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Intel@ Math Kernel Library, <http://www.intel.com/software/products/mkl>

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| | |
|---|----|
| Before You Begin Windows Installation | 7 |
| ADS Supported Platforms | 7 |
| Check the System Requirements | 7 |
| ADS Installation options | 8 |
| User Compiled Models | 9 |
| Obtain ADS 2011.01 Licenses | 9 |
| Multiple ADS Installations | 9 |
| Check Available Memory | 10 |
| Defining an Install Folder | 10 |
| Supported Features on Windows 64-bit | 11 |
| Verifying Java (JRE) Installation in Windows | 12 |
| Installing Advanced Design System on Windows | 14 |
| Installing ADS on a System | 14 |
| Installing ADS on the Server | 16 |
| Installing from a File Server | 19 |
| Using Multiple ADS Versions | 19 |
| Silent Installations | 20 |
| Before Setting Up Licenses For Windows | 23 |
| Obtaining a HostId/Hardware Key | 23 |
| Obtaining the ADS License File | 23 |
| License Types | 24 |
| License Codewords | 25 |
| Windows License Setup | 26 |
| License Setup Flow | 26 |
| Get Host Id | 26 |
| Obtain License File | 28 |
| License Setup | 28 |
| Set Environment Variables | 31 |
| Launch ADS | 32 |
| Managing ADS Licenses | 34 |
| License Information Tool | 34 |
| License Preference Tool | 34 |
| Special Licensing Needs | 38 |
| Managing Multiple ADS Versions | 46 |
| Using Advanced Design System after Windows Installation | 52 |
| Running Advanced Design System | 52 |
| Troubleshooting and FAQs | 56 |
| FAQs | 58 |
| Installing Connection Manager Server on Windows | 60 |
| Obtaining the Software | 60 |
| Before You Begin | 60 |
| Installing the Server | 62 |
| Configuring the Server IO on the PC | 63 |
| Using Connection Manager with Windows XP Service Pack 2 | 67 |
| Running the CM Server as a Windows Service | 72 |

Before You Begin Windows Installation

Before starting the Advanced Design System (ADS) Installation on Windows platform, you must read the guidelines provided on this page.

ADS Supported Platforms

ADS supports the following platforms:

| OS | 32 bit | 64 bit |
|-----------------|---|---|
| Windows/VISTA | Microsoft Windows XP Professional SP3 Microsoft Windows Vista Enterprise SP1 | Microsoft Windows XP Professional x64 Microsoft Windows Vista Enterprise SP1 64-bit edition |
| Windows 7 | Microsoft Windows 7 Enterprise | Microsoft Windows 7 Enterprise 64-bit edition |
| LINUX | Redhat RHEL WS 4.x and RHEL 5 Novell SLES 9.x and SLES 10 | Redhat RHEL WS 4.x and RHEL 5 Novell SLES 9.x and SLES 10 (64-bit AMD Opteron and Intel EM64T processors) |
| Solaris (SPARC) | Not Supported | Solaris 10 with 64-bit support turned on Solaris 10 05/08 Patch Bundle or the Solaris 10 05/08 (Update 5) release image with 138352-02 X11 6.6.2: fontconfig patch |

For updated list of supported platforms, refer to [ADS Supported Platforms](#) .

Check the System Requirements

Ensure that your hardware and software configuration meets the following minimum hardware and system requirements to install and/or run ADS.

Note
Agilent recommends you to have more than the minimum configuration to effectively work with ADS.

| Requirement | Description |
|---|--|
| 32-bit Operating System and Service Pack | Microsoft Windows XP Professional SP3 Microsoft Windows Vista Enterprise SP1 Microsoft Windows 7 Enterprise |
| 64-bit Operating System | Microsoft Windows XP Professional x64 Microsoft Windows Vista Enterprise SP1 64-bit edition Microsoft Windows 7 Enterprise 64-bit edition |
| Display | High-resolution color only (Super VGA, 1024x768, 15-inch monitor minimum). |
| RAM | Minimum 1 GB RAM recommended for Windows XP Minimum 4 GB RAM recommended for Windows Vista and Windows 7 On a 32-bit Windows XP operating system, its processes cannot use more than 2 GB of memory for a single simulation process regardless of the maximum addressable memory available. |
| Web Browser | Microsoft Internet Explorer version 5.5 or higher Mozilla Firefox 3.3 or higher Acrobat Reader 5.0 or higher (to view PDF files). Java and JavaScript must be enabled on your browser for the documentation to appear correctly. Java Runtime Environment (JRE) must be installed on your machine to use the search functionality provided in the ADS documentation. The minimum recommended version is Sun Java Plug-in 1.3. See Verifying Java (JRE) Installation in Windows to check if JRE is installed or not. |
| Hard Disk | 4.5 GB for a complete installation. Recommended file system is NTFS. Novell file servers are not supported. VFAT/FAT systems are not recommended for complete installations. |
| Security Device | ADS software licenses are locked to an external device (FLEXid hardware security key) attached to the PC's USB or parallel port or locked to a PC's LAN ethernet card. Licenses can also be secured to a network server using FLEXIm server software. |
| Supported Printers | Printers supported by the operating system used. |
| Internet Access | High speed internet access is required to download the ADS install file. |
| Processor | Intel Pentium © 4 or higher, or AMD XP 3000 or higher. |
| Compiler (<i>only</i> for model development and 64-bit simulations involving Verilog-A components) | C++ and C: Microsoft Visual Studio .NET 2008 with SP1/Hotfix (Windows Vista 64 also requires Microsoft Visual Studio 2008 Team Suite Service Pack 1 and Visual Studio 2008 Service Pack 1 Update for Windows Vista) |
| HDL simulator (required only for HDL cosimulation) | Only Mentor Graphics ModelSim SE Plus 6.3a is supported in 32-bit mode. |

ADS Installation options

ADS supports Complete as well Custom installation of the software.

Complete Installation Options

If you select Complete install, ADS installs the following for which you need at least 4.5 GB of free disk space:

| Features | Description |
|-------------------------------------|--|
| ADS programs and tools | This is the basic ADS software and necessary tools to run ADS. |
| DesignGuides and Application Guides | Special interactive tool kits and handbooks for various design types |
| Manuals & Help | All documentation. If this option is not selected, documentation will not be available |
| Examples | All examples for Advanced Design System |

Custom Installation Options

If you opt for Custom Install, you can select the ADS features you want to install. The following table lists the supported features:

| Features | Description |
|-------------------------------------|--|
| ADS programs and tools | This is the basic ADS software, minus the following features |
| DesignGuides and Application Guides | Special interactive tool kits and handbooks for various design types |
| Manuals & Help | All documentation. If this option is not selected, documentation will not be available |
| Examples | All examples for Advanced Design System |

User Compiled Models

If you are using dynamic User Compile Models (UCM) and upgrading from earlier ADS release, recompilation is required only if the compiler has been upgraded. For example, if you are doing 32-bit models, going from 2009 Update 1 to 2011.01, the compiler was upgraded so recompilation is required.

For static UCM, recompilation is required for every upgrade.

Obtain ADS 2011.01 Licenses

Though you can install all ADS features but you can use only those for which you have a valid licenses. To obtain license, you can submit online request at [License Request Form](#) . The licenses are then emailed to you in a license file, file with extension `.lic`, for example `license.lic`. You can also tie your licenses to a hardware key or dongle. To obtain a valid hardware key, contact Agilent EEsof Business Support.

For details on how to setup your ADS license, see *Installing Your Licenses* (instalpc).

Multiple ADS Installations

You can have multiple installations of ADS in separate directories on the same machine,

but you cannot install the current version over a previous ADS installation, a *Previous Version Detected* error message is displayed. This is also applicable for Early Access versions of ADS.

Before uninstalling or deleting previous ADS installation:

- Keep a copy of your workspaces, customized configuration files, and other data.
- Keep a copy of your license file available in <install_directory>\licenses folder.

For details on running multiple ADS versions, refer to *Using Multiple ADS Versions* (instalpc).

Check Available Memory

RAM

You need a minimum of 1 GB RAM on your system. More memory results in better overall system performance for some design work. However, since ADS is compiled on a 32-bit operating system, its processes cannot use more than 2 GB regardless of the maximum addressable memory available on your system. To check the amount of memory on your system without rebooting, double-click the **My Computer** icon. From My Computer window, choose **Help > About Windows** and available physical memory is displayed in About Windows.

Disk Space

For complete ADS installation, you need 4.5 GB of disk space. For custom installation, the amount of disk space required depends on the ADS features that you want to install. As you run the ADS installation program, the disk space required for various features is also indicated.

Note
You need extra temporary space of up to 1.75 GB for self extracting installation file.

To check the free disk space available on your system, double-click the **My Computer** icon. Select **View > Details**. Look in the **Free Space** (displayed in left column) for each of your drives where you want to install ADS.

Defining an Install Folder

The default folder for ADS installation is "C:\agilent\". You can change the default location and select your own desired path. Ensure that you must have permissions to write to the disk drive on which you want to install ADS. The installation also adds entries to your PC's Windows Registry so ensure that you have permissions to do so.

Note
The installation path and folder name for ADS software should be without any spaces as ADS may give error while executing simulation.

For more details, see *Installing Advanced Design System on Windows* (instalpc).

Supported Features on Windows 64-bit

The following simulators are supported when ADS is installed on a Windows XP Professional x64 or Windows Vista 64-bit operating system:

- 64-bit Analog/RF
- 64-bit Momentum
- 64-bit ADS Ptolemy

If you want to run these simulators in 32-bit mode or you want to use features that are not available on a 64-bit operating system, you can launch ADS in 32-bit mode. See *Running Advanced Design System* (instalpc).

The following tables provide details about the supported features when ADS is installed on a Windows XP Professional x64 or Windows Vista 64-bit operating system.

| Functionality | Windows 64-bit |
|---|--|
| Large Schematics, Netlists, Layouts | 32-bit mode |
| Data Display / Large Datasets | native 64-bit |
| 3rd Party: DRC, Translators | 32-bit mode |
| Utilities (LineCalc, Smith, DesignGuides) | 32-bit mode |
| Connection Manager Client | 32-bit mode |
| Connection Manager Server | n/a |
| Legacy Instrument Server | n/a |
| Dynamic Link to Cadence | n/a |
| FlexLM License Server | native 64-bit |
| Circuit Simulation | Windows 64-bit |
| Circuit Simulation Engine, Local Simulation (assume no external cosims or linked executables) | native 64-bit |
| Circuit Simulation Engine, Remote Simulation (assume no external cosims or linked executables) | native 64-bit |
| Verilog-A | all native 64-bit only, or all 32-bit compatibility mode, no 64/32-bit mixture |
| User-Compiled Models, SimKit, MINT | all native 64-bit only, or all 32-bit compatibility mode, no 64/32-bit mixture |
| LSF Support | n/a |
| A/RF Modulated-Source-DSP-Based | 32-bit mode |
| A/RF, MeasEqn Expressions based on ADS Ptolemy (evm_wlan_dsss_cck_pbcc(), evm_wlan_ofdm(), spectrum_analyzer()) | 32-bit mode |
| A/RF Wireless Test Benches (assume no 3rd party cosims) | 32-bit mode |
| System Simulation | Windows 64-bit |

| | |
|---|--|
| Ptolemy Engine (assume no user-compiled models) | native 64-bit |
| Ptolemy Remote Simulation | native 64-bit |
| Ptolemy, Connection Manager Instruments components (except for links listed below) | native 64-bit |
| Signal Studio file reader and writer (CM_SStudioFileRead, or 'write_to_datafile' feature in the CM_ESG_*_Sink components) | native 64-bit |
| Ptolemy, User-Compiled C | all native 64-bit only, or all 32-bit compatibility mode, no 64/32-bit mixture |
| Matlab Cosim | ADS and MATLAB with both native 64-bit only, or both 32-bit compatibility mode, no 64/32-bit mixture |
| HDL Cosim | both ADS and HDL simulator must be running under 32-bit compatibility mode |
| SystemC Cosim | 32-bit mode |
| Ptolemy, Interactive Controls and Displays Components | native 64-bit |
| VeeLink | n/a |
| CM_LA_167xx_Source component | n/a |
| VSA 89600 components (VSA_89600_1_Sink, VSA_89600_1_Source, VSA_89600_2_Sink, VSA_89600_Sink, VSA_89600_Source) | n/a |
| Momentum Simulation | Windows 64-bit |
| Momentum Engine, Local | native 64-bit |
| Momentum Engine, Remote Simulation | native 64-bit |
| Momentum Visualization (and 3D Layout Viewer) | native 64-bit |

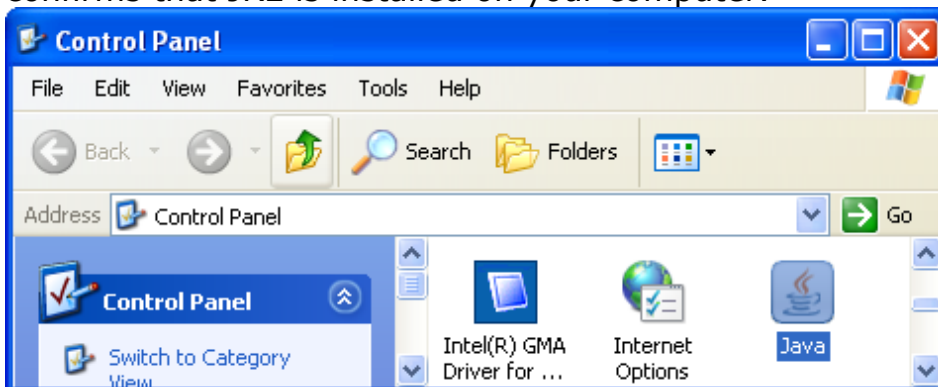
Note

All Connection Manager Client and Instrument components require that the Connection Manager Server be installed on the same machine or on a remote Windows 32-bit XP or 2000 machine.

Verifying Java (JRE) Installation in Windows

JRE must be installed in for help search engine to work effectively. Follow the steps below to verify whether JRE is installed on your PC or not:

- From desktop, choose **Start > Control Panel** to open the Control Panel window.
- If you see the coffee cup icon (see figure below) in the Control Panel window, it confirms that JRE is installed on your computer.





Note

You can download and install the JRE in your computer, from the url:

<http://java.com/java/download/index.jsp>

Installing Advanced Design System on Windows

Before starting ADS installation on a Windows platform, see *Before You Begin Windows Installation* (instalpc) for system requirements and other necessary details.

Note
If you have installed an Early Access version of ADS, you should uninstall it before installing this version. For more information, see Uninstalling Advanced Design System.

Installing ADS on a System

Follow the steps below to install ADS on your system running on Windows platform:

1. Download the ADS installation file `ads2011_01_rXXX_windows.exe` from the [Agilent EEsof EDA Web](#) to any folder, say `C:\Temp`.
2. Run the self extracting installation file `ads2011_01_rXXX_windows.exe` from the location where you saved it.

Note
Before starting the installation, the installation file extracts all the necessary files in a temporary folder.

3. Select the language from the drop-down list of Installation window and click **OK** to continue.
4. At the Introduction screen, click **Next** to read the License Agreement. This is only a usage agreement and is not related to the licenses required to run the software.
5. At the License Agreement screen, accept the agreement and click **Next** to continue with setup.
6. At the Choose Install Set screen, choose any one of the two installation options:
 - **Complete**: For complete ADS installation. It requires about 4.5 GB of disk space and installs the ADS design environment, simulators, documentation, examples, and DesignGuides. If you choose a Complete installation, skip the next step.
 - **Custom**: For customized installation where you can choose from the ADS items you want to install. For a list of custom installation items, see [Installation Items](#).

Note
While you can choose which ADS items you want to install, the ability to run them is determined by the licenses you have purchased.

7. For a custom installation, the next screen lets you choose the items you want to install. Click any item name to see the description of the same in the window below. Select the items you want to install and click **Next** to continue.

