



ispLEVER 6.0

Installation Notice

UNIX

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ispLEVER 6.0 Installation Notice

This document provides installation instructions for the ispLEVER[®] UNIX software.

During installation, you will be prompted to select the installation path for the ispLEVER software and global constraints for JEDEC file options.

The ispLEVER 6.0 software supports all Lattice Semiconductor FPGA, ispXPLD[™], CPLD, ispGDX2[™], ispGDX[®], ispGAL[®], and GAL[®] device designs.

Note

There is a single configuration of the ispLEVER product. Although it is normally called “ispLEVER for Windows” or just “ispLEVER,” it is occasionally referred to as “HDL Base.”

System Requirements

The following are the basic system requirements for the ispLEVER UNIX software:

- ◆ Sun Solaris 2.8 operating system with the following patches installed:
 - ◆ Patch 109147-23 or higher

- ◆ Math library (libm) patch 111721-04
- ◆ 1 GB of memory
- ◆ 2.7 GB minimum disk space (3.3 GB if all ORCA® FPSC devices are installed)
- ◆ X Window System Version X11R6 (or compatible) CDE
- ◆ Color monitor
- ◆ CD-ROM drive (2X or above) or DVD-ROM drive

Contacting Lattice Semiconductor

You can contact Lattice Semiconductor by any of the following means:

- ◆ Lattice Semiconductor Corporation
5555 Northeast Moore Court
Hillsboro, Oregon 97124-6421 U.S.A.
- ◆ Internet: www.latticesemi.com
- ◆ Literature Hotline: 1-888-ISP-PLDS (477-7537)
- ◆ Applications Support
Domestic: 1-800-LATTICE (528-8423)
International: (503) 268-8001
Fax: (503) 268-8556

Installation Disks Directory Structure

The ispLEVER 6.0 software gives you the option of installing from five CDs or from a single DVD.

CD-ROM Structure

The following describes the contents of the five CD-ROMs.

- ◆ CD-ROM 1 contains the following directories and files:
 - ◆ The acroread directory contains the acro_sol.taz file, which installs the Adobe Acrobat Reader software. Refer to “Installing Adobe Acrobat Reader” on page 9 for more information.
 - ◆ The isptools directory contains the isplever.taz file, which contains the compressed ispLEVER software (Part 1).
 - ◆ The readme.txt file contains installation and licensing information.

- ◆ The install.csh file contains the installation script for installing the software that is on the CD.
- ◆ CD-ROMs 2–5 contain the following directories and files:
 - ◆ CD-ROM 2 contains the compressed ispLEVER software (Part 2).
 - ◆ CD-ROM 3 contains the compressed ispLEVER software (Part 3).
 - ◆ CD-ROM 4 contains the ORCA FPGA device and support files.
 - ◆ CD-ROM 5 contains the ORCA FPSC device and support files.

DVD-ROM Structure

The single DVD-ROM contains the same directories and files that are included in the five CD-ROMs.

Project Navigator Installed Directory Structure

The ispLEVER Project Navigator software installation contains the following directories and files:

- ◆ The readme.txt file contains installation instructions.
- ◆ The isptools directory is the main directory.
 - ◆ The isptools/cae_library directory contains synthesis header libraries for Synplicity in both Verilog and VHDL formats. The directory also contains the libraries for interface kits (ispLSI[®] design and simulation libraries).
 - ◆ The isptools/ispcomp directory contains the files for the ispLEVER software.
 - ◆ The isptools/ispcpd directory contains the files for the ispLEVER software.
 - ◆ The isptools/ispfpga directory contains the files for ORCA devices.
 - ◆ The isptools/ispjtools contains the files used by ispUPDATE.
 - ◆ The isptools/ispvmsystem directory contains Lattice Semiconductor device programming software.
 - ◆ The isptools/license directory contains the license agreement.

Installing the ispLEVER 6.0 Software

An installation script named `install.csh` is provided on the CDs or DVD to simplify the installation process. The following sections describe the installation and setup requirements for the software.

