.

At this point, you have installed SQL*LIMS and the Oracle runtime software on your PC. The next section explains how to establish and verify communication with the server.

NOTE: You may choose to keep your old version of SQL*LIMS maintained and running until you test the new version. (The installer creates a new code tree under the SQL*LIMS home directory alongside the older version.)

⚡ To switch back to the older version:

1. Change the sqllms.ini file to point to the old code tree. (See

UPDATE INSTRUCTIONS HERE?

1. SQLLIMS.INI, page 10.)
2. Now restart Windows.

We recommend restarting Windows after installing both Forms 4.5 and SQL*LIMS. This removes older DLLs before running Oracle or SQL*LIMS.

Setting up Server Communication

At this point, the Oracle Installer has loaded all the SQL*Net executables and auxiliary files. Now, you must set up Oracle's SQL*NET 2.1, the software that connects your client PC to the server.

This section tells you how to use the CD file, TNSNAMES.ORA, as a template for creating your specific configuration file which you will store into your orawin\network\admin directory.

Setting Up SQL *Net 2.1

The Oracle SQL*NET software uses a configuration file called TNSNAMES.ORA, stored in the orawin\network\admin directory, to determine which server and database to connect to. Therefore, before you can use SQL*Net, you must create TNSNAMES.ORA on your PC. The SQL*LIMS 3.0 CD (c:\sqllims\install) includes an example of this file, as follows:

```
#####
#TNSNAMES.ORA
#####
sparcnet =                               (Name of database service)
  (DESCRIPTION =
    (ADDRESS =
      (PROTOCOL = tcp)                   (Protocol)
      (HOST = sparcey)                   (Host Name)1
      (PORT = 1521)
    )
    (CONNECT_DATA =
      (SID = v71sun)                     (Database SID)
    )
  )
```

1. From c:\sqllims\install on the CD, copy TNSNAMES.ORA to your orawin\network\admin directory.

¹ **NOTE:** For entering the Host Name parameter, your system will run faster if you use the actual TCP/IP address rather than the host name. Contact your network administrator to find out the IP address of your host computer.

2. Edit your copy of TNSNAMES.ORA, substituting your own names for the database service, HOST and SID (**sparcnet**, **sparcey**, and **v71sun**, respectively, above)².
3. Be sure to save the edited TNSNAMES.ORA file in the orawin\network\admin directory.

The host, using the Network Configuration Tool, can also generate this file (see SQL*NET Administrators Guide).

Now that you have set up TNSNAMES.ORA, the next steps show you how to confirm that you can connect to the server.

Verifying Correct SQL*NET Setup

The following steps let you verify that installation and TNSNAMES.ORA setup is correct.

To verify correct SQL*NET setup:

1. Double-click on the SQL+ icon to start SQL*PLUS.
2. Type in your Oracle user name, Oracle password, and database service name from your TNSNAMES.ORA file.
3. Verify that you get the SQL > prompt. This means connection to the server was successful.

NOTE: If you receive a login error, this means SQL*NET is not set up properly -- check your TNSNAMES.ORA file parameters.

Setting Up SQL*Net DECnet

If you are using Digital's Pathworks software with the DECnet network adapter, adjust your TNSNAMES.ORA file to reflect a DECnet connection. Apply the same steps used for Setting Up SQL*Net 2.1 above, to the sample file below. Substitute your own names for the database service, HOST and SID (**v71dec**, **myvax**, and **v71vms**, respectively, below).

² **NOTE:** If you want to be able to connect to more than one HOST or database, you must create, in the TNSNAMES.ORA file, an entry for each server and database.

```

v71dec =                                (Name of database service)
  (DESCRIPTION =
    (ADDRESS =
      (PROTOCOL = decnet)    (DECnet protocol)
      (NODE = myvax)
      (OBJECT = v71listener) (from listener.ora)
    )
    (CONNECT_DATA =
      (SID = v71vms)
    )
  )

```

)

Setting Up SQL*LIMS 3.0 Client Software

Program Manager Icon

The SQL*LIMS installation creates the SQLLIMS Program Group with a SQLLIMS icon.