Note
You must choose to install *ADS programs and tools* which includes *Layout, Simulators and Schematic Capture*; otherwise ADS will not run properly. *Manuals & Help* is selected by default to install the entire ADS documentation set. If you uncheck this item, documentation and help files will not be available regardless of which other items you choose.

8. At the Choose Install Folder screen, click:
 - **Next** to install to the default folder. The installation program will create this

folder if it does not already exist. One more option **Restore Default Folder** is also provided to restore the default folder after every uninstallation.

- **Choose** to specify a different destination folder. If you specify a folder that does not already exist, the installation program will create it for you.

9. At the Set Your Home Directory screen, click:

- **Next** to accept the default.
- **Choose** to select a different folder.

The folder you specify will be the default startup folder for ADS. It will also be used to store the configuration data in a subfolder called `hpeesof`.



Note

If you are using more than one ADS version, choose a new *Home* folder for each version. For the best performance, choose a folder on your local, not network, drive.

10. At the Choose Shortcut Folder screen:

- You can type a name in *Start Menu Folder Name* to have the same named folder in Start menu, by default it is Advanced Design Systems 2011.01.
- If you want ADS icon on desktop, check the *Icon To Desktop* option.

11. At the Pre-Installation Summary screen, review your choices, and click:

- **Previous** to access previous screens to verify entries and make changes. This screen appears again if you go back to make other choices.
- **Install** to start the installation. Immediately after you click **Next**, the *Setup Status* screen appears and the program configures the installation process. When the program determines that your system is ready for installation, it begins to install files. The status screen displays the files being installed and the progress.
- **Cancel** to exit the Setup without completing the installation.

12. After installation, click **Done** to quit the installer. The ADS License Setup Wizard starts automatically after this and check for the license status. Before launching ADS, you must complete the ADS license setup. For more details on license setup instructions, see *Windows License Setup* (instalpc).

Installation Items

A complete ADS installation installs these items except FLEXnet files and requires approximately 4.5 GB of disk space. For a custom installation, you can choose which items you want to install.

| Item | Description |
|-------------------------------------|--|
| ADS Programs and Tools | This is the basic ADS software, including the Design Environment, Data Display, simulators for analog/RF systems, signal processing and electromagnetic designs. |
| DesignGuides and Application Guides | Special interactive tool kits and handbooks for various design types. |
| FLEXnet Files | FLEXnet licensing software |
| Manuals and Help | Online documentation, help, and search engine. Documentation and help files will <i>not</i> be available if this option is not selected. ADS uses HTML-based documentation displayed using your Web browser. See <i>Check the System Requirements</i> (instalpc) for browser requirements. |
| Examples | Complete ADS application examples with search engine. |

Installing ADS on the Server

To install ADS on the server, ensure that the LAN client files are part of the installation. ADS installs a folder, `LAN_client_setup`, under the <ADS Installation folder> (for example: `C:\<ADS installation folder>\LAN_client_setup`) with the files required to set up client machines.

Once the server installation is complete, share the installation directory so that client machines can access the software across the network. Consult your system administrator or refer to your Windows documentation for instructions on sharing directories.

Using the LAN Client Installation Process

Once you have installed ADS on a server and shared the installation folder, use the following steps to install clients on each client machine.

Notes

1. You need to uninstall any local ADS installation from a machine before you start the LAN Client setup process on it. See Uninstalling Advanced Design System for uninstall instructions.
2. LAN or Client PC installation problems can occur if you access server files using a UNC path, or a path such as `\\hostname\share`. This path can come about if you use the Network Neighborhood to attach to server files, where you assign a drive letter to it; or if you use the Windows Explorer with the `\\hostname\share` notation to access a shared drive.

1. Map a drive on the client machine that connects to the shared ADS installation directory from the server machine. For example, you may create a mapped drive `G:` that accesses the `C:\<ADS installation folder>` directory on the server. Consult your system administrator or refer to your Windows documentation for instructions on mapping paths.
2. Run `setup.exe` from the `LAN_client_setup` folder to start the Install Shield wizard.
3. The Advanced Design System 2011.01 LAN Client Installation title window appears displaying the Welcome screen. Click **Next** to view the License Agreement.
4. At the License Agreement screen, click **Yes** to accept the License Agreement and continue with the setup.
5. At the Specify Your Home Directory screen, define the install destination for the client's program files. Click **Browse** to change the default folder.
6. Click **Next** to continue.
7. At the Personal or Common program folder screen:
8. Choose an option either *Create folder and shortcuts only for current user* OR *Create folder and shortcuts for all users* and click **Next**.
9. At the Select Program Folder screen, enter the Program Folder name. You can type a new folder or select one from the Existing Folders list to select the Program folder.
10. At the Check Setup Information screen, review your choices and click:
 1. **Back** to access previous screens to verify entries and make changes. This screen appears again if you go back to make other choices.
 2. **Next** to continue the installation.
 3. **Cancel** to exit the LAN Setup without completing the client installation.

11. When the installation is complete, click **Finish**.

Running Silent LAN Client Installations

To run the silent LAN client installation, follow the steps below:

1. On a single system, you can record a sample response file to be used on other systems. Run the sample interactive installation with the `-r "filename"` arguments. The following is an example of a command to run under the `LAN_client_setup` sub folder or the server installation of Advanced Design System (change `c:\tmp` reference to a directory available on your system, using two backslashes in the path):

```
setup /r /f1"c:\tmp\lanc.iss"
```
2. Add the setting `INSTALLER_UI=silent` near the top of the recorded file to enable silent mode.
3. On other systems, you can use this response file to run a silent installation by using the `-f "filename"` arguments, under the following, the `start /wait` part of the command is not required, it just lets you know when the command has finished.

```
start /wait setup.exe -f c:\tmp\lanc.iss
```

If there's a need to customize setting on a per client basis, you need to edit the response file before you run the silent installation.

- The `USER_INSTALL_DIR` directory is set to directory where the original version of ADS is installed, for example

```
USER_INSTALL_DIR=t:\\servershare\\Agilent\\ADS2011_01
```

- The `HOME` directory is set through the variable `USER_SELECTED_FOLDER`, for example:

```
USER_SELECTED_FOLDER=C:\\users\\default
```

- The name of the Start Menu folder is set through the variable `szFolder`, for example:

```
USER_STARTMENU_FOLDER=Advanced Design System 2011.01
```

Example lanc.iss file

```
# Mon Jan 24 11:34:41 PST 2011
# Replay feature output
#-----
# This file was built by the Replay feature of InstallAnywhere.
# It contains variables that were set by Panels, Consoles or Custom Code.
INSTALLER_UI=silent
#Choose Advanced Design System File Server Folder
#-----
USER_INSTALL_DIR=Y:\\FileServer\\Agilent\\ADS2011_01
#Set Your Home Directory
#-----
```

```
USER_SELECTED_FOLDER=C:\\Users\\yourname
#Set Your EEsof License Tools Directory
#-----
HPEESOF_LIC_INSTDIR=C:\\Program Files\\Agilen\\EEsof_License_Tools
#Choose Shortcut Folder
#-----
USER_STARTMENU_FOLDER=Advanced Design System 2011.01 - Lan Client Installation
ICONS_TO_DESKTOP=1
```

Using Batch Files to set up ADS Clients

Client installations of ADS can also be set up to run using batch (.bat) files. Use the following information to set up your batch files if you choose to run ADS using this option.

Note
Running ADS clients using a batch file is optional. If you do not intend to use batch files, skip the next two sections on *Configuring ADS for Batch-Mode Clients* and *Creating a Batch File to run ADS Clients*.

Once you have installed ADS on a server and shared the installation folder, complete the following two steps to install clients on each client machine.

You can install ADS on your network and run it from any PC connected to your network.

1. Install ADS selecting the *Complete* installation option on at least one PC (the file server). If you are a new user of ADS 2011, you will be asked to set your EEsof license tools directory. Select a direct residing on the file server or copy the contents of this directory to the file server after you have installed ADS.
2. Share the *Advanced Design System* installation directory and the EEsof License Tools directory with the users on your network. If you are a new user of ADS 2011, you need to share an EEsof License Tools directory to all your users and if you support the use of a batch file, set an environment variable HPEEOSF_LIC_DIR to this path under the batch file.

Configuring ADS for Batch-Mode Clients

On each client system, you have to run a small `setup.exe` configuration program just once per system. For more details, see *Running the Configuration Script (instalpc)*.

The following is an example of an error message you see if you use a batch file against a network copy of ADS and you have not run the required `setup.exe` configuration program on the client system.

```
< prompt > .\ads.exe The application has failed to start
because its side-by-side configuration is incorrect.
See the application event log for more detail.
```

Creating a Batch File to run ADS Clients

Using a text editor, create a batch file on the client system(s). The name of this file is not as important as giving it the .bat file extension. The file can be located anywhere on the

client system. You can create a Windows shortcut to the batch file for added convenience.

For more details on how to create a batch file, see *Creating a Batch File to Set the Environment and Start ADS* (instalpc).

Installing from a File Server

The contents of the downloaded installation image of ADS can be copied to a file server PC enabling you to install ADS from this file server. This arrangement is useful for doing silent installations (see [Silent Installations](#)).

Ensure that you must have read and write permissions to install ADS from a File Server. Follow the same steps for installation as defined in *Installing Advanced Design System on Windows* (instalpc)

Using Multiple ADS Versions

Use the following instructions to maintain and run more than one version of ADS (such as version 2009U1 and 2011.01). Keep a separate $\$HOME$ directory for each version of ADS to help in structuring all the files and to avoid problems that may arise due to sharing of the configuration files among multiple installations.

Setting the HOME Directory

Follow the steps below to specify the $\$HOME$ variable value in the registry for each version of ADS.

1. Click **Start > Run**.
2. Type `regedit` in the Run box and click **OK**.
3. In the Registry Editor, select **HKEY_LOCAL_MACHINE > SOFTWARE > agilent > ADS > (ADS version) > eeenv**.
4. Select **HOME** and choose **Edit > Modify** to enter the desired location and click **OK** to apply the changes.
5. Close the Registry Editor.

Repeat these steps for each version of ADS.

Caution

Use extreme care when editing the system registry. The computer may not function properly if the registry contains an error. You should backup the registry as a precaution. For more information, see the Registry Editor's online *Help*.

Setting the HOME Environment Variable

Alternatively, you can set the *\$HOME* variable as an environment variable. In this case, you need to set it up in an MS-DOS batch script and run that batch script to start ADS.

Note

If you install ADS using a non-standard method and use an MS-DOS batch script to start ADS, you cannot install off-cycle products (addons, hotfixes, MSRs). To install off-cycle products, you must have a valid ADS installation with standard registry entries.

Script for ADS 2011.01

Choose the ADS version by running the appropriate script. Ensure that the *Start in* variable is set correctly on the desktop shortcut by following the steps below:

1. Right-click the desktop shortcut that you use to start ADS.
2. Click **Properties**.
3. Click the Shortcut tab.
4. Verify that the *Start in* value is the same as the *\$HOME* variable setting.

Silent Installations

The InstallAnywhere program provided with ADS supports a silent installation mode. A normal (non-silent) installation receives the necessary input from the user installing the software in the form of responses to prompts in dialog boxes. However, a silent installation does not display prompts for inputs. InstallAnywhere supports a silent mode that has no end-user interaction, and runs either using the defaults provided for a complete install or using a response file that contains the values for various InstallAnywhere variables, which control the installation. For details of response files, refer [Creating Your Own Response File](#).

Silent Installation Overview

Here is an overview on how to set up and run a silent installation on a Windows PC.

1. On a server PC's sharable hard disk, copy the ADS install file in a folder. For details about setting up a file server, refer [Installing from a File Server](#).
2. Share this folder and map the folder to a client machine.
3. If needed, run a silent uninstallation before hand to remove ADS from the client PCs.
4. On client PCs, run the `ads2011_01_rXXX_windows.exe` using arguments for a silent installation (see below).

Running a Silent Installation

To run a silent installation on a client PC, run the *setup.exe* utility using the silent installation arguments shown below:

1. On the client PC, verify that ADS installation folder does not already exist. There should not be a *C:\<ADS installation folder>* folder since the silent installation process is not expecting it to be there. If ADS has been installed, uninstall it using instructions on Uninstalling Advanced Design System.
2. On the client PC, open a Command Prompt or DOS prompt window. In a command prompt, change to the folder *D:\<ADS installation folder>\dvd* that is shared by the server PC.
3. On the client PCs, perform one of the following actions to run a silent installation of ADS:



Note

- When a silent installation is running you won't see any confirmation that the installer is running. However, the process monitor shows *ads_install.exe* processes running in the background.
- The most effective way to troubleshoot errors with the silent install/uninstall process is to run the same type of installation in normal or visual mode.

• Complete Silent Install

- To perform a complete silent installation without requiring any user interaction, type the following command from the command line:
`ads2011_01_rXXX_windows.exe -i silent`

• Custom Silent Install

- The custom silent installation gets its input from the response file *installvariables.properties* created during a custom installation. To perform a custom silent installation without requiring any user interaction, create a response file then type the following command from the command line specifying the path to the response file:
`ads2011_01_rXXX_windows.exe -f c:\tmp\your_response_file.txt -i silent`
 To run the silent install and wait until the process finishes, change directory to the *Windows\Disk1\InstData\VM* sub directory and run the *ads_install.exe* executable, for example:
`cd /d Windows\Disk1\InstData\VM`
`start /wait ads_install.exe -f c:\tmp\your_response_file.txt -i silent`

Creating Your Own Response File

A response file is required to perform silent installation. During normal installation, inputs provided manually into dialog boxes are automatically recorded to a response file. By default, all of the variables defined in your installation are recorded. A response file is always generated after the successful completion of an installation. InstallAnywhere creates this file when the installation exits, storing the values of the applicable properties in the file. This is useful for saving a record of a specific installation execution session that can later be reused in a silent or custom installation.

This response file is a plain text file that uses a simple key=value format. If you want to change the settings in a particular response file, you can edit the response file directly or

create your own response file.


Example File:

```
INSTALLER_UI=silent
USER_INSTALL_DIR=C:\\ADS2011_01
CHOSEN_INSTALL_SET=complete
USER_SELECTED_FOLDER=C:\\users\\default
USER_DEFAULT_HOME=users\\default
USER_HOME_FOLDER=C:\\users\\default
CHOSEN_INSTALL_FEATURE_LIST=ADS,DGS,Examples,Manuals
```

- **INSTALLER_UI** allows you to specify the installer mode in the properties file, negating the need to use the *-i silent* command-line switch.
- **USER_INSTALL_DIR** is the location where you want to install ADS.
- **USER_DEFAULT_HOME** is the location where you want to save your configuration files and workspaces.
- **CHOSEN_INSTALL_SET** can be set to a value of either "complete" or "custom". If you set it to "complete", you don't need to add the **CHOSEN_INSTALL_FEATURE_LIST** variable. The "complete" selection installs all of the ADS modules. If you select "custom", you need to set the **CHOSEN_INSTALL_FEATURE_LIST** (as described below).
- **CHOSEN_INSTALL_FEATURE_LIST** use one or more of the following items separated by commas:

ADS, DGS, FLEXnet, Manuals, Examples

| CHOSEN_INSTALL_FEATURE_LIST (items) | Description |
|--|--|
| ADS | ADS programs and tools |
| DGS | DesignGuides and Application Guides |
| FLEXnet | FLEXnet Files (licensing software for license servers) |
| Manuals | Manuals & Help |
| Examples | Examples |

 Installing all these features constitutes a complete install.

Before Setting Up Licenses For Windows

This section provides information about the prerequisites for setting up licenses on Windows.

Obtaining a HostId/Hardware Key


If you are using dongle, you must have the hardware key. In the absence of a hardware key, you need to obtain the Host Id of your machine. Host Id is the physical address displayed on the LAN adapter of your machine.