CD-ROM Installation

To install the ispLEVER software by using CD-ROM:

1. Insert the ispLEVER software CD-ROM 1 into the CD-ROM drive.
2. Mount the CD-ROM drive. The volume manager should automatically mount the installation CD-ROM (`/<cdrom>/cdrom0`) drive. If installing from a network, mount the drive by making a directory mount point and using the proper mount argument.
3. Select a path location for installing the ispLEVER software, create a directory, and change to that directory, as in this example:

```
mkdir <path>/<install_path>  
cd <path>/<install_path>
```

4. Execute the `install.csh` script (on the CD) with the path to the installation files (on the CD) as the argument (`<CD Drive>/install.csh <CD Drive>`). Here is an example:

```
/<cdrom>/cdrom0/install.csh /<cdrom>/cdrom0
```

The installation script untars the files needed.

5. After running the `install.csh` script, you will be prompted to install “ispLEVER Design Tools (Part 1).” Enter **y** to continue. You will be prompted to place the appropriate CD in the CD-ROM drive when necessary to install the remaining parts of the ispLEVER software.
6. When prompted, enter **n** to indicate that you are not installing Part 2 & 3 from the DVD drive.
7. When prompted again, enter **y** to confirm that you are installing from the CD-ROM drive.

Installing ORCA FPGA Devices

Installing ORCA FPGA devices requires CD-ROM 1, CD-ROM 2, and CD-ROM 3 that are included with the ispLEVER software. The ispLEVER installation script (install.csh) gives you the option, with a “Y” or “N” prompt, to install the ORCA Datafile product family data files.

To install ORCA FPGA devices:

1. Enter **y** to install ORCA FPGA devices.
The script presents a list of options that enable you to install one or all series of ORCA FPGA devices. For example, option 3 installs ORCA series 4.
2. Enter the option number for each of the device families that you want to install.
3. When prompted, enter **n** to indicate that you are not installing from the DVD drive.
4. When prompted again, enter **y** to confirm that you are installing from the CD-ROM drive.

Installing ORCA FPSC Devices

For FPSC device installation, CD-ROM 1, CD-ROM 2, and CD-ROM 3 are required. The ispLEVER installation script gives you the option, with a “Y” or “N” prompt, to install the FPSC product family.

To install ORCA FPSC devices:

1. Enter **y** to install the ORCA FPSC devices.
The installation script presents a list of options for installing one, more, or all of the FPSC devices.
2. Enter the option number for each device that you want to install. To install all ORCA FPSC devices, enter 8.
3. When prompted, enter **n** to indicate that you are not installing from the DVD drive.
4. When prompted again, enter **y** to confirm that you are installing from the CD-ROM drive.

Setting ispVM Installation and SVF File Generation

The ispLEVER installation script (`install.csh`) gives you the option, with a “Y” or “N” prompt, of forcing the installation of the ispVM[®] system and setting the default for SVF generation. If you do not set the SVF file generation during installation, you can manually set the options as a local setting in the Constraint Editor.

To set ispVM installation and SVF file generation:

- ◆ Enter **y** to set up automatic generation of SVF files.

Installing CHECKSUM as USERCODE Default

The ispLEVER installation script (`install.csh`) gives you the option, with a “Y” or “N” prompt, of setting the default for USERCODE to CHECKSUM for CPLD devices. For LatticeXP and MachXO devices, CHECKSUM is the default for USERCODE. With this option, the ispLEVER software inserts the JEDEC file's CHECKSUM value into the USERCODE field. If the ispLEVER software is generating an ISC data file, it inserts the CRC value into the USERCODE field. If you do not set the USERCODE default to CHECKSUM during installation, you can manually set the option to the local setting in the Constraint Editor.

To install CHECKSUM as the USERCODE default:

- ◆ Enter **y** to set CHECKSUM to the USERCODE default.

Completing the Installation

After these steps, the installer begins copying the installation files to your directory. After the files are installed from CD-ROM 1, you will be prompted to insert CD-ROM 2, CD-ROM 3, and if applicable, CD-ROM 4 and CD-ROM 5.

- ◆ When prompted, insert CD-ROM 2 into your CD-ROM drive to continue the installation.
- ◆ When prompted, insert CD-ROM 3 into your CD-ROM drive to continue the installation.
- ◆ When prompted, insert CD-ROM 4 into your CD-ROM drive to install the selected ORCA Series.
- ◆ When prompted, insert CD-ROM 5 into your CD-ROM drive to install the selected FPSC devices.