You may adjust the properties to contain a username/password (and optionally a database connect string) as follows:

Description:	SQL*LIMS
Command Line:	c:\sqllims\v3_0_4\bin\sqllims.exe userid=ops\$username/password@database term=sl_win:normal
Working Directory:	c:\sqllims\v3_0_4\forms
Shortcut Key:	None

To adjust the properties:

1. Use the above sample code above as a template to adjust the properties.
2. Above, **database** is the optional database connection string from your TNSNAMES.ORA file. Typically, it should match the entry for LOCAL in your ORACLE.INI file (although it need not match, see ORACLE.INI, page 9).
3. If you don't want to be prompted for your SQL*LIMS login each time, enter your username and Oracle password for userid.

Example: **userid=ops\$penlims/penlims@v71axp**

NOTE: Do not change Working Directory; it must point to the forms directory.

ORACLE.INI

The SQL*LIMS installer changes the ORACLE.INI file, located in your WINDOWS directory (c:\windows), as follows:

✦ **To set up the database name:**

At the top of the file:

1. Set **LOCAL = <database name>**

where, **<database name>** is the name of the service from your TNSNAMES.ORA file.

This line is not absolutely necessary, however, it speeds SQL*Net connections by using database connection information. This eliminates your having to provide it every time.

In the above TCP and DECnet examples, LOCAL would be set to either:

local=sparcnet

or:

local=v71vms

TK21_ICON location

The installer adds or changes the line beginning with **TK21_ICON=** to the icon subdirectory where your SQL*LIMS installation kit is installed, typically c:\sqllims\v3_0_4\icons

✦ **To setup TK21_ICON:**

1. If this line is not present, add it to the [Oracle] section of the ORACLE.INI file.
2. If this line is already in another directory listed, then add the SQLLIMS location as the first element in the path.

Example:

TK21_ICON=c:\sqllims\v3_0_4\icons

or:

TK21_ICON=c:\sqllims\v3_0_4\icons;c:\orawin\forms45\icons

Setting your Reports and graphics paths

The SQL*LIMS reports path is added to the front of the environment variables, REPORTS25_PATH and GRAPHICS25_PATH.

```
REPORTS25_PATH=c:\sqllims\v3_0_4\reports;c:\orawin\...  
GRAPHICS25_PATH=c:\sqllims\v3_0_4\reports;c:\orawin\...
```

UPDATE INSTRUCTIONS HERE?

SQLLIMS.INI

This following file is created in your WINDOWS directory (c:\windows):

Assuming the default location:

```
[General]  
Version=3.0  
[Environment]  
CLIENT_MESSAGE_LEVEL=0 (0-3,0=no logging, 3 is highest)  
SQLLIMS_INSTANCE=sparcey_v7lims(SQLLIMS server instance)  
LIMS_ERROR=C:\sqllims\log  
LIMS_FORMS=c:\sqllims\v3_0_4\forms  
LIMS_LIBRARIES=c:\sqllims\v3_0_4\forms  
LIMS_PROGRAMS=c:\sqllims\v3_0_4\bin  
WORKLIST_GEN_DEFAULT=CHOOSE  
SQLLIMSMenuStartup=30  
Language=SYSTEM  
TextAccessMode=FILE  
ResourceFileName=SYSTEM  
TranslateMenu=FALSE  
CheckResTimestamp=FALSE
```

The variable, **CLIENT_MESSAGE_LEVEL** enables tracing to your log file created in the C:\SQLLIMS\LOG directory.

✦ To set up **CLIENT_MESSAGE_LEVEL** tracing:

1. If you experience connection problems, set **CLIENT_MESSAGE_LEVEL** to 3, the highest trace level., to generate the most diagnostics.
2. Set **CLIENT_MESSAGE_LEVEL** to 1 or 2 if you want to gather some diagnostics (2 generates more than 1).
3. Set **CLIENT_MESSAGE_LEVEL** to zero (0) if you are not gathering diagnostics.