To obtain the Host Id (Ethernet Address / License Id):

1. Select **Start > Run** and enter the following command:
`cmd /k ipconfig /all`
2. Click **OK** to open the `cmd` window.

For example:

```
Ethernet adapter Local Area Connection:  
Connection-specific DNS Suffix . . . . . your_network.com.  
Description . . . . . Broadcom NetXtreme Gigabit Ethernet  
Physical Address . . . . . *00-08-05-E1-A8-DF*
```

 **Notes**

- The 12-digit Host Id/Physical Address should be used without dashes, for example, **000805E1A8DF**.
- This example applies to LAN card users. Wireless Network Card users should locate their network card in the text file and use that Physical Address.

Obtaining the ADS License File

You must have a license file (file with extension `.lic`) before starting ADS license setup. If you have not received the same, you can place your ADS license request for:

- New Sale License Request
- New Release License Request
- Renew Expired License
- Early Access License Request
- Change / Transfer Licenses
- Evaluation License / Token Redemption / Renewal Request
- Temporary / Provisional License Request

Evaluation License

If your request for ADS evaluation license is approved, you will receive a license file (of ADS license version 2.9) as an attachment through e-mail. Save this license file on your computer.

[Click here](#) to order ADS evaluation / trial version.

Purchased License

If you purchase the ADS license, you will receive an e-mail containing an entitlement certificate. Follow the instructions in e-mail that directs you to the Agilent Software Manager (ASM) to redeem the certificate for a license file. The license file will be sent through e-mail. You can also download the license file from the Agilent website. Save the license file on your computer.

License Types

ADS supports the following license types:

- **Floating:** This license type is used to run license server to cater the licenses to the remote machines. For example:


```
SERVER cinnamon 0025B3A05E6F
VENDOR agileesofd
INCREMENT b_core agileesofd 2.9 23-nov-2010 1 \

VENDOR_STRING="0025B3A05E6FP=#1,7,8,13,14,25,27,66,67,105,110,116,131,132,156D=#W2200BT,ADS_
Core;e_core \
: RUIGYQG 2UIWQDI PYPNDAX NCJLZW2 TFGCOWK GNIX" \
START=25-oct-2010 SIGN="0313 D7B4 40BF 7578 AF7F 8DF4 A4C4 \
0DA1 67C9 3FFE 2103 2AB0 0F1F BDF4 4F7D 67FB 2CD2 FC3F 24B7 \
6E95 D4FB"
```

- **Node Locked:** This license type is used for accessing ADS on current machine. For example:

```
SERVER madhubs 0025B3A05E6F
VENDOR agileesofd
INCREMENT b_core agileesofd 2.9 23-nov-2010 1 \

VENDOR_STRING="0025B3A05E6FP=#1,7,8,13,14,25,27,66,67,105,110,116,131,132,156D=#W2200BT,ADS_
Core;e_core \
: RUIGYQG 2UIWQDI PYPNDAX NCJLZW2 TFGCOWK GNIX" \
HOSTID=0025b3a05e6f START=25-oct-2010 SIGN="02D8 82B1 95BC \
19B1 A3F8 33E6 D7C2 8AF3 6DCF 8A4C 3000 7F98 51BE 5973 C6CB \
3569 21FA 0DB9 B030 660F 59BE"
```

 The single user license allows only one simultaneous simulation, which is of the same type.

License Codewords

For an updated list of supported license codewords, visit [Agilent EEsof website](#) .

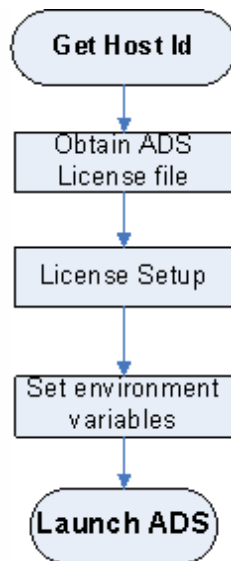
Windows License Setup

After installing Advanced Design System (ADS), you need to setup your ADS license before running ADS. This section provides license setup information on a Windows platform.

Note
The **ADS License Setup Wizard** starts automatically once ADS is installed successfully. If you have already received your license file (file with extension `.lic`), then you can also setup your ADS license using License Setup wizard. For more details on setting up license through wizard, see **License Setup through Wizard**.

License Setup Flow

The following flowchart illustrates the steps that you can refer for completing the ADS license setup (without using ADS License Setup Wizard).



Get Host Id

To obtain a host ID of your machine, see *Obtain Host Id* (instalpc).

Installing a Hardware Key

If you are using a hardware key for ADS license, run FLEXnet to install the FLEXid hardware key (also called a dongle) on a parallel or USB port of your computer. In a node-locked environment, the hardware key is installed on the local machine. In a floating license environment, it is only required on the server machine.

Notes

1. Before installing the hardware key, note the hardware key ID number. If you have not received your security licenses from Agilent EEsof, you will need to provide this number for your License Request Form, as explained in the section, *License Types* (instalpc).
2. ADS 2011.01 installs version 11.9.0.0 of FLEXnet. Make sure you use the latest version of the FLEXnet software, drivers, and hardware key as needed on all ADS systems and license servers.

Installing the FLEXid Driver

You can lock your license to a hardware key. For this, you must have the system administrative privileges. The ADS installation file also installs the Flexid driver, in case there are any issues you can reinstall the same by following the steps below:

1. Run `FLEXid_Dongle_Driver_Installer.exe` file from `C:\Program Files\Agilent\EEsof_License_Tools\bin` folder to start the FLEXid Dongle Driver Installer Wizard.
2. Select the drivers you want to uninstall and click **Next**.
3. After successful installation, click **Finish** to terminate the wizard.
4. Restart your computer to activate the installed driver.

Note

To remove any existing FLEXid drivers run `FLEXid_Dongle_Driver_Installer/remove`.

Using the Ethernet Address of the PC LAN Card

Another way to run the FLEXnet licensing system on your PC is to read your LAN card's Ethernet address and have Agilent EEsof Business Support tie this identifier to your ADS licenses. To obtain Ethernet address:

1. Ensure that you have TCP/IP and IPX/SPX network protocols loaded on your PC. The IPX/SPX protocol is required by FLEXnet.
2. Verify that you can read your LAN card's Ethernet address (also known as the "physical address"). For all versions of Windows, run the following FLEXnet command from the MS DOS Command Prompt:

```
C:\Program Files\Agilent\EEsof_License_Tools\bin
lmutil lmhostid
```

Note

If `lmutil lmhostid` command does not return the expected address, make sure you have the IPX/SPX (NWLink IPX/SPX Compatible Transport) protocol loaded.

Obtain License File

You must have a valid license file to start the license setup. [Click here](#) to order ADS evaluation/trial version. Once your license request is approved, license file is mailed as an attachment to registered email id.

You can also contact Agilent EEsof business support for license file.

License Setup

The following section provide instructions to install ADS license. You should have installed ADS before you complete these steps. For details on installing ADS on a PC running Windows, refer to *Installing Advanced Design System (instalpc)*.

Notes

1. Use the following information to update all existing license servers with the latest version of the FLEXnet software (e.g., *lmgrd* and *lmutil*). The software is installed with ADS 2011.01. Using older versions may cause license-encryption errors, invalid *hostid* results, and unsupported feature errors.
2. Verify that all multiple and redundant servers are updated including any license administration scripts in use. Run *lmutil* from the `C:\Program Files\Agilent\EEsof_License_Tools\bin` for information to help modify the scripts.
3. Restart the license server.

Installing the License File

The `license.lic` file that implements FLEXnet security must be installed to run ADS. Save the license file, `license.lic`, file that you received via e-mail to a folder, for example, `C:\Program Files\Agilent\EEsof_License_Tools\licenses.`

If your licenses will be served by a central server, have your system administrator install the `license.lic` file on the license server machine.

Customizing Your License File (optional)

It is recommended that you use the license file you receive without modifying its content. Starting with ADS 2011.01, all *license.lic* files are generated with SERVER lines with the following format:

```
SERVER this_host <hostid>
```

where:

`this_host` is equivalent to the hostname of the system that the license server is running on
`<hostid>` is the License ID (FLEXID hardware key number or Ethernet address) of the license server.

If you wish to modify the license file you can change the default hostname setting in your license file to the actual hostname of the license server system. The license server is the machine that will serve the licenses on the network, and whose Ethernet address or FLEXID hardware key number, appears on the SERVER line.

For example, assuming that a machine with FLEXID hardware key number 8-5E700059B957 has a hostname of *joshua*. The SERVER line should read:

```
SERVER joshua FLEXID=8-5E700059B957
```

For example:

```
SERVER joshua FLEXID=8-5E700059B957 27000
```

You can also specify a specific TCP port number for license requests as follows:

```
SERVER <hostname> <hostid> <tcp_port>
```

If you do not specify a TCP port number on the SERVER line, the license server will use the first available TCP port number in the range 27000 to 27009.

If you do not use the license setup wizard to install your licenses then you will need to set the `ADS_LICENSE_FILE` as follows.

```
ADS_LICENSE_FILE=@joshua
```



Note

Enter a specific port address on the SERVER line for improved license check-out performance. You may enter a port address outside the range of 27000 to 27009, as long as the address is not used elsewhere. Then set the environment variable `ADS_LICENSE_FILE`.

Setting the Vendor Daemon Path

By default, no path is specified for the `agileesofd` vendor daemon executable. This is acceptable as long as `lmgrd` and `agileesofd` are in the same folder when you start `FLEXlmgrd`.

In the typical license configuration, `lmgrd` and `agileesofd` are both located in the `C:\program Files\agilent\EEsof_License_Tools\bin` folder. After `lmgrd` is started, it searches for `agileesofd` in the same folder. If `agileesofd` is not in the same folder as `lmgrd`, you must specify a path to it using the following syntax

```
VENDOR agileesofd C:\Program
```

Connecting to a License Server through a Firewall

If client systems connect to a license server through an Internet firewall set up on a Windows PC, you must also specify the port number the vendor daemon uses. You can specify the port number on the license file's `VENDOR` line. If the port is not specified, the default is chosen by the operating system at run time. If this port number is specified, there may be a delay restarting the vendor daemon until all clients have closed their connections to the daemon. Here is an example of a properly configured `VENDOR` line including the daemon path and port number:

```
VENDOR agileesofd C:\Program  
Files\Agilent\EEsof_License_Tools\bin\agileesofd` 1705
```

Some clients may timeout before they can connect to a license server through a firewall. The default timeout period is 0.1 second. If you need a longer timeout period, you can set the environment variable `FLEXLM_TIMEOUT` to a new value. Enter the value using microseconds. Agilent EEsof recommends trying one second. For example:

```
FLEXLM_TIMEOUT=1000000
```

Depending on your network, you may need to adjust the period so it is long enough to allow connections without slowing down simulations excessively.

Starting Server

Server can be started using `FLEXlmgrd`. You must start the FLEXnet license manager daemon (*lmgrd*) on the license server(s) first. Once the license server(s) is running *lmgrd* and has started the vendor daemon(s), you can configure the other machines (clients) and user login accounts that need to access ADS.

To start server you need the following:

- FLEXnet software installed in the `C:\Program Files\Agilent\EEsof_License_Tools\bin` folder. This is done when you install ADS.
- The license server machine connected to the network using the TCP/IP network protocol.
- A local copy of the `license.lic` file that contains the FLEXnet licenses. Every machine that will run ADS must be able to access the `license.lic` file used by the license server(s) to check out a license. Access to the *license.lic* file can be via a local copy of the `license.lic` file or through a network drive.
- Properly configured `SERVER` and `VENDOR` lines in your `license.lic` file.

If you have a three-server redundant configuration, you must start FLEXnet on all three

servers before the licenses will be available on the network. Once you have FLEXnet running, you can configure the other machines (clients) and user login accounts that need to access ADS by setting the ADS_LICENSE_FILE.

Use the following steps to start the FLEXnet executable file, *lmgrd.exe*:

1. From a MS-DOS Command Prompt, change the following:
C:\Program Files\Agilent\EEsof_License_Tools\bin
2. Type the following command specifying the full path and location of the license file:
lmgrd -c C:\Program Files\Agilent\EEsof_License_Tools\licenses\license.lic
-l C:\Program Files\Agilent\EEsof_License_Tools\flex.log

To shut down the license manager, enter the following at a command prompt, from the C:\Program Files\Agilent\EEsof_License_Tools\bin folder:

```
lmutil lmdown -c C:\Program
Files\Agilent\EEsof_License_Tools\licenses\license.lic
```

Ensuring Access to the License File

You need to configure each client machine to access the license server and to check out a license. You can do this by using one of two methods:

- Place a copy of the `license.lic` file in the C:\Program Files\Agilent\EEsof_License_Tools\licenses folder of each local machine.
- Configure the ADS_LICENSE_FILE to point to the license file.

Typically it is best to use the *port@host* syntax to set the ADS_LICENSE_FILE to point to the license server.

```
set ADS_LICENSE_FILE=27000@joshua
```

Where *27000* is the TCP port on the SERVER line in the license.lic file and *joshua* is the host name of the license server.

If your license server is set up to search for an available port, use the @host syntax to set the ADS_LICENSE_FILE to point to the license server.

```
set ADS_LICENSE_FILE=@joshua
```

You can also set the ADS_LICENSE_FILE to point to the full path and filename of the license.lic file used by the license server.

Set Environment Variables

The Agilent License Information Tool is available to check your environment variable settings, display your `license.lic` file, and shows your license and server status. If you use the default license file location, the environment variables are set automatically. To use the `license.lic` file from a different location, you have to set the `ADS_LICENSE_FILE` environment variable to point to the location.

Setting Environment Variables For Floating License

You can set the environment variables for **Floating** licenses as follows:

The environment variable can be entered either as a user variable or as a system variable. The user variable affects only the currently logged-in user; the system variable affects all users. For a node-locked license, be sure you add the `ADS_LICENSE_FILE` variable to the *System variables*, not the *User variables*.

If you are running multiple versions of ADS, do not include the `HPEESOF_DIR` variable in the *System variables* or *User variables* list boxes (and remove them if you have them). You need to configure each client machine to access the license server and to check out a license. You can do this by using one of the following methods:

- Place a copy of the `license.lic` file in the `C:\Program Files\Agilent\EEsof_License_Tools\licenses` folder of each local machine.
- Configure the `ADS_LICENSE_FILE` to point to the license file.

It is recommended to use the `port@host` syntax to set the `ADS_LICENSE_FILE` to point to the license server, as shown below:

```
set ADS_LICENSE_FILE=27000@joshua
```

Where `27000` is the TCP port on the `SERVER` line in the `license.lic` file and `joshua` is the host name of the license server.

If your license server is set up to search an available port, use the `@host` syntax to set the `ADS_LICENSE_FILE` to point to the license server, as shown below:

```
set ADS_LICENSE_FILE=@joshua
```

You can also set the `ADS_LICENSE_FILE` to point to the full path and filename of the `license.lic` file used by the license server.

Setting Environment Variables For Node Locked License

You can set the environment variables for **Floating** licenses as follows:

For a node-locked license, add the `ADS_LICENSE_FILE` variable to the *System variables*, not the *User variables*.

Launch ADS

To run ADS from the Start menu choose **Programs > Advanced Design System 2011.01 > Advanced Design System 2011.01**.