DVD-ROM Installation

To install the ispLEVER software by using DVD-ROM:

1. Insert the ispLEVER software DVD into the DVD-ROM drive.
2. Mount the DVD-ROM drive. The volume manager should automatically mount the installation DVD-ROM (`/<cdrom>/cdrom0`) drive. If you are installing from a network, mount the drive by making a directory mount point and using the proper mount argument.
3. Select a path location for installing the ispLEVER software, create a directory, and change to that directory, for example:

```
mkdir <path>/<install_path>  
cd <path>/<install_path>
```

4. Execute the `install.csh` script (on the DVD) with the path to the installation files (on the DVD) as the argument (`<DVD Drive>/cd_1/install.csh <DVD Drive>`), for example:

```
/<cdrom>/cdrom0/cd_1/install.csh /<cdrom>/cdrom0/cd_1
```

The installation script untars the files needed.

5. After running the `install.csh` script, you will be prompted to install “ispLEVER Design Tools (Part 1).” Enter **y** to continue.
6. When prompted, enter **y** to indicate that you are installing Part 2 & 3 from the DVD drive.

Installing ORCA FPGA Devices

The ispLEVER installation script (`install.csh`) gives you the option, with a “Y” or “N” prompt, to install the ORCA Datafile product family data files.

To install ORCA FPGA devices

1. Enter **y** to install ORCA FPGA devices.
The script presents a list of options that allow you to install one or all in a series of ORCA FPGA devices. For example, option 3 installs ORCA series 4.
2. Enter the option number for each of the device families you want to install.
3. When prompted, enter **y** to confirm that you are installing from the DVD drive.

Installing ORCA FPSC Devices

The ispLEVER installation script gives you the option, with a “Y” or “N” prompt, of installing the FPSC product family.

To install ORCA FPSC devices:

1. Enter **y** to install the ORCA FPSC devices.
The installation script presents a list of options for installing one, more, or all of the FPSC devices.
2. Enter the option number for each device that you want to install. To install all ORCA FPSC devices, enter 8.
3. When prompted, enter **y** to confirm that you are installing from the DVD drive.

Setting ispVM Installation and SVF File Generation

The ispLEVER installation script (install.csh) gives you the option, with a “Y” or “N” prompt, of forcing the installation of the ispVM system and setting the default for SVF generation. If you do not set the SVF file generation during installation, you can manually set the options as a local setting in the Constraint Editor.

To set ispVM installation and SVF file generation:

- ◆ Enter **y** to set up automatic generation of SVF files.

If you do not set the SVF file generation during installation, you can manually set the options as a local setting in the Constraint Editor.

Installing CHECKSUM as USERCODE Default

The ispLEVER installation script (install.csh) gives you the option, with a “Y” or “N” prompt, of setting the default for USERCODE to CHECKSUM for CPLD devices. For LatticeXP and MachXO devices, CHECKSUM is the default for USERCODE. With this option, the ispLEVER software inserts the JEDEC file's CHECKSUM value into the USERCODE field. If the ispLEVER software is generating an ISC data file, it inserts the CRC value into the USERCODE field. If you do not set the USERCODE default to CHECKSUM during installation, you can manually set the option to the local setting in the Constraint Editor.

To install CHECKSUM as the USERCODE default:

- ◆ Enter **y** to set CHECKSUM to the USERCODE default.

After these steps, the installer begins copying the installation files to your directory.

Linking to or Copying the Installation Directory

After installing the ispLEVER software, you may want to link the installation directory to another directory or copy the installation directory to another directory and set the installation path to the new directory.