Using Language Translation Features

REVIEWER NOTE: This section will be updated in a couple of days with information gathered yesterday.

SQL*LIMS 3.0, includes a LANGUAGE feature that lets the System Administrator define user text in any number of languages. The languages may be spoken languages, such as French or German, or, special jargon or altered terminology.

For example, an American company may want to display “Product Name”, more meaningful to the laboratory, instead of “Sample Type”.

An international company may want to convert Product Name to the local language and use local laboratory terminology.

SQL*LIMS 3.0 introduces three new utilities:

1. Language, uses a new form, Define Language to set up the language
2. SQL*LIMS Object Text uses the form, SQL*LIMS Object Text Translation Utility to set up text for anything on the screen such as, window titles, button labels, balloon help, menus, column headings, etc.
3. SQL*LIMS Message Text uses the form, SQL*LIMS Messages to set up messages to the user.

The default SYSTEM language is American English and all text elements are defined in American English. The SYSTEM language is the parent for all root languages. SQL*LIMS maintains the SYSTEM language as the GLOBAL namespace.

Using the Language utility, a user defines a language as either a root language or a language variant.

A root language, in the SQL*LIMS 3.0 definition, is a language not derived from another. For example, American English, Spanish, German and Swiss German are root languages. A root language is a namespace from where the bindings for all text items are assigned. **See Figure 1**, page 12 and **Figure 2**, page 12.