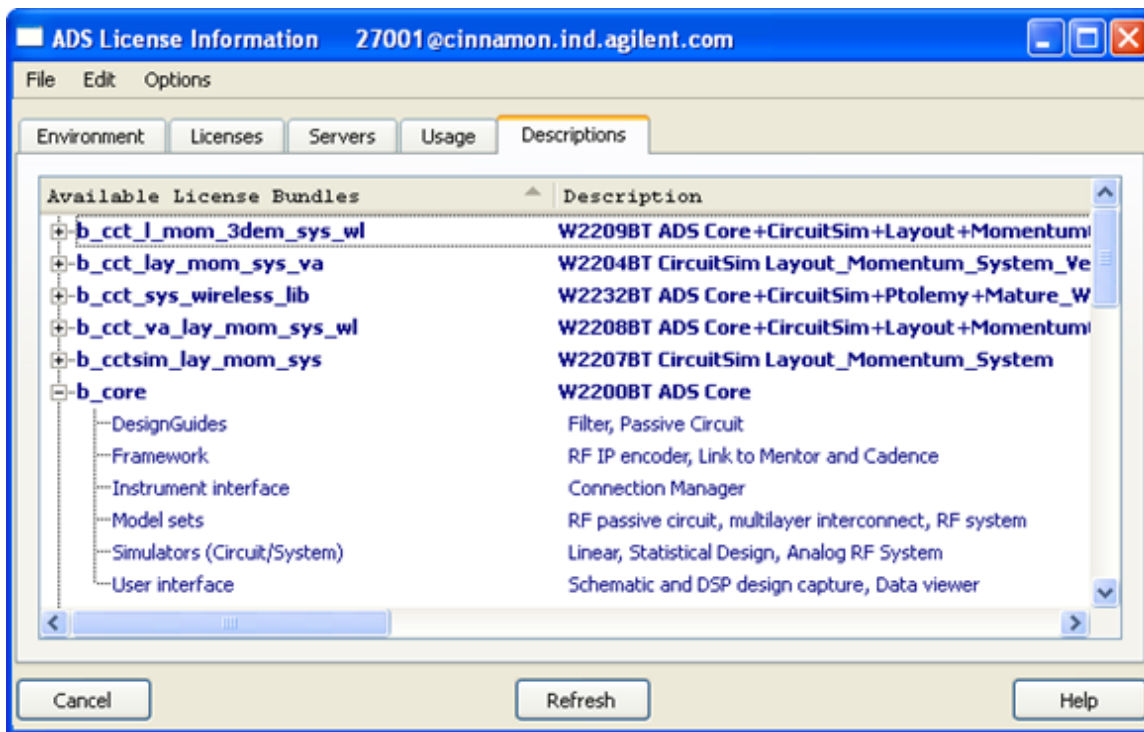
Managing ADS Licenses

This section provides information about how to manage ADS licenses and all the tools and utilities.

License Information Tool

The Agilent License Information Tool is available to check your environment variable settings, display the `license.lic` file, and show your license and server status. You can access this tool in the following three ways:

- From the Start menu, choose **Programs > Advanced Design System 2011.01 > ADS Tools > License Information Tool**.
- From the ADS Main window, choose **Tools > License Information**.
- From `C:\program Files\agilent\EEsof_License_Tools\bin`, run `aglmtool.exe`.



For a current list of licenses available from Agilent EEsof with product descriptions and part numbers, see *License Codewords* (instalpc).

License Preference Tool

License bundles typically start with "b_" in their names. A bundle looks like any other

INCREMENT line in the license file, but ADS recognizes the feature name as a collection, or bundle, of individual features. When ADS checks out the license bundle, it enables all the functionality associated with the individual features.

By default, an ADS run-session has all the bundles available for checkout. However the License Preference Tool can be used to limit the set of license bundles to be used by your ADS session. It records such information in the environment variable `ADS_LICPREF_<hostname>`. If you need more bundle selection flexibility to control which licenses are used on selected systems, see [Manually Setting the License Bundle Preference](#).

Running the License Preference Tool

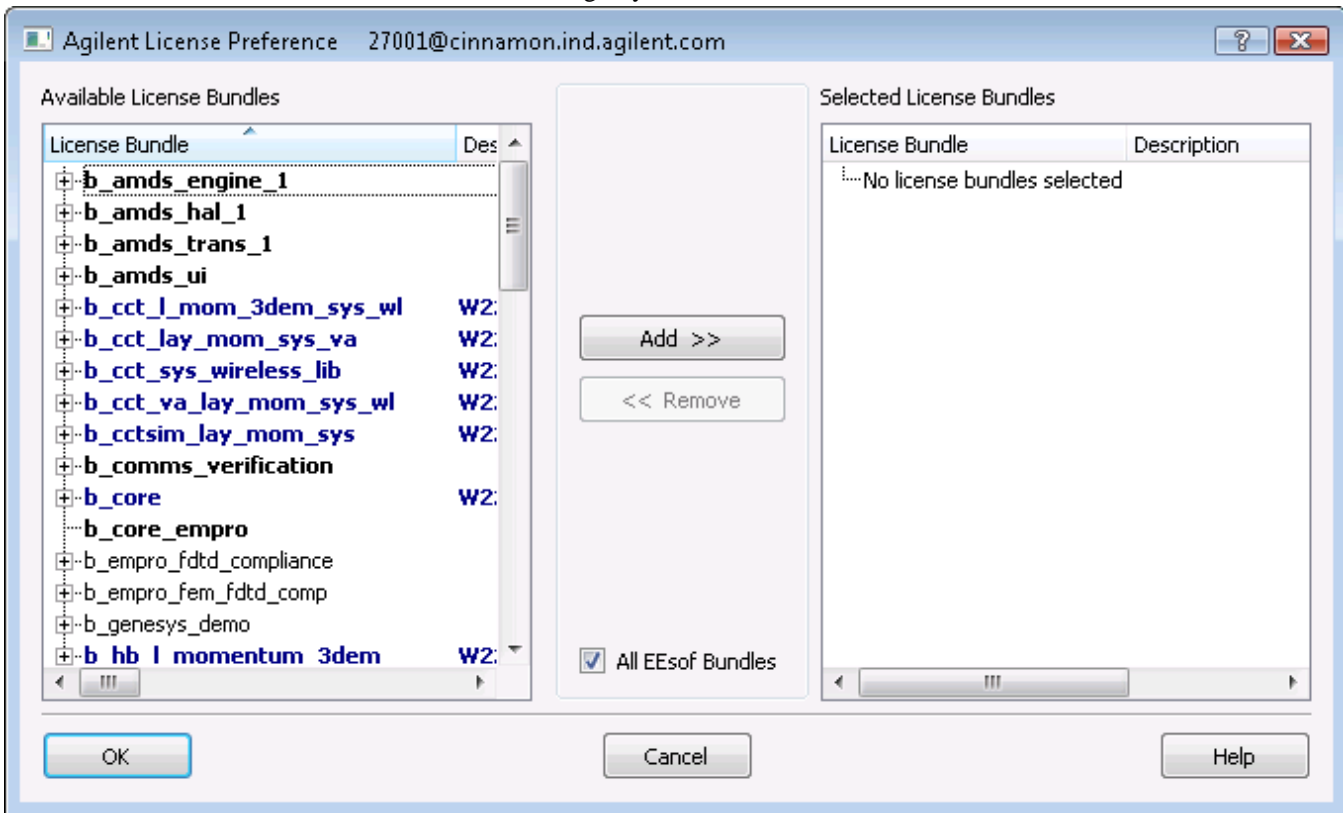
To start the License Preference Tool, from the Start menu, choose **Programs > Advanced Design System 2011.01 > ADS Tools > License Preference Tool**. The License Preference tool allows you to view the available license bundles and their features, and select bundles.

- To see the features available in a bundle, click the expansion icon next to the bundle name under **Available License Bundles**.
- To select a bundle, choose one of the bundles listed under **Available License Bundles**, then click **Add** button. The selected bundle appears under **Selected License Bundles**.
- To accept your choice, click **OK**. This sets the environment variable `ADS_LICPREF_<hostname>` in `HKEY_CURRENT_USER\Software\Agilent\EEsof_License_Configuration` registry.



Note

You must have Write permissions to update the registry settings.



How the License Preference Tool Works

- When you run the License Preference tool, it attempts to locate a license file using the following license definitions:
 - Environment variable `ADS_LICENSE_FILE`
 - `HKEY_CURRENT_USER\Software\Agilent\EEsof_License_Configuration` in the registry
- The License Preference Tool will show all possible bundles if a license file is not located.
- You can select a bundle according to specific rules controlled by the License Preference Tool.
- If required, you can select a particular license bundle (if you have purchased more than one license bundles) using the License Preference Tool.
- If, while using ADS, the feature you attempt to use is not in the currently selected bundle, ADS will attempt to check out a valid floating or nodelocked license for the feature. This is known as license roll-over. If license roll-over fails to check out a license, ADS displays a license error if another bundle with the requested feature is available. You can then select another bundle that contains the feature. Save your work and exit ADS. Then, run the License Preference Tool to remove and add bundles, and restart ADS.

License Preference Not Set

When license preference has not been set, ADS attempts to checkout licenses in the order

listed below. In this example, *ads_schematic* is the requested license.

- ADS first looks for an Element license that contains *ads_schematic*.
- If such an ELEMENT is found, ADS pulls that Element to satisfy the license request.
 - if no such Element is found or available, then ADS looks for a Standalone *ads_schematic* license.
- If such a STANDALONE is found, ADS pulls that Standalone to satisfy the license request.
 - if no such Standalone is found or available, then ADS looks for a Bundle that contains *ads_schematic*.
- If such a BUNDLE is found, ADS pulls that Bundle to satisfy the license request.
 - the least expensive bundle available that contains *ads_schematic* is used to satisfy the license request.
 - an informational dialog pops up showing the bundle that was pulled to satisfy the license request (shown below)
 - if no such Bundle is found or available, then a license denial occurs.

License Preference Set

When license preference has been set, ADS attempts to checkout licenses in the order listed below. License preference is usually set using the License Preference Tool.

The License Preference Tool enables multiple feature bit bundles to be selected together in order of precedence. This example uses *ads_schematic* as the requested license.

Setup:

The following list of bundles are selected with the License Preference Tool:

Bundle A

Bundle B

...

Bundle N

- If BUNDLE A is available and it contains *ads_schematic*, ADS pulls Bundle A to satisfy the license request.
 - if Bundle A is not available or does not contain *ads_schematic*, ADS looks at the next bundle in the list to satisfy the license request.
- If Bundle B is available and it contains *ads_schematic*, ADS pulls Bundle B to satisfy the license request.
 - if Bundle B is not available or does not contain *ads_schematic*, ADS looks at the next bundle in the list to satisfy the license request.
 - all bundles specified in your license preference are tried in order of their listing until reaching the last bundle in the list.
- ...
- If Bundle N is available and contains *ads_schematic*, ADS pulls Bundle N to satisfy

the license request.

- if Bundle N is not available or does not contain *ads_schematic*, ADS looks for an Element that contains *ads_schematic* license.
- If such an ELEMENT is found, ADS pulls that Element to satisfy the license request.
 - if no such Element is found or available, ADS looks for a Standalone *ads_schematic* license.
- If such a STANDALONE is found, then ADS pulls that Standalone license to satisfy the license request.
 - if no such Standalone is found or available, a license denial occurs.

Special Licensing Needs

Be sure to use the *lmttools* utility to install an ADS license on a server that is already running FLEXnet. For details on using FLEXnet, refer to the Flexera website at:

<http://www.flexera.com/>

Using FLEXnet Options

An options file enables the license administrator to control the security parameters of FLEXnet. Specifically the license administrator can:

- Allow the use of features based on user, hostname or display name.
- Deny the user of features based on user, hostname or display name.
- Reserve licenses based on user, hostname or display name.
- Control the amount of information logged about license usage.

Creating an Options File

Use the desired options listed to create the options file using any text editor. Ideally, you should keep the options file in the same directory as your *license.lic* file. Also, add the pathname to the options file in the *license.lic* file as the fourth field on the VENDOR line for *agileesofd* as shown in the following example. (Remember to use the backslash ('\') character if the file contains wrapped lines.)

```
VENDOR agileesofd c:\\licenses\\vendors\\agileesofd \
c:\\licenses\\agileesofd.opt
```

You can include comments in your options file by starting each comment with a pound sign '#'. Everything in the options file is case-sensitive. Be sure that user names and feature names, for example, are entered correctly. The available options are:

- EXCLUDE
Deny a user access to a feature.
- EXCLUDEALL
Deny a user access to all feature served by this vendor daemon.
- GROUP
Define a group of users for use with any options.
- INCLUDE
Allow a user to use a feature.
- INCLUDEALL
Allow a user to use all features served by this vendor daemon.
- NOLOG
Turn off logging certain items.
- REPORTLOG
Specify that a logfile be written suitable for use by the FLEXadmin End-User Administration Tool.
- RESERVE
Reserve licenses for an individual user or groups of users.
- TIMEOUT
Works only for *specified* simulator and library licenses.
- TIMEOUTALL
Works for all simulator and library licenses.

Use the following steps to create and use an options file. Details about each step located in previous sections:

1. Create an options file with your required options.
2. Modify your *license.lic* file so that the VENDOR or DAEMON line points to this option file as shown in this example:

```
VENDOR agileesofd c:\\licenses\\vendors\\agileesofd \
c:\\licenses\\agileesofd.opt
```

3. Start up your license server (lmgrd) that is pointing to your license file. You must stop it first if it is running. It's important that a message is displayed or recorded in the FLEXnet log verifying the license manager is using the options file. The following example shows that the license manager is using the *agileesofd.opt* file containing the TIMEOUTALL option set to 900 seconds:

```
17:35:14 (agileesofd) Using options file: "c:\\licenses\\agileesofd.opt"
17:35:15 (agileesofd) ALL FEATURES: INACTIVITY TIMEOUT set to 900 seconds
```

4. Set *ADS_LICENSE_FILE* to point to your license server.
5. Run ADS.

Specifying the TIMEOUT Option

You can set a custom time-out period for simulator and library licenses using the TIMEOUT or TIMEOUTALL options. If you do not specify a time-out value in your options file or do not have an options file, a default two-hour limit is used. These time-out options

apply to those application features that have explicitly implemented time-out via the heartbeat function. This includes licenses for the Analog/RF and Signal Processor simulators and for libraries, and *do not* affect licenses for the design environment and data display. The time-out option sets the amount of time a feature may remain idle before its license is released and reclaimed by the vendor daemon. The TIMEOUT option enables you to identify specific licenses, and the TIMEOUTALL affects all licenses (simulators and libraries).

To use TIMEOUT, add an entry for each feature to the options file using the following format:

```
TIMEOUT feature_name seconds
```

where:

feature_name is name of the feature.

seconds is the number of seconds before inactive license is reclaimed. The minimum value is 900 seconds (15 minutes). If you specify a time-out value smaller than the minimum, the minimum is used.

The option TIMEOUTALL works just like TIMEOUT, but applies to all features.

```
TIMEOUTALL seconds
```

Here are example entries you can include in your options file:

To set a time-out for the harmonic balance simulator to one hour (3600 seconds):

```
TIMEOUT sim_harmonic 3600
```

To set time-outs for multiple simulators to different periods:

```
TIMEOUT sim_linear 900
```

```
TIMEOUT sim_harmonic 3600
```

```
TIMEOUT sim_convolution 3600
```

To set a time-out for all simulators and libraries to one hour (3600 seconds):

```
TIMEOUTALL 3600
```

Updating the License File

If you have been running FLEXnet and receive updated licenses from Agilent EEsof, you can add the new licenses to the FLEXnet environment as follows:

1. Replace the existing *license.lic* files on the license servers and clients with the new *license.lic* file.
2. On the primary server, run `lmutil lmreread`. This causes the *lmgrd* on the primary server to re-read the `license.lic` file and update all of the other *lmgrd* processes on the network.
3. After you have done this, you can run `lmutil lmstat -a` to verify that the license servers have received the new license information.

If this does not work, you may need to stop all of the `lmgrd` processes and then re-restart `lmgrd` again.

Merging Multiple Vendor Licenses

When you are running FLEXnet-licensed products from multiple vendors, you have three ways to prevent licensing conflicts during installation:

- Multiple license server nodes; each running one *lmgrd* and one license file
- One license server node running one *lmgrd* and one license file
- One license server node running multiple *lmgrds* and multiple license files

Each *lmgrd* can only read a single license file. With the first option you will have more license servers to monitor. With the third option you have only one server but multiple *lmgrds* to administer.