To link or copy the installation directory to another directory:

1. If you want to link to the installation directory, create a soft link pointing to this location. If you want to copy the installation directory, choose the new path location and copy the files to it.
2. Set the `NEW_INSTALL_PATH` environment variable to the new directory location as follows:

```
setenv NEW_INSTALL_PATH <new_directory>/isptools
```

3. If you want to return to the original working, set the `NEW_INSTALL_PATH` variable as follows:

```
setenv NEW_INSTALL_PATH <original_directory>/isptools
```

Installing Adobe Acrobat Reader

Adobe Acrobat Reader is required for viewing manuals and data sheets in PDF format. If you do not already have Adobe Acrobat Reader installed on your system, you can use the Acrobat Reader installation file, `acro_sol.taz`, that is included in the `acread` directory of CD-ROM 1. This file installs Acrobat Reader version 5.0.9. If you have an older version of Acrobat Reader, it is recommended that you install version 5.0.9 to ensure the proper viewing and printing of the documents. The `acro_sol.taz` file contains a `readme` text file with complete installation instructions.

After you install Acrobat Reader, each user must set the path to the software's bin directory, as follows:

```
set path = (<path_to_Acrobat_Reader_bin_directory> $path)
```

To apply the change, open a new window or type `source .cshrc`.

Using the Examples Directory

In order to use the design examples directory, you must copy the files from the server to your local system and change the write permissions. Copy the files from the server examples directory to the equivalent path and directory on your local system:

```
<install_path>/isptools/examples
```

Installing the ispLEVER Software from a Server

The following sections explain how to set up the ispLEVER installation files on a server and install the software from the server instead of from the CD-ROM.

Setting Up the Files

To copy the five CD-ROMs to a server:

1. Create the following directories: `cd_1`, `cd_2`, `cd_3`, `cd_4`, `cd_5`.

Note

The directory names are case-sensitive. Make sure that you type the directory names using lower case only.

2. Copy the contents from each of the five CD-ROMs to its appropriate directory.

To copy the DVD to a server:

1. Create a directory for the DVD contents, using lower-case letters.
2. Copy the contents from the DVD to the `dvd` directory that you created. The DVD contains the same files and directories as the five CD-ROMs.

Installing from the Server

To install the ispLEVER software from the server to your local computer:

1. Create a directory for the installation on your local computer.
2. Change to the directory that you created.
3. Copy and paste the path for the installation script, and then paste it again without the installation script file name, for example:

```
/<path>/cd_1/install.csh /<path>/cd_1
```


4. Press **Enter**.
5. You will be prompted to install “ispLEVER Design Tools (Part 1).” Enter **y** to continue.
6. When prompted, enter **n** each time to indicate that you are not installing Part 2 & 3 from the CD-ROM drive and that you are not installing Part 2 & 3 from the DVD drive.

You will be prompted with instructions about selecting software options. Answer with **y** or **n** after each prompt. After all the questions have been answered, the installation will begin automatically.

Licensing for the ispLEVER Software

You must set the license environment variable before running the ispLEVER software.

Note

The ispLEVER 6.0 software uses FLEXlm 9.2 license administration software. FLEXlm 9.2 requires Sun Solaris patch 109147-23 or higher. Users of the ispLEVER 3.1 or older software must bring down the previous license daemon and start the new license daemon.

The default location of the license file is `<install_path>/isptools/license/license.dat`. If this location is changed, you must set the `LM_LICENSE_FILE` environment variable to include the new path name.

Note

In order to change the `LM_LICENSE_FILE` variable, you must edit the `.cshrc` file. Do not change the `license.dat` location after installation.

Obtaining a License

To register and license your ispLEVER software:

- ◆ Obtain the host ID of your license server with the following command:

```
<install_path>/isptools/ispcpld/bin/lmutil lmhostid
```

- ◆ Go to the Licensing section of the Lattice Semiconductor Web site (www.latticesemi.com/license) and select ispLEVER Advanced System (UNIX). This is the fastest way to obtain your license.

Note

Lattice Semiconductor supports licensing for a single server or three redundant servers. If you are using three redundant servers, enter all three server host IDs on the License File/Registration Form in the order that they appear in your existing license.dat file.

Lattice Semiconductor will send your ispLEVER license file (license.dat) to you by e-mail within one working day. After you receive the license file from Lattice Semiconductor, copy the license.dat file to the ispLEVER license directory as follows:

```
<install_path>/isptools/license/license.dat
```

Editing the License File

The following example shows a floating license file:

```
SERVER nodename 1234abcd 1710
DAEMON lattice daemon_path
FEATURE LSC_ADVANCED lattice 10 02-may-2004 1 \
      8C9136CA9F6A "ispLEVER Advanced"
```

Edit the `SERVER` line by replacing the node name with the host name and the port ID (1710). The port ID must be unique, so you may need to change it.