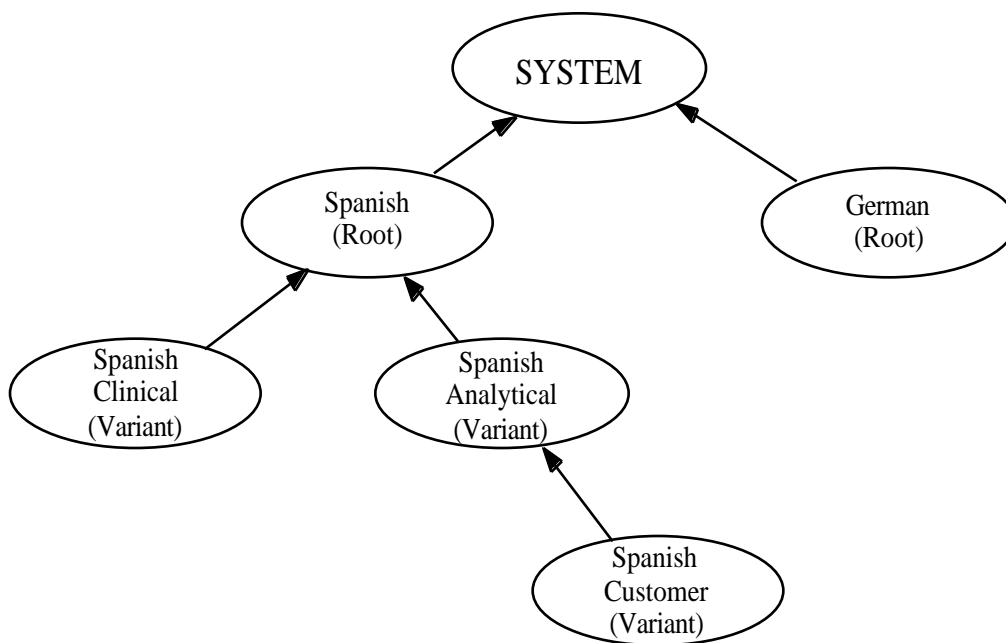


Figure 1. System / Root / Variant Language Structures

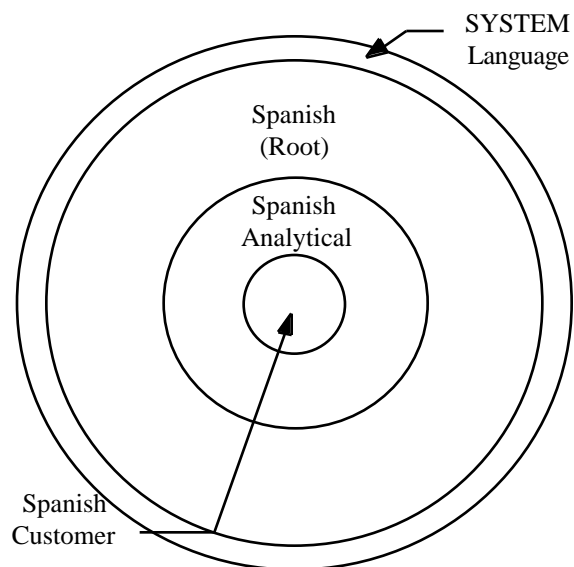


Figure 2. Diagram of Root and Variant Subsets of SYSTEM

SQLLIMS.INI FILE SETTINGS

Following are the SQLLIMS.INI file parameters, their meaning and possible values.

Section: [General]

The Installer maintains the parameters in the [General] section; typically no change is necessary.

Section: [Environment]

BannerImageFileName	User supplied graphics file	Default: none
----------------------------	------------------------------------	----------------------

Each user may load a graphic different than the Perkin-Elmer logo on the SQL*LIMS MDI window as follows:

Place the name of the image with the full directory pathname if the image is not located in the forms directory. The ideal size is 440 by 330 pixels. Smaller or larger images are automatically adjusted by SQL*LIMS to ideal size.

To replace the graphic with a blank screen, enter NONE for the file name. The default file type is BMP.

See the parameter, BannerImageFileType for allowable graphic file types.

BannerImageFileType	Graphic file type	Default: BMP
----------------------------	--------------------------	---------------------

If the graphic file type is not a Windows BMP image, you must specify the file type. Allowable file types are: BMP, JFIF, PCX, PICT, GIF, CALS, PCD, RAS and TIFF.

CheckResTimestamp	TRUE/FALSE	Default: TRUE
--------------------------	-------------------	----------------------

Set CheckResTimestamp FALSE to disable comparison of the timestamp in the resource file with the timestamp of the language in the database. Normally, the resource file timestamp is compared against the database timestamp whenever the SQL*LIMS client starts up. If the timestamp of the database language does not match, the user is warned that the resource file may be out of date. Disabling this parameter is most useful when the system administrator is modifying the language definition for text translation.

CLIENT_MESSAGE_LEVEL 0-3**Default: 0**

CLIENT_MESSAGE_LEVEL dictates the detail of diagnostic information written to the client log file in directory LIMS_ERROR. The higher the setting, the more diagnostic information is written to the log file, creating a larger the log file.

Set CLIENT_MESSAGE_LEVEL to zero (0) if you want no diagnostic information written to the file. Set it to three (3) to diagnose communication problems between the SQL*LIMS client and the SQL*LIMS server.

Typically, this parameter is set to one (1) or zero (0).

HELP_FILE**Name of help file****Default: SL_HELP.HLP**

To replace the SQL*LIMS help file with your own, set this parameter. The help file is stored in the directory, LIMS_FORMS. If your help file is not located in this directory, specify the full pathname and file name.

Language**User Language Setting****Default: SYSTEM**

This location shows the current value of the user preference, Language. Note: this setting does not override user preference, it is contained in the INI file to set the initial language during SQL*LIMS startup. SQL*LIMS maintains the language setting. To change your language, change user preference.

LIMS_ERROR**Error/Scratch/Log directory****Default: none**

The location of the user log file and all temporary files created by SQL*LIMS. The SQL*LIMS installer normally maintains this parameter however, you may specify any directory you want for creating log and scratch files.

LIMS_FORMS**Forms Directory****Default: none**

The location of the SQL*LIMS forms, menu and resource files. The SQL*LIMS installer maintains this parameter....yada - yada - yada...(deleted pages)

WORKLIST_GEN_DEFAULT Automatic/Manual/Choose**Default: AUTOMAT**

Default task list generation mode for worklist creation. The parameter may be overridden in the Create Worklist form.