Your product's license file(s) define the license server(s) by hostname and hostid in the SERVER line(s) in the license file.

- If the license files for two or more products contain identical hostids on the SERVER line(s), then these files can be combined.
- If the license files for two products contain different hostids on a SERVER line, then the license servers for those products will be running on different nodes and the license files cannot be combined.

If you have two or more products whose license servers run on the same node (as specified by the SERVER lines in the license files), you may be able to combine the license files into a single license file.

- If the SERVER lines in those files have identical hostids, then you can combine the files into a single file.
- If the SERVER lines have different hostids, then you must keep the license files separate.

Essentially, you can combine two license files under the following conditions:

1. The number of SERVER lines in each file is the same.
2. The hostid field of each SERVER line in one file exactly matches the hostid field of each SERVER line in the other file.

Some possible reasons license files may not be compatible are:

- License files are set up to run on different server nodes, so hostids are different.
- One file is set up for single server (has only one SERVER line), the other is set up for redundant servers (has multiple SERVER lines).
- One vendor uses a custom hostid algorithm, so the hostids on the SERVER lines are different even though the files are for the same machine.

If your license files are compatible as described above, then you can combine license files and run a single *Imgrd*, as described in [Combining License Files from Multiple Vendors](#). If the license files are not compatible, then you must keep the license files separate and run separate copies of *Imgrd* for each license file, as described in the section, [Using Separate License Files on the Same Server Node](#). For specific information about combining licenses for multiple versions of ADS, see [Managing Multiple ADS Versions](#).

Important
There is virtually no performance or system-load penalty for running separate *Imgrd* processes.

Combining License Files from Multiple Vendors

If your license files are compatible, you can combine them using any text editor. To combine license files, read all of the compatible license files into one file, then edit out the extra SERVER lines so that only one set of SERVER lines remains. Write out this data, and you have your combined license file.

If you combine license files from multiple vendors, it is a good idea to keep a copy of the combined license file in each vendor's default license file location. This way, your users can avoid having to set `ADS_LICENSE_FILE`, because each package finds its license information in the default place. On UNIX or Linux, you can do this with a symbolic link from each default location to the location of the combined license file.

FLEXnet Version Component Compatibility

When you combine license files for two different FLEXnet-licensed products, the products may not use the same version of FLEXnet. FLEXnet is designed to handle this situation. There are two basic compatibility rules for FLEXnet:

1. A newer *Imgrd* can be used with an older vendor daemon, but a newer vendor daemon might not work properly with an older *Imgrd*.
2. A newer vendor daemon (or *Imgrd*) can be used with an older client program, but a newer client program might not work properly with an older vendor daemon.

From these two compatibility rules come the simple rules for selecting which version of administration tools to use:

1. Always use the newest version of *Imgrd* and the newest version of each vendor daemon.
2. Use the newest FLEXnet utilities.

For specific application programs, you can use either the new or the old version (with the assumption that the vendor daemon for that application is at least as new as the application).

Using Separate License Files on the Same Server Node

You must run a separate copy of *Imgrd* for each license file. When you run multiple copies of *Imgrd*, there are two details to remember:

1. The port number on the SERVER line of each license file must be unique. You can use a standard text editor to change the port number in each license file so that they are all different.
2. You must make sure that you are using a compatible version of *Imgrd* when you start it up for a particular license file. This can be done by using an explicit path to *Imgrd*.

When running client programs (such as a licensed application), you can set the `ADS_LICENSE_FILE` environment variable to point to multiple license files. For example, you may have a license file from vendor ABC and a license file from vendor XYZ with incompatible servers. You can place the license file from vendor ABC into:

```
c:\user\default\abc.lic
```

and the license file from vendor XYZ into:

```
c:\user\default\xyz.lic
```

then set the `ADS_LICENSE_FILE` environment variable to point to both of them. The syntax is as follows:

```
ADS_LICENSE_FILE=27000@server1;27000@server2;27000@server3
```

Note that each path is separated with a semi-colon.

`ADS_LICENSE_FILE` can point to only one license file for FLEXlm v1.x applications.

Redundant License Servers

FLEXnet enables you to set up a redundant license server configuration. This involves configuring three license servers with one of the three servers functioning as the master server. If the master server goes down, one of the other two servers becomes the new master server, and the licenses remain available on the network.

Setting up redundant servers requires extra system administration and is not recommended unless you absolutely need it.

To set up redundant license servers, use the same FLEXnet procedures on all three servers. All three servers need to be up and running before your licenses will be made available.

Note
You must explicitly set the port number, for example 27005, and complete the license setup again.

Manually Setting the License Bundle Preference

If you are using license bundles, you are aware that you must select a bundle prior to running ADS. Typically, bundles are selected by using the Agilent License Preference Tool. This tool is discussed in *Using the Agilent License Preference Tool*. However, system administrators and advanced users can manually configure environment variables when they need more bundle selection flexibility. Proper configuration using these environment variables control which licenses are used, and the systems using them.

The two environment variables that control bundle selection are:

- `AGILEESOFD_LICPREF<hostname>_` controls bundle selection specifically for the system identified by `<hostname>`.
- `AGILEESOFD_LICPREF` controls bundle selection for all systems on a network with access to the license server.

ADS looks for these variables in the following locations in the order given here:

- Shell environment
- `HKEY_CURRENT_USER\Software\Agilent\EEsof_License_Configuration`

ADS first looks for `AGILEESOFD_LICPREF<hostname>_` in each of these locations. If ADS cannot find a value for `AGILEESOFD_LICPREF<hostname>`, then ADS looks for `_AGILEESOFD_LICPREF`. If `AGILEESOFD_LICPREF` is not found, no bundle is selected.

Examples

- Joe Smith wants to use the `_b_core_` bundle when he runs ADS on the system with the hostname *alpha*. To set this up, Joe should add the environment variable `{ADS_LICPREF_ALPHA=b_core}`
- A system administrator wants to configure a system to use the `_b_core_` bundle when anyone runs ADS on the system named *beta*, and to use the `_b_hb_layout_` bundle when ADS is run on other systems. To set this up, the administrator should add the environment variables
`ADS_LICPREF_BETA=b_core` and
`ADS_LICPREF=b_hb_layout`

Accessing Licenses through a Firewall

There may be situations where it is necessary to check out FLEXnet licenses through a firewall (or router). This may occur when a license server is behind a company firewall and

other sites or companies need to check out licenses.

Assuming your license agreement allows you to serve licenses in this manner, you can enable license checkout through a firewall by configuring your firewall to allow TCP communication through the TCP ports used by the license manager daemon (lmgrd) and any vendor daemons you will run.

For example, assume you have a license server serving EEsof EDA licenses and your *license.lic* file contains the following lines:

```
SERVER myserver 00809AC7123F8
VENDOR agileesofd c:\apps\flexnet\vendors\agileesofd
VENDOR agileesof c:\apps\flexnet\vendors\agileesof
DAEMON hpeesofd c:\apps\flexnet\vendors\hpeesofd
```

To set up your firewall to allow TCP access to the license server, you must specify a TCP port number for lmgrd on the SERVER line and for each vendor daemon on the VENDOR or DAEMON lines. For example:

```
SERVER myserver 00809AC7123F8 27000
VENDOR agileesofd c:\apps\flexnet\vendors\agileesofd port=1705
VENDOR agileesof c:\apps\flexnet\vendors\agileesof port=1706
DAEMON hpeesofd c:\apps\flexnet\vendors\hpeesofd port=1707
```

Note
After specifying TCP ports in your *license.lic* file, you must stop and restart your license server.

Next, configure your firewall or router to allow TCP communication through the TCP ports you specified in your *license.lic* file. In the example above this would be ports 27005, 1705, 1706, and 1707.

Finally, clients must set the ADS_LICENSE_FILE environment variable to the port number assigned to the license server. Using the example above, the setting would be:

```
ADS_LICENSE_FILE=27005@myserver
```

Once this has been done, clients outside of the firewall will be able to access licenses from your server.

Note
Some clients may timeout before they can connect to a license server through a firewall set up on a Windows PC. The default timeout period is 0.1 second. If you need a longer timeout period, you can set the environment variable FLEXLM_TIMEOUT to a new value. Enter the value using microseconds. Agilent EEsof recommends trying one second. For example:

```
FLEXLM_TIMEOUT=1000000
```

Depending on your network, you may need to adjust the period so it is long enough to allow connections without slowing down simulations excessively.

Managing Multiple ADS Versions

This section provides information about how to manage the licenses for multiple versions of ADS.

Backward Compatibility of Licenses

The following table lists ADS versions with details of their license management:

| Release Name | License File Version | Daemon Name | FLEX Version | License Environment Variable | Default License File Location |
|--------------|----------------------|-------------|--------------------------|------------------------------|---|
| ADS 1.5 | 1.5 | hpeesofd | FLEXIm 7.0g | LM_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.dat |
| ADS 2001 | 1.7 | hpeesofd | FLEXIm 7.0g | HPEESOFD_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.dat |
| ADS 2002 | 1.9 | agileesof | FLEXIm 7.2h CRO | AGILEESOF_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2002C | 2.1 | agileesof | FLEXIm 7.2h CRO | AGILEESOF_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2003 | 2.3 | agileesofd | FLEXIm 8.2a CRO | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2004 | 2.34 | agileesofd | FLEXIm 9.2a CRO | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2005 | 2.35 | agileesofd | FLEXnet 10.1.3 CRO | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2006 | 2.6 | agileesofd | FLEXnet 10.8 CRO | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2008 | 2.7 | agileesofd | FLEXnet 11.4.1 | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2009 | 2.8 | agileesofd | FLEXnet 11.6 | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2009U1 | 2.8 | agileesofd | FLEXnet 11.6 | ADS_LICENSE_FILE | \$HPEESOF_DIR/licenses/license.lic |
| ADS 2011.01 | 2.9 | agileesofd | FLEXnet 11.9 | ADS_LICENSE_FILE | C:\program Files\agilent\EEsof_License_Tools\license.lic |

The following table lists the license compatibility between various ADS releases. Note that license compatibility also depends on the whether the license was available in that release.

| Licenses From This Release | ADS 2011 | ADS 2009 | ADS 2008 | ADS 2006 | ADS 2005A | ADS 2004A | ADS 2003C | ADS 2003A | ADS 2002C | ADS 2002 |
|------------------------------------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|----------|
| Will Work With This Release | | | | | | | | | | |
| ADS 20011 | X | X | X | | | | | | | |
| ADS 2009U1 | X | X | X | | | | | | | |
| ADS 2009 | X | X | X | | | | | | | |
| ADS 2008 | | X | X | X | | | | | | |
| ADS 2006 | | | X | X | X | | | | | |
| ADS 2005A | | | | X | X | X | X | | | |
| ADS 2004A | | | | | X | X | X | | | |
| ADS 2003C | | | | | | X | X | | | |
| ADS 2003A | | | | | | X | X | | | |
| ADS 2002C | | | | | | | | X | X | |
| ADS 2002 | | | | | | | | X | X | |

Combining ADS Licenses with Other Agilent EESof EDA Licenses

For ADS 2011, the vendor daemon *agileesofd* is used. This is the same vendor daemon that was used for ADS earlier versions of ADS. If you want to serve ADS 2011 licenses and earlier from the same server, you need to have the latest version of *lmgrd*, v9.2a, and two or three DAEMON lines in your license file, depending on how many versions you want to support. The ADS daemon names available are:

agileesofd - for ADS 2003A, 2003C, 2004A, 2005A, 2006A, and 2006 Update
agileesof - for ADS 2002 and 2002C
hpeesofd - up to and including ADS 2001

For example, the license file would include:

```
SERVER xyzmems 77a588a7 1700
VENDOR agileesofd c:\ADS2009U1\licenses\vendors\agileesofd
VENDOR agileesof c:\ads2002C\licenses\vendors\agileesof
DAEMON hpeesofd c:\ads2001\licenses\vendors\hpeesofd
```

You would then add the INCREMENT lines for the different products to the file.

The name and extension of the license file are arbitrary (i.e., license.dat, license.lic or adslicenses.txt). By default, all ADS versions up to and including ADS 2001 look for a file named license.dat and all ADS versions from ADS 2002 to ADS 2009 Update 1 look for a file named license.lic. You can use one of these names, or some other name you prefer. Whatever name you choose to use, make sure you set the environment variables to point to your license file.

The supported environment variables are:

- ADS_LICENSE_FILE for ADS 2003A through 2009
- AGILEESOF_LICENSE_FILE for ADS 2002 and 2002C
- HPEESOFD_LICENSE_FILE for ADS 2001

- LM_LICENSE_FILE for ADS 1.5 and earlier

For example, if the combined license file is named adslicenses.txt and you want to build a license file that contains ADS 2009 Update 1, ADS 2003C, ADS 2002C, ADS 2001, and IC-CAP 2001 licenses, then:

- ADS 2003C and 2009 will use:
ADS_LICENSE_FILE=c:\licenses\adslicenses.txt
- ADS 2002C will use:
AGILEESOF_LICENSE_FILE=c:\licenses\adslicenses.txt
- ADS 2001 will use:
HPEESOFD_LICENSE_FILE=c:\licenses\adslicenses.txt
- IC-CAP 2001 will use:
LM_LICENSE_FILE=c:\licenses\adslicenses.txt

Each version of ADS uses a certain search order to look for the environment variable:

- ADS 2003C through 2009 Update 1 will first look for the environment variable named ADS_LICENSE_FILE. If ADS_LICENSE_FILE and LM_LICENSE_FILE are both defined, ADS 2003C through 2009 Update 1 will use ADS_LICENSE_FILE and ignore LM_LICENSE_FILE. If ADS_LICENSE_FILE is not defined, then ADS 2003C through 2009 Update 1 will default to LM_LICENSE_FILE.
- ADS 2002 and 2002C will first look for the environment variable named AGILEESOF_LICENSE_FILE. If AGILEESOF_LICENSE_FILE and LM_LICENSE_FILE are both defined, ADS 2002 and 2002C will use AGILEESOF_LICENSE_FILE and ignore LM_LICENSE_FILE. If AGILEESOF_LICENSE_FILE is not defined, then ADS 2002 and 2002C will default to LM_LICENSE_FILE.
- ADS 2001 will first look for the environment variable named HPEESOFD_LICENSE_FILE. If HPEESOFD_LICENSE_FILE and LM_LICENSE_FILE are both defined, ADS 2001 will use HPEESOFD_LICENSE_FILE and ignore LM_LICENSE_FILE. If HPEESOFD_LICENSE_FILE is not defined, then ADS 2001 will default to LM_LICENSE_FILE.
- All previous ADS versions, up to and including ADS 1.5 will use LM_LICENSE_FILE.

Even though all versions of ADS will default to LM_LICENSE_FILE if that is the only environment variable that exists, it is recommended that you use the supported environment variables listed above.