To edit the Lattice `DAEMON` line, replace `daemon_path` with the path to the Lattice daemon, as in this example:

```
<install_path>/isptools/ispcpld/bin/lattice
```

When editing these lines, type them exactly as you received them. All entries are case-sensitive.

Note

The encryption codes are in hexadecimal format (digits 0-9, and lower-case letters a-f or upper-case letters A-F). Enter the number 0, not the letter O; enter the number 1, not the lower-case letter L.

Starting the License Manager

Type the following command on one line to start the license manager daemon:

```
<install_path>/isptools/ispcpld/bin/lmgrd  
-l <install_path>/isptools/license/license.log  
-c <install_path>/isptools/license/license.dat
```

Note

Redirecting output to a log file is helpful when you debug licensing problems. The `-l` switch tells the license manager to send its output to a log file (license.log), and `-c` tells it which license to serve. The log file contains information on the status of the server and the daemon and TC port in use. It also shows which users have checked out the license and the checkout time.

Stopping the License Manager

If it is necessary to stop the FLEXlm license manager, follow this procedure:

1. Confirm that the daemon is running by typing the following:

```
ps -ef | grep lmgrd
```

2. If `lmgrd.exe` is running, use the following on one line to stop the daemon:

```
<install_path>/isptools/ispcpld/bin/lmutil lmdown  
-c <install_path>/isptools/license/license.dat
```

The following prompt appears:

```
Shutting down FLEXlm on nodes: hostname  
Are you sure? [y/n]:
```

3. Type **y** and press **Return** to shut down the license daemon.

Running the ispLEVER Project Navigator GUI

The ispLEVER software has a graphical user interface (GUI) called the Project Navigator. When you use the `ispgui` script command, the software automatically performs the environment setup.

Note

The ispLEVER UNIX software supports EDIF and ABEL designs only. Schematic, VHDL, and Verilog design entries are not supported.

To start the ispLEVER software Project Navigator GUI:

1. Set the `PATH` environment variable as follows:

```
Set path = (<install_path>/isptools/ispcpld/bin $path)
```

Note

If your license file (`license.dat`) is not under `/<install_path>/isptools/license/license.dat`, you must set the `LM_LICENSE_FILE` variable to the location of your license file, for example:

```
setenv LM_LICENSE_FILE /<license_directory>/license.dat
```

2. Set the display environment as follows:

```
setenv DISPLAY <PC_IP_address_or_Workstation_Name>:0.0
```

3. Type the following script command in the command line:

```
ispgui
```

Refer to the online Help for more information about the Project Navigator.

Avoiding Long PATH Errors in C-Shell When running an ispLEVER tool such as the Design Planner in C-shell (`csh`) from the `ispgui` tool, an unusually long `PATH` variable (for example, 600-700 characters) will prevent its usage. Specifically, the `csh` truncates `PATH`, causing error messages pertaining to missing run-time library and other errors related to this restriction to be issued.

To avoid this error, make sure that the path does not exceed the allowable length of 1024 characters for your particular version of `csh`. If you receive a “long path” error message, you must exit `ispgui`, reduce the path length, and attempt to open your design file using `ispgui` again.

Running Multiple Versions of the Software

The ispLEVER user interface enables you to use a previous version of the software without resetting the environment variables.

To run a previous version, set up your environment by invoking one of the shells, as shown in “Environment Variable Setup” on page 16. Here is an example:

```
<ispLEVER6.0_install_path>/isptools/ispcpld/bin/setup_lv*
```

Similarly, to run ispLEVER 3.1, set up your environment by invoking one of the shells in that release:

```
<ispLEVER3.1_install_path>/isptools/ispcpld/bin/setup_lv*
```

To switch to any previous version in batch mode, you must manually change the environment variables, including those for `PATH`, `FPSC`, and `FOUNDRY`.