Example of a Merged License File

```
SERVER solarone 80FB214D 1700
DAEMON hpeesofd c:\hfs\d1\local\licenses\hpeesofd
VENDOR agileesof c:\hfs\d1\local\licenses\agileesof
VENDOR agileesofd c:\hfs\d1\local\licenses\agileesofd
#
# ADS 2001 licenses
#
INCREMENT Adapt_comp hpeesofd 1.5 03-nov-2002 5 EC7A98E3FB4AC8771142 \
  VENDOR_STRING=s=80FB214D
```


Advanced Design System 2011.01 - Windows Installation

```
INCREMENT Ad_da_appkit hpeesofd 1.5 03-nov-2002 5 \  
    1CCA189368AF358196C4 VENDOR_STRING=s=80FB214D  
INCREMENT Ampsa_appkit hpeesofd 1.5 03-nov-2002 5 \  
    0CBAB813D8101E34EB55 VENDOR_STRING=s=80FB214D  
INCREMENT Analog_lib hpeesofd 1.5 03-nov-2002 5 9CEA88930822C5CF81AC \  
    VENDOR_STRING=s=80FB214D  
INCREMENT Tx_appkit hpeesofd 1.5 03-nov-2002 5 6C0A5873869F9624DFF5 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT User_defined_model hpeesofd 1.5 03-nov-2002 5 \  
    2CAAEE8E326E3D9DD888B VENDOR_STRING=s=80FB214D  
INCREMENT Verilog_code_gen hpeesofd 1.5 03-nov-2002 5 \  
    FCAA489350CD03768D44 VENDOR_STRING=s=80FB214D  
INCREMENT Vhdl_code_gen hpeesofd 1.5 03-nov-2002 5 \  
    FC4A58B306109B640C5C VENDOR_STRING=s=80FB214D  
INCREMENT Wcdma3g_des_lib hpeesofd 1.5 03-nov-2002 5 \  
    DC7AA89389009E4B61BF VENDOR_STRING=s=80FB214D  
INCREMENT Wcdma_des_lib hpeesofd 1.5 03-nov-2002 5 \  
    7C0A38F308FA2C30CE3D VENDOR_STRING=s=80FB214D  
INCREMENT Wlan_des_lib hpeesofd 1.5 03-nov-2002 5 \  
    4C8A6893E259E6C86399 VENDOR_STRING=s=80FB214D  
  
#  
# IC-CAP 2001 licenses  
#  
INCREMENT a_si_tft agileesof 6.0 29-oct-2001 1 D0A4535DE290 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT ac_driver agileesof 6.0 29-oct-2001 1 1A9EE36873A0 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT analysis agileesof 6.0 29-oct-2001 1 025C2B939BD5 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT curtice_statz_fet agileesof 6.0 29-oct-2001 1 7D88F11FEE4B \  
    VENDOR_STRING=s=80FB214D  
INCREMENT dc_driver agileesof 6.0 29-oct-2001 1 65C14D4C7948 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT gummel_poon_bjt agileesof 6.0 29-oct-2001 1 8FB9632C0555 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT ucb_bsim3 agileesof 6.0 29-oct-2001 1 BEDFA8C2810F \  
    VENDOR_STRING=s=80FB214D  
INCREMENT ucb_bsim4 agileesof 6.0 29-oct-2001 1 D454A8AB830D \  
    VENDOR_STRING=s=80FB214D  
INCREMENT ucb_mos2_mos3 agileesof 6.0 29-oct-2001 1 D9768F388827 \  
    VENDOR_STRING=s=80FB214D  
INCREMENT vbic_bjt agileesof 6.0 29-oct-2001 1 3DE6FB45CD8C \  
    VENDOR_STRING=s=80FB214D  
  
#  
# ADS 2002C licenses  
#  
INCREMENT ads_datadisplay agileesof 2.0 30-jun-2002 1 \  
    VENDOR_STRING=80FB214D HOSTID=80fb214d SIGN="008E 5A70 FECF \  
    8BEF 9B3A 8A67 7375 0A51 0940 A264 6B00 C335 666B 03E2 D8E7 \  
    99A8 A0F9 9007 2AC4 EF7D E101"  
INCREMENT ads_datadisplay agileesof 2.0 30-jun-2002 1 \  
    VENDOR_STRING=80FB214D SIGN="01CB 4272 B241 5A67 A4C8 CADB \  
    A080 FFB2 7796 6C29 EC02 C3A9 FD8A BE47 C0C0 F027 5552 947F \  
    64CC 06BA 2201"  
INCREMENT ads_drc agileesof 2.0 30-jun-2002 1 VENDOR_STRING=80FB214D \  
    HOSTID=80fb214d SIGN="0138 3E48 7191 3703 8FFB 2614 067B 2A7E \  
    203F 4F0C C900 79FE F186 9B1E 2B10 3B3D D650 2204 18CF 00C9 \  
    3E3A"  
INCREMENT trans_veriloggen agileesof 2.0 30-jun-2002 1 \  
    VENDOR_STRING=80FB214D HOSTID=80fb214d SIGN="014D A119 4C16 \  
    49
```

Advanced Design System 2011.01 - Windows Installation

```
9831 16B3 B5C6 EFE7 ED11 D0AE F389 EA00 590B 0E0A E0CD 5E4D \
9CE6 E6AD B27E 2CC4 8C1A 1D9D"
INCREMENT trans_veriloggen agileesof 2.0 30-jun-2002 1 \
  VENDOR_STRING=80FB214D SIGN="0332 DEBA 8398 B80F D2A0 0237 \
  BF97 0C7E 1CF3 CB15 2902 A5CB 47FA ECCB 9C6B BED2 E3D9 FBEB \
  EF84 FAFE 7AC8"
INCREMENT trans_vhdlgen agileesof 2.0 30-jun-2002 1 \
  VENDOR_STRING=80FB214D HOSTID=80fb214d SIGN="03D0 0C40 7E3C \
  E656 F8A8 ADF2 B161 97C1 CE6C DC0C DA00 A704 91C9 F5A0 30C6 \
  DA2A 60C0 A435 E003 02A0 C7A4"
INCREMENT trans_vhdlgen agileesof 2.0 30-jun-2002 1 \
  VENDOR_STRING=80FB214D SIGN="028D FD25 D0E4 AD1A A0B7 5D61 \
  E2A8 7CC2 8135 D605 8200 F200 39D8 E5AF 4B9E D240 3682 4BAA \
  D9BD 6FB3 E580"
#
#ADS2003C licenses
#
INCREMENT ads_datadisplay agileesofd 2.3 07-jul-2003 1 \
  VENDOR_STRING="00047518D858 : O2GAZUD WSGSONJ 2HNECZL 12WKCKE \
  LRXYGSO MWYFKGP AKBPONX LOYSO" HOSTID=00047518d858 SIGN="0246 \
  771A BBA2 A0D4 B29E 7371 6FF7 F3D9 161A 1204 EE00 2E92 8AC0 \
  1AF7 FAF9 5B2C B017 23F7 91E8 BF97 B9AD"
INCREMENT ads_drc agileesofd 2.3 07-jul-2003 1 \
  VENDOR_STRING="00047518D858 : QEGHABO KEYWTHV 1HEIWND JFAVQ2A \
  UJXJ2EW KYARWEQ GY" HOSTID=00047518d858 SIGN="02EC 9EA3 EE62 \
  BDBC 9793 019D 0551 FD3E 20DD D0C1 D301 DA95 9F79 16A8 5E11 \
  1B81 E7CC 90F8 68A0 E116 8F0B"
INCREMENT ads_encoder agileesofd 2.3 07-jul-2003 1 \
  VENDOR_STRING="00047518D858 : GONJAZX FHGGNAP BWOGIAH PBKWEYK \
  UCKGULO YSO2GAZ UDWSGS" HOSTID=00047518d858 SIGN="027B 178E \
  2893 8446 A5C4 0990 830E CC2C F215 528B 6401 9B93 9540 A54C \
  B85A A68E 0049 200F 1685 96D1 FD7F"
INCREMENT ads_layout agileesofd 2.3 07-jul-2003 1 \
  VENDOR_STRING="00047518D858 : BUYPSCY ESZGY2G PVZBPON XODFINY \
  IUIUACJ EFQGAUY XLYSX" HOSTID=00047518d858 SIGN="032E E2FE \
  1D41 5386 F290 C7AA 207B 20C6 9187 D2D5 0D00 7DB9 8FF8 531A \
  9947 9A9D 5D72 A8E6 9807 3037 F7EA"
#
# ADS2009 licenses
#
INCREMENT ads_datadisplay agileesofd 2.7 08-nov-2007 1 \
  VENDOR_STRING="8-5E7012345678 : DXNLFPQ WZBCLQ2 AUJXJ2E \
  IEKCKLI WFYQNM DNJU1YM LHYKAQC OM" START=11-nov-2007 \
  SIGN="028C 541A A8DE F4CD 9796 2D38 BC5A 7588 F431 7E62 0601 \
  95CE F386 0A87 0B26 7EE7 7FEB 9DE4 60E9 6DDE 0340"
INCREMENT ads_schematic agileesofd 2.7 08-nov-2007 1 \
  VENDOR_STRING="8-5E7012345678 : KSGSOTJ D1JYAKF UZJFEJI \
  U2CRZDW FYANHIW HKMNMAU FQ1AQPJ UGW" START=11-nov-2007 \
  SIGN="02B0 5CFB 3F35 006F CDC5 1BBE DE50 831E 54DC A024 A301 \
  A491 42EA A1AA 3E41 C43D 5B63 E82D 3B51 8961 005D"
INCREMENT mdl_systemlib agileesofd 2.7 08-nov-2007 1 \
  VENDOR_STRING="8-5E7012345678 : PGNPGMU IWQUFPY PNDJKYU \
  GNHSULC KL2RXY2 NXAHEGC TLRDCYB RW1Q" START=11-nov-2007 \
  SIGN="02E9 3C03 1616 0BC9 5E70 C088 5D86 770F E8D4 862C D803 \
  E25B CDD5 EB9D AA31 FD4B 2C30 ED41 4635 3420 A4FD"
INCREMENT sim_convolution agileesofd 2.7 08-nov-2007 1 \
  VENDOR_STRING="8-5E7012345678 : DSXUYDA CHECD1Y 2NMAJPB \
  CESQD2M JX2LGBG QWPS1OK RTEIQGA UYDLY" START=11-nov-2007 \
  SIGN="0153 1869 9B6E C851 5225 A333 0727 E795 BE74 8C5D 0302 \
  E9BC E165 4F3D E4D4 D7BF E530 3CC5 B760 830E 9C95"
```



Note

In the license file, # can be used to comment out the incremental codewords.

Using Advanced Design System after Windows Installation

This section provides information about different ways to launch ADS.

Running Advanced Design System

Your ADS licenses must be properly configured and installed before you can run ADS. To set up your license file, follow the instructions in *Setting Up Licenses* (instalpc).

Note
ADS License Setup Wizard starts automatically if there are any issues in ADS License setup.

To run ADS from the Start menu, select **Programs > Advanced Design System 2011.01**. The following options are available in the Start menu:

- **ADS Tools:** Displays a list of ADS tools, such as Digital Filter Designer, or LineCalc if they have been installed. Choose the tool you want to launch (provided you have licensed these features). Other tools include the License Information Tool, License Preference Tool, and the Ptolemy Modelbuilder Shell.
- **ADS Resources:** You can access the ADS online help from here. The documentation files are accessed from the location in which they are installed (if you chose to install documentation).
- **Advanced Design System 2011.01:** Launches the ADS Main window and the use of the various ADS Suites, features and modules you have licensed. If you are not familiar with ADS, choose **Help > Topics and Index > Quick Start** for help on getting started with ADS.
- **Uninstall Advanced Design System 2011.01:** Launches the Uninstall Program. For more information about this utility, refer to the section, *Using the Uninstaller*.

Running ADS in Verbose Mode

You can start ADS in the verbose (debug) mode to store and display the information about what is happening as ADS runs. This additional information is displayed in an error log window. It can be very useful to debug a problem with ADS both at startup and in general operation. In the verbose mode, ADS creates a log file, `ads_daemon.log`, in the root folder of your system disk. This file can be used to track the issue that you may face while working with ADS.

To start ADS in the verbose mode:

1. Open your Windows Explorer and navigate to the `bin` folder in the ADS installation folder. For example,

C:\Agilent\ADS201101\bin

2. Double-click the `ads_verbose.bat` file to start the ADS in the verbose mode.
3. You will notice some extra message windows as ADS starts. Click **OK** in each of the windows to start the ADS.

To trace any error or issues you can refer to the `ads_daemon.log` file. For any further assistance, you can access Agilent EEsof EDA Technical Support or e-mail your `ads_daemon.log` file to the Agilent support engineer.

Running ADS from a Network-based Installation

To install ADS on your network and run it from any PC connected to your network:

1. Install ADS by selecting the *Complete* installation option on at least one PC (the file server). If you are a new user of ADS 2011, you will be asked to set your EEsof license tools directory. Select a directory residing on the file server or copy the contents of this directory to the file server after installing ADS.
2. Share the *Advanced Design System* installation directory and the EEsof License Tools directory with the users on your network. If you are a new user of ADS 2011, you need to share a EEsof License Tools directory to all your users. Also, if you support the use of a batch file, set an environment variable `HPEEOSF_LIC_DIR` to this path under the batch file.

Note

If you are supporting users on 32-bit versions of Windows and your original ADS installation is performed on a 64-bit Windows system, under the EEsof License Tools, you need to copy the utilities from the `bin/win32` directory to the `bin` directory to allow 32-bit system users to use these set of the EEsof License Tools.

After installing ADS and EEsof License Tools on a file server, you can support your users in the following ways:

- Create a batch file to set the environment variables and to start ADS (see [Creating a Batch File to Set the Environment and Start ADS](#)).
- [Use the LAN Client Installation Process](#) .

Running the Configuration Script

On each PC client, you need to run a small `setup.exe` configuration program. The ADS file server contains 32-bit and 64-bit versions of the configuration program.

- For 32-bit systems, run the `setup.exe` configuration program located here:

C:\Agilent\ADS2011_01\install\32bit\setup.exe

- For 64-bit systems, run the `setup.exe` configuration program located here:

C:\Agilent\ADS2011_01\install\64bit\setup.exe

If required, the configuration program can also be run in silent mode on the PC client. Use the path shown above (depending on 32-bit or 64-bit) and replace `setup.exe` with the following:

```
msiexec /q /i "%HPEESOF_DIR\install\32bit\ADS_MM_Setup.msi"
```

Note
Running the configuration program in silent mode successfully, depends on careful placement of the double-quotes (").

Creating a Batch File to Set the Environment and Start ADS

Create a batch file `*.bat` on the each PC client. The file can be located anywhere on the PC client.

The following is an example of a Windows `.bat` file that sets the environment variables and starts ADS 2011.01. The exact path name and location for the `HPEESOF_DIR`, `HOME`, `HPEESOF_LIC_DIR` and `ADS_LICENSE_FILE` environment variables will vary depending on your version of ADS, your home directory location, and your particular license configuration. Check with your system administrator for details.

```
set HPEESOF_DIR=c:\file_server\ADS2011.01
set ADS_LICENSE_FILE=27001@ [your server name]
REM NEW for ADS 2011, you must set a HPEESOF_LIC_DIR variable
set HPEESOF_LIC_DIR=c:\file_server\EEsof_License_Tools
set PATH = %HPEESOF_DIR%\bin;%PATH%
set DOCS_DIR=%HPEESOF_DIR%\doc
set HOME=C:\users\default
cd %HOME%
%HPEESOF_DIR%\bin\ads.exe
```

Note
If you try to run this batch file to launch a network copy of ADS 2008 or later versions before executing the required `setup.exe` (as per 32-bit or 64-bit version) configuration program, you will get an error message similar to the following:

```
.\ads.exe The application has failed to start because its side-by-side configuration is incorrect. Please see the application event log for more detail.
```

Using the ADS RF Designer Suite

You need to purchase a specific product license to access ADS RF Designer product. If have not installed the *RF Designer* license, an error message is displayed when you try to open RF Designer. To purchase this product suite, contact your Agilent EEsof sales representative. If you have purchased this suite and are encountering the same problem, check your `license.lic` file. Follow instructions in *Setting Up Licenses* (instalpc), for details

on licensing procedures.

Troubleshooting and FAQs

This section describes some of the common problems (along with possible solutions) you may encounter while running ADS or during ADS license setup.

ADS Does Not Start

It is possible to install ADS features for which you have not purchased licenses but you cannot access the applications without a valid license.

If ADS applications does not start, check the following:

- Ensure your ADS license setup is correct, as explained in *Windows License Setup* (instalpc).
- Open and review the `install.log` file (available in ADS installation folder) to see if there are any apparent problems with the installation structure. (You may have to re-install ADS.)
- Check the environment variable settings using Agilent *License Information Tool* (instalpc).

If you cannot find the problem, run ADS in verbose (debug) mode and contact Technical Support to help pinpoint the problem.

ADS Does Not Run After Starting the License Server

If the following error message appears when you run ADS, license bundle selection may be required:

```
No such feature exists  
Feature: b_core  
License path:  
$HPEESOF_DIR/EEsof_License_Tools/licenses/license.lic  
FLEXlm error: -5,357
```

This error can appear if license file (`license.lic`) file contains license bundles and you have not run the Agilent License Preference Tool to select a license bundle. You must select a license bundle using the License Preference Tool, so ADS will know to use it. See [Using the Agilent License Preference Tool](#) .

Licenses Stop Working

The FLEXnet software must be able to read the ethernet address of your LAN card for your licenses to work properly. If you only have the TCP/IP protocol loaded on your PC, then FLEXnet will be unable to read the ethernet address and ADS will not work.

You must have the NWLink IPX/SPX protocol loaded in addition to the TCP/IP protocol.

To load the NWLink IPX/SPX protocol in Windows, do the following:

1. Choose **Start > Settings > Control Panel.**
2. In the Control Panel, double-click **Network.**
3. In the Network dialog box, select the **Protocols** tab.
4. Click the **Add** button.
5. Select *NWLink IPX/SPX Compatible Transport* from the list that appears and click **OK.**
6. The protocol will be loaded. Once it is complete, select **OK** until out of the Network dialog box.
7. To complete this procedure, reboot your PC.

Losing Licenses When Opening Help

On network configurations, such as a VPN (virtual private network), where ADS and its licenses are accessed through a web browser, opening an ADS help topic may break the connection to the network. To avoid this situation, set the following Internet Explorer option so ADS help opens in a new browser window:

1. In Internet Explorer, choose **Tools > Internet Options.**
2. Select **Advanced** tab in the **Browsing** section, disable (uncheck) *Reuse windows for launching shortcuts.*

ADS Workspace Cannot be Opened After System Restore

System Restore returns your Windows system to a previous point in time. The problem is that System Restore targets and deletes any design .CFG files that were created after the desired system restore point. Any ADS workspace and design files created after the restore point are stripped of their configuration files, design files, and empty directories. Therefore, ADS cannot open these workspaces.

If System Restore was recently used, you can recover the lost design files and repair the corrupted ADS workspace directories by selecting *Undo my last restoration* from System Restore.

After System Restore is reversed and your PC is rebooted, your ADS workspaces are restored to working order and all design files are recovered.

If System Restore must be done for whatever reason, you should first protect any ADS workspaces that contain recent work.

- Check with your system administrator to find out if your ADS workspaces are being backed up regularly and if the most recent backup contains your most recent work.
- If your ADS workspaces are not backed up, temporarily move your recent ADS workspaces to a protected location for the duration of the System Restore. According to Microsoft, the C:\Program Files directory is safe from modification by System Restore. Remember to move your workspace back to their original location after System Restore completes. This is important, as the ADS simulator will fail to run if spaces exist in the path to the ADS workspace directory.

FAQs

Following are some frequently asked questions about installation of ADS programs on the PC.

Install Over Multiple Hard Disks

To install ADS applications over multiple hard disks, you need to re-run the Setup program as many times as necessary, installing selected installation items to a different destination each time.

Find Flex ID of Hardware Key

You need the nodelock ID of your hardware security key to get licenses from Agilent EEsof. It might also be useful to access this information when you place a call to Technical Support. There are two ways to check this:

- Before you install the hardware key on your PC, you can read the ID directly from the key.
- If you have installed the hardware key on your PC, and have also already installed your licenses and the FLEXnet software, enter the following command to check the nodelock ID:

```
lmutil lmhostid -flexid
```

Add ADS Files

The InstallAnywhere program can be used to install ADS features that were not installed during the Custom installation.

 **Notes**

1. To repair your ADS installation, uninstall ADS (see Uninstalling Advanced Design System) and then re-install ADS (see *Installing Advanced Design System on Windows* (instalpc)).
2. Agilent EEsof does not recommend using the Add/Remove Programs feature (to un-install ADS) available on the Control Panel.

To add ADS items to an existing ADS installation (requires downloading ADS image):

1. Close all ADS applications, and all Windows programs. Download the ADS installation file `ads2011_01_rXXX_windows.exe` from the [Agilent EEsof EDA Web](#) to any folder, say `C:\Temp`,
2. Run the self extracting installation file `ads2011_01_rXXX_windows.exe` from the location where you saved it.
3. Follow the online instructions until you reach *Install Set* screen, then choose **Custom** at the **Choose Install Set** screen, then choose **Next**.
4. At the next screen, choose the items you want to install, then choose **Next** to begin installing the items. The Setup Status screen appears showing the installation progress.
5. Click **Done** when the installation is complete.

Installing Connection Manager Server on Windows

The Connection Manager server can be easily installed and used with Advanced Design System (ADS). Follow these instructions to install the Connection Manager server and configure the server IO.

Obtaining the Software

ADS 2011 release includes Connection Manager Client by default, but it does not include installation for Connection Manger Server (needs to reside on same/local or remote 32B Windows XP/2K PC with latest Agilent IO Libraries software that will be connected to your target instruments) . To use Connection Manager Server with ADS 2011, it must be installed separately. Click [here](#) to download the latest available version of ADS Connection Manager Server.

For more details about ADS Connection Manager Client/Server and how to install them, see the following: [What is Connection Manager](#)

Note

ADS 2011 Connection Manager is built on the core version of Connection Manager Server that was shipped originally with ADS 2006 Update 3.

Before You Begin

To communicate with instruments, you must install the Connection Manager server. Before installing the server, ensure that your PC workstation and your EDA software licensing meet the following requirements.

System Requirements

The server must be installed on a true 32-Bit Windows XP PC workstation connected to the same network as the EDA software network server or local installation. If you intend to use ADS installed on any other operating system (OS) (Ex: any 64-Bit WindowsXP, any 32/64-Bit Windows Vista, Linux, or Solaris OS...) that is not supported directly by ADS Connection Manager Server, consider the following alternative configuration [Dual Workstation/Remote IO Link Configuration "B"] as described in the following ADS support document:

https://edasupportweb.soco.agilent.com/portal/page?_pageid=36,39953&_dad=portal&_schema=PORTAL&itemid=318418

Note
Connection Manager Server cannot be installed on 64-bit machines.

| Requirement | Description |
|-----------------------|--|
| Processor | Pentium III 450 MHz or higher |
| RAM | 256 MB |
| Hard Disk Space | 500 MB on system drive |
| Operating System | Windows XP Professional (Service Pack 1 or Service Pack 2) |
| Network Configuration | TCP/IP |
| Supported Media Type | CD-ROM required for program installation. |

Caution
If you have Toshiba Bluetooth Stack installed on your system, you must uninstall it before installing Connection Manager server. Installing Toshiba Bluetooth Stack and Connection Manager server on the same system may cause undesirable effects including a system crash. To uninstall Toshiba Bluetooth Stack on Windows, choose **Start > Control Panel > Add or Remove Programs**, then locate the program and select **Remove**.

You can install Windows native Bluetooth drivers to use Bluetooth devices.

Licensing Requirements

Although the Connection Manager client requires a license, Connection Manager server does not require a license regardless of where it is installed.

Note
The Connection Manager client is installed during the main software installation. The *link_connect_mgr* license is required to run the client from a schematic page. Connection Manager client and server installations are not related to the client-server installation of the EDA software.

EDA Software Version Requirements

The Connection Manager client and server software must be from the same or compatible release. If you have been using an older release of Connection Manager, then you install ADS 2009 Update 1 on a client system, you also must install a compatible release of the server software. Since the Connection Manager server was not updated for ADS 2009 Update 1, the compatible release for ADS 2009 Update 1 is ADS 2006 Update 3.

Installation Package Overview

The Connection Manager server installation installs all the software necessary to enable the EDA software-supplied measurements. This includes:

- Run-time versions of the Agilent Test and Measurement Programmer's Toolkit. This

includes the most recent version of VISACom available when the Toolkit was released. The latest version is available from the Agilent Developer Network at: <http://adn.tm.agilent.com>

- The Agilent IO Libraries
- ADS Measurement Libraries
- Run-time versions of Microsoft .NET, suitable for running .NET application
- The Connection Manager server

Installation Types

Complete

The **Complete** installation installs all program features in the default installation directory *C:\Program Files\Agilent\Connection Manager Server*.

Custom

The **Custom** installation lets you define the installation directory and choose the optional program features, such as the ADS Measurement Library, Connection Manager documentation, Ptolemy VEE Link Server, and VEE Service Control Panel Application.

Installing the Server

1. Ensure that your PC workstation meets the system requirements.
2. Insert the Connection Manager Server 2006 Update 3 Installation Disc into the workstation CD-ROM drive.
3. When the installation wizard prompts you, choose the type of installation.
4. Follow the command prompts to complete the installation.

For Windows XP Service Pack 2 Systems Only

1. When the system reboots, Connection Manager Server starts and the *Windows Security Alert* dialog appears.



2. In the *Windows Security Alert* dialog, click **Unblock**. This creates an exception in the Windows Firewall that allows network connections through the firewall to the Connection Manager server.

This completes the installation process. To connect instruments to the server workstation, complete the steps in [Configuring the Server IO on the PC](#).

Configuring the Server IO on the PC

Prior to using Connection Manager for the first time, you must configure the IO on the server workstation.

This section provides instructions for automatically configuring common LAN and GPIB interfaces, and for manually configuring other interfaces such as LAN/GPIB gateways.

[To Configure Common LAN or GPIB Interfaces](#) provides simplified instructions to configure a common LAN or GPIB interface.

To manually configure an available interface (for example, the Agilent E5810A LAN/GPIB gateway), see [To Manually Configure Other Interfaces](#).

Additional Resources

For detailed information on IO configuration, refer to the documentation for the IO libraries.

Choose the **IO** icon in the tool bar, then choose **View Documentation**.

Also, see "Configuring IO Interfaces" in Agilent IO Libraries Installation and Configuration

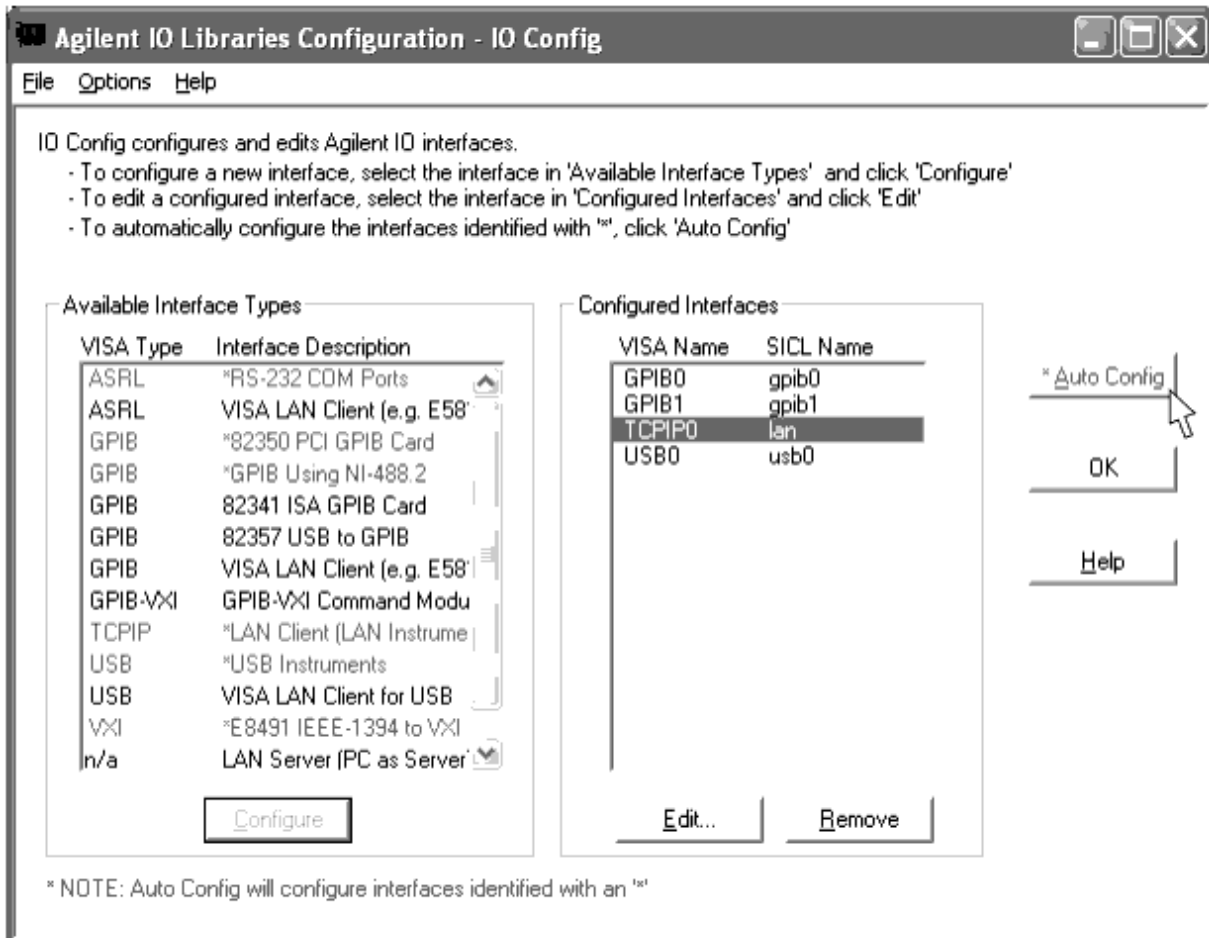
Note

Connection Manager server does not support the use of National Instruments IO connectivity products. The Connection Manager server relies entirely on the Agilent IO libraries to provide instrument connectivity, and cannot offer support for National Instruments IO products.

To Configure Common LAN or GPIB Interfaces

To auto-configure the I/O and connect instruments to the server using a LAN or GPIB interface:

1. In the server's Windows system tray, select **IO > Run IO Config**.
This opens the *IO Config* dialog. The *Available Interface Types* group box lists the IO types supported by the Agilent IO Libraries. List entries with an asterisk (*) can be automatically configured in step 2.
2. To automatically configure common LAN and GPIB interfaces in the *IO Config* dialog, select **Auto Config**.
Auto-configured interfaces appear in the *Configured Interfaces* group box, as shown.



For GPIB interfaces, ensure that the GPIB interface is installed/connected to the server.

For LAN interfaces, the IO auto-configuration routine creates a TCPIP network tunnel and displays `TCPIP lan` in the *Configured Interfaces* group box. The routine creates only one TCPIP interface regardless of the number of LAN cards installed on the server workstation.