Running from the Command Line

You can run the ispLEVER software in batch mode using the `ispflow` command-line software. When you use the `ispbatch` command, as shown following, the software automatically performs the environment setup.

Note

1. Run only ABEL and EDIF designs with the `ispflow` command-line software for UNIX. The `ispflow` command-line software for UNIX does not support schematic, VHDL, or Verilog designs.
2. If you are running an EDIF design that was designed on a PC, you must convert the file from PC to UNIX format. Use the following command:

```
dos2unix <pc_design>.edf <unix_design>.edf
```

To run `ispflow` software using the `ispbatch` command:

1. Set the `PATH` environment variable as follows:

```
set path = (<install_path>/isptools/ispcpld/bin $path)
```
2. In your design directory, type the following:

```
ispbatch [-i <design>] [-d <device>]
```

Note

If your license file (license.dat) is not under `/<install_path>/isptools/license/license.dat`, you must set the `LM_LICENSE_FILE` variable to the location of your license file, for example:

```
setenv LM_LICENSE_FILE /<license_directory>/license.dat
```

Refer to “Environment Variable Setup” on page 16 for information about environment setup scripts. Refer to the online Help for more information about using the `ispflow` command-line software.

When running ORCA tools from the command line, make sure that

```
<install_path>/isptools/ispfpga/bin/sol
```

occurs in your path before

```
<install_path>/isptools/ispcpld/bin
```

Refer to the “Running ORCA Tools from the Command Line” topic in the online Help for more information.

Environment Variable Setup

The installation script creates two environment setup scripts: `setup_lv.csh` and `setup_lv.sh` (for Bourne/korn shell users). The scripts are generated in the following directory:

```
<install_path>/isptools/ispcpld/bin
```

If you want to set up your environment manually to run the `ispLEVER` software in batch mode, using programs such as `ispflow`, `legacy2lci`, or `legacyglci`, you can use the environment setup scripts.

After editing your `license.dat` file and starting the FLEXlm license manager, source either the `setup_lv.csh` or `setup_lv.sh` file as follows:

```
source <install_path>/isptools/ispcpld/bin/setup_lv.csh
```

or

```
source <install_path>/isptools/ispcpld/bin/setup_lv.sh
```

Configuring System Settings

You must configure your system settings by using the MainWin Control Panel, shown in Figure 1. Configurable settings include the following:

- ◆ Date/Time
- ◆ Printers
- ◆ Regional Settings
- ◆ Display
- ◆ Internet Options

1. From the command line, in the `<install_path>/isptools/ispcpld/bin` directory, type the following:

```
ispsetting
```

The MainWin Control Panel appears, as shown in Figure 1.

Figure 1: MainWin Control Panel



2. Double-click the appropriate icon in the MainWin Control Panel to display dialog boxes for setting Date/Time, Printers, Regional Settings, Display, and Internet Options.

Updating the ispLEVER Software from the Web

After you have registered and licensed your installation, check the Lattice Semiconductor Web site for new software updates, device support, and enhancements. Make sure you have the latest software by checking for updates regularly.

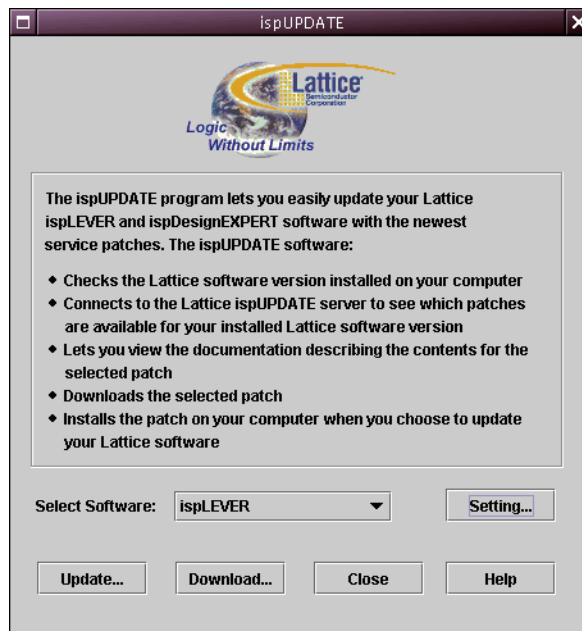
To activate *ispUPDATE*:

1. From the command line, in the `<install_path>/isptools/ispcpd/bin` directory, type the following:

```
iupdate
```

The main *ispUPDATE* window appears, as shown in Figure 2.

Figure 2: ispUPDATE Window



2. In the main window, click **Setting**.

The Internet Connection Setting dialog box now appears with the Connections tab selected, as shown in Figure 3.

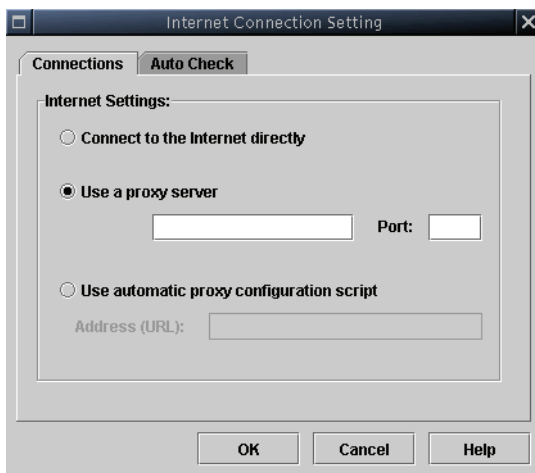
Changing the Connection Settings

To enable the automatic checking, you must indicate how your computer accesses the Internet.

To change the Internet connection settings:

1. Select the **Connections** tab of the Internet Connection Setting dialog box, shown in Figure 3.

Figure 3: Connections Tab



2. Select one of the three Internet settings provided:
 - ◆ Connect to the Internet directly – Select this option if you do not have to go through a proxy server.
 - ◆ Use a proxy server – Select this option if you must go through a proxy server before connecting to the Internet. The proxy server prevents outsiders from breaking into your organization’s private network. Ask your system administrator for the URL address and port assignment. This option is turned on by default.
 - ◆ Use automatic proxy configuration script – Select this option if you have an automatic proxy configuration file. Ask your system administrator for the URL address and type it in the text box provided.

Changing the Automatic Checking Settings

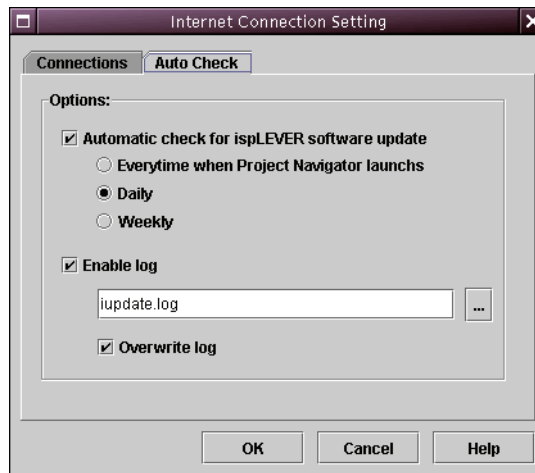
The Lattice Semiconductor software can automatically check for updates and activate a window showing the ispLEVER updates available.

If you want to turn off or change the automatic update checking, change the settings in ispUPDATE as follows:

1. Select the **Auto Check** tab of the Internet Connection Setting dialog box.
2. If you want to enable the automatic checking for software updates, be sure the **Automatic check for ispLEVER software update** option is selected. It is selected by default.

If you want to disable the automatic checking, clear the **Automatic check for ispLEVER software update** option, as shown in Figure 4.

Figure 4: Disabling Automatic Checking in Auto Check Tab



3. If you selected the **Automatic check for ispLEVER software update** option, indicate the frequency with which you want the checking to be performed: every time that the Project Navigator is started, daily, or weekly. A daily check is the default.
4. Select **Enable log** to keep a record of the ispLEVER update checking. When you select this option, a log is kept, even if automatic checking is not implemented. This option is selected by default.
 - ◆ If desired, rename the log file and select a different directory for the log file.
 - ◆ Select **Overwrite log** to save only the last log. This option is selected by default. Clear this selection to append each log to the previous one.
5. Click **OK**.