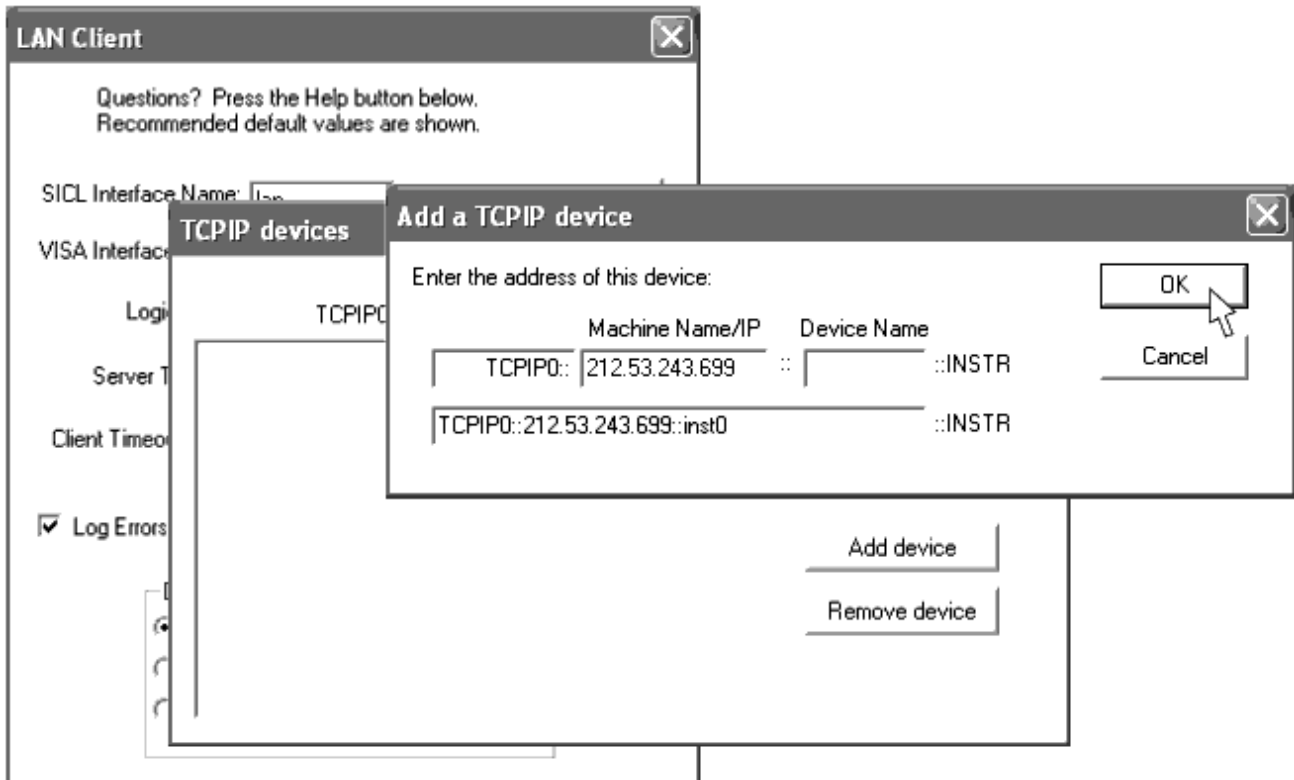
Follow the steps in [To Connect Instruments to the Server through the LAN](#) to complete the LAN interface configuration.

To Connect Instruments to the Server through the LAN

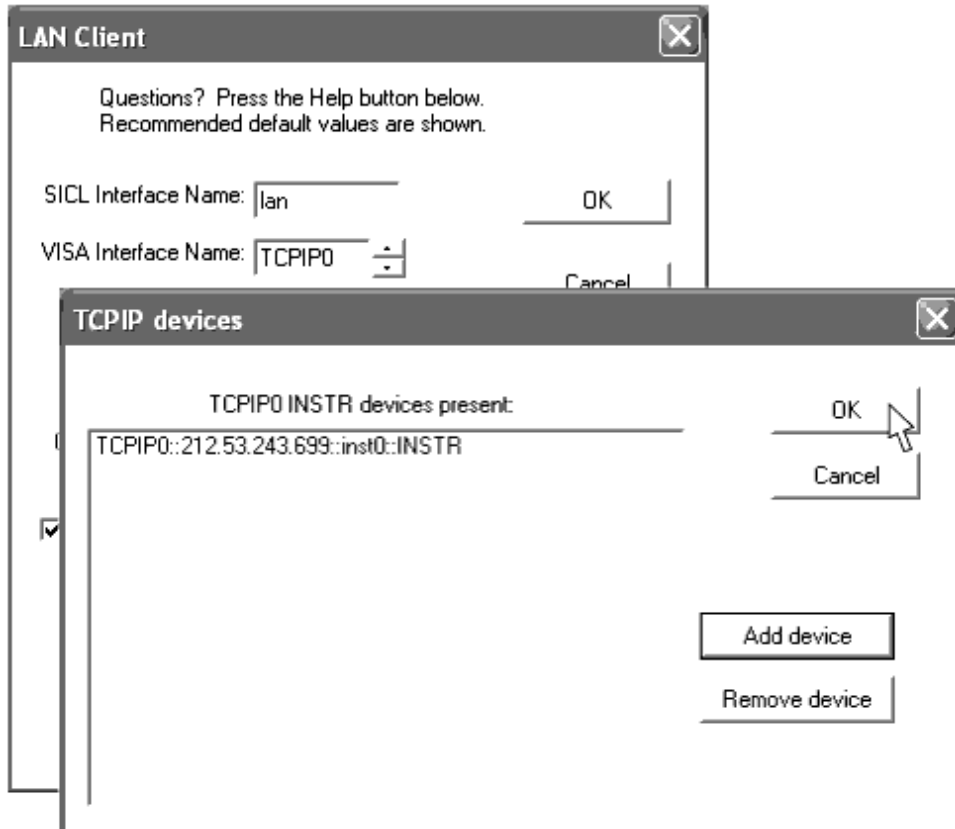
Unlike GPIB interfaces where instruments communicate directly with the server via an exclusive bus, the Agilent IO libraries do not dynamically discover instruments connected to the server via LAN. You must manually add LAN devices to the server IO.

To add LAN devices:

1. In the *IO Config* dialog, highlight **TCPIPO** in the *Configured Interface* group box and click **Edit**.
2. In the *LAN Client* dialog, click **Edit VISA Config**.
3. In the *TCPIP devices* dialog, click **Add device**.
4. In the *Add a TCPIP device* dialog **Machine Name/IP** field, enter the IP address of the instrument you would like to connect to the server and click **OK**.



5. In the *TCPIP devices* dialog, click **OK**.



6. In the *LAN Client* dialog, click **OK**.
7. In the *IO Config* dialog, click **OK**.

If you encounter a problem

Ensure the following conditions are met:

- The server is connected to the LAN.
- The instrument is connected to the LAN.
- The instrument line power is switched on.
- The LAN is operational.

To Manually Configure Other Interfaces

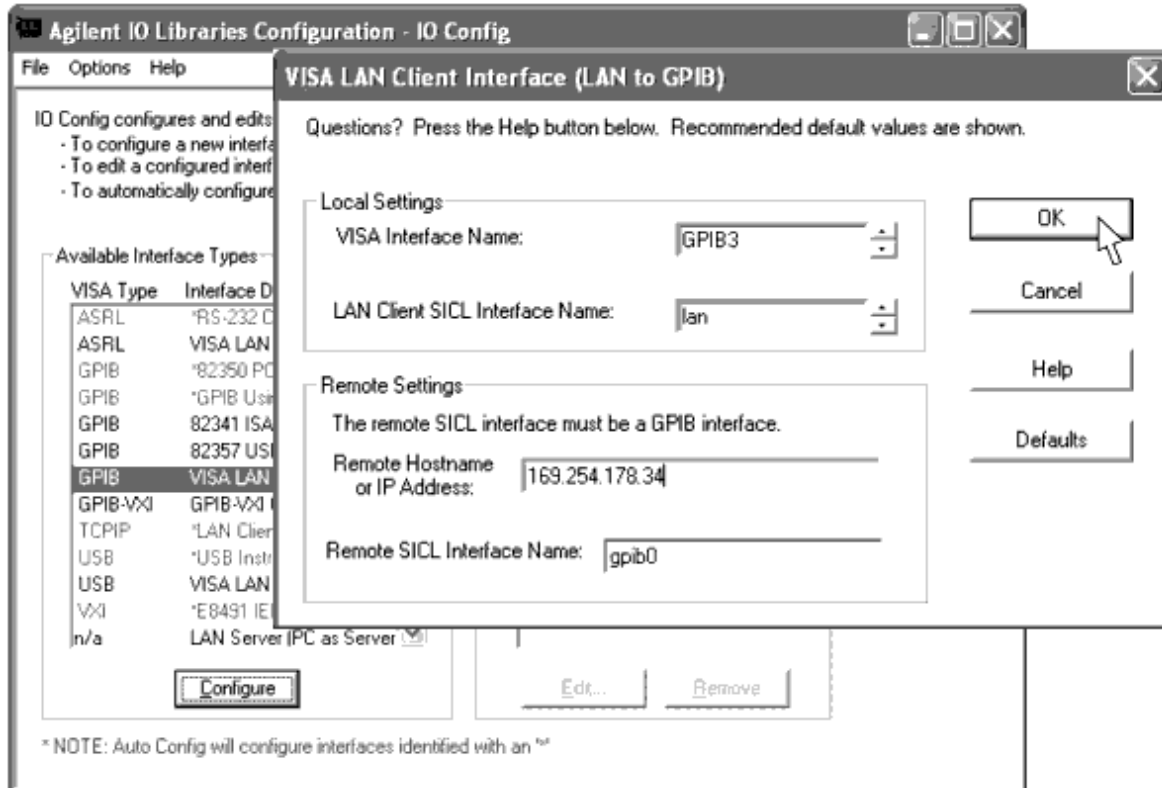
This section explains how to manually configure an IO that cannot be auto-configured by the Agilent IO Library. This section explains how to configure a LAN/GPIB gateway, such as the Agilent E5810A.

To manually configure a LAN/GPIB gateway.

1. In the Windows system tray, select **IO > Run IO Config**.
2. In the *Available Interface Types* group box, highlight **VISA LAN Client Interface (E5810A)** and click **Configure**.
3. In the *VISA LAN Client Interface (LAN to GPIB)* dialog *Local Settings* group box, use

the scroll box to choose a VISA Interface Name.

4. In the *Remote Settings* group box, enter the hostname or IP address of the LAN/GPIB gateway.
5. In the *Remote Settings* group box, enter the SICL interface name assigned to the LAN/GPIB gateway (or other network interface device) and click **OK**.
During the process of configuring the LAN/GPIB gateway, you must assign a SICL interface name to the device. You must enter the same SICL interface name in the Remote SICL Interface Name data entry field.



6. In the *VISA LAN Client Interface (LAN to GPIB)* dialog, click **OK**.

To exit the IO configuration without connecting instruments to the server, in the *IO Config* dialog click **OK**. To connect instruments to the server, follow the steps in [To Connect Instruments to the Server through the LAN](#).

If you encounter a problem

Ensure the following conditions are met:

- The server is connected to the LAN.
- The LAN is operational.

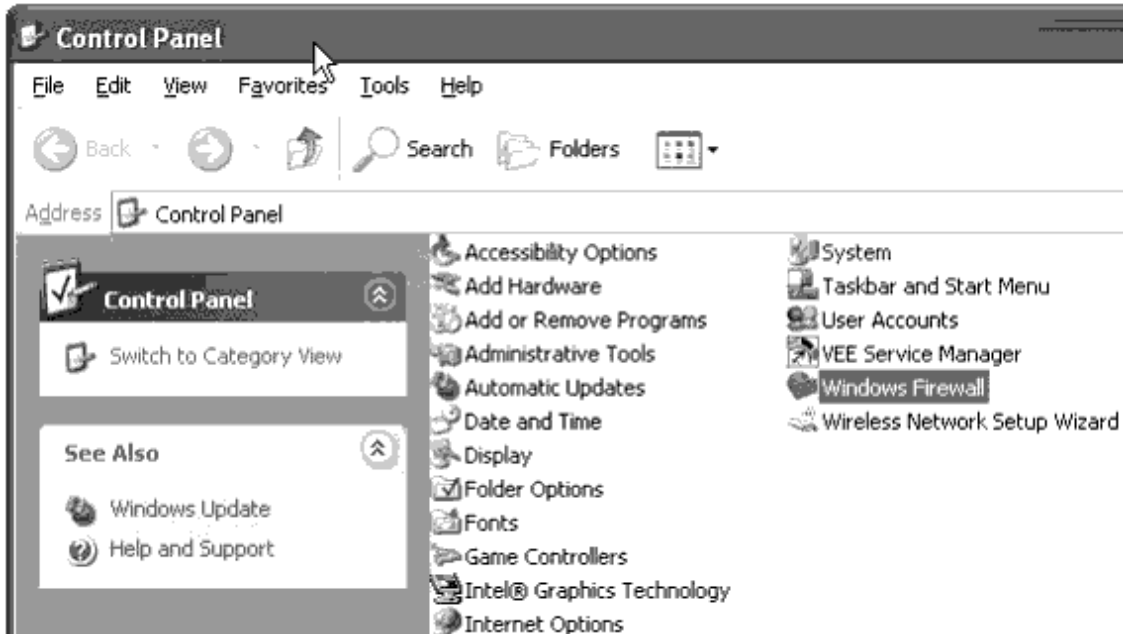
Using Connection Manager with Windows XP Service Pack 2

By default, computers using Windows XP Service Pack 2 will not allow access to the Connection Manager server and VEE Service through the firewall.

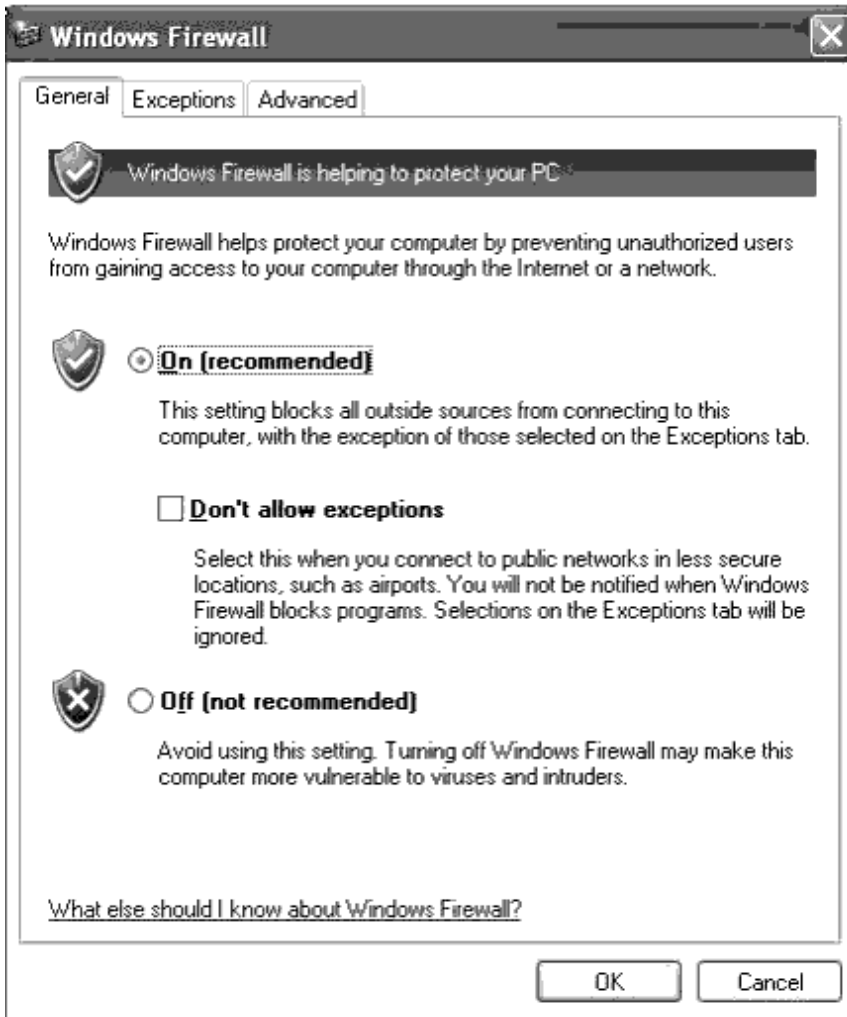
If you have upgraded from another operating system version to Windows XP Service Pack 2, you must enable connections to the PC hosting the Connection Manager server and/or VEE Service by listing them as exceptions to the firewall.

To enable network connections to Connection Manager server (and VEE Pro, if necessary) through the firewall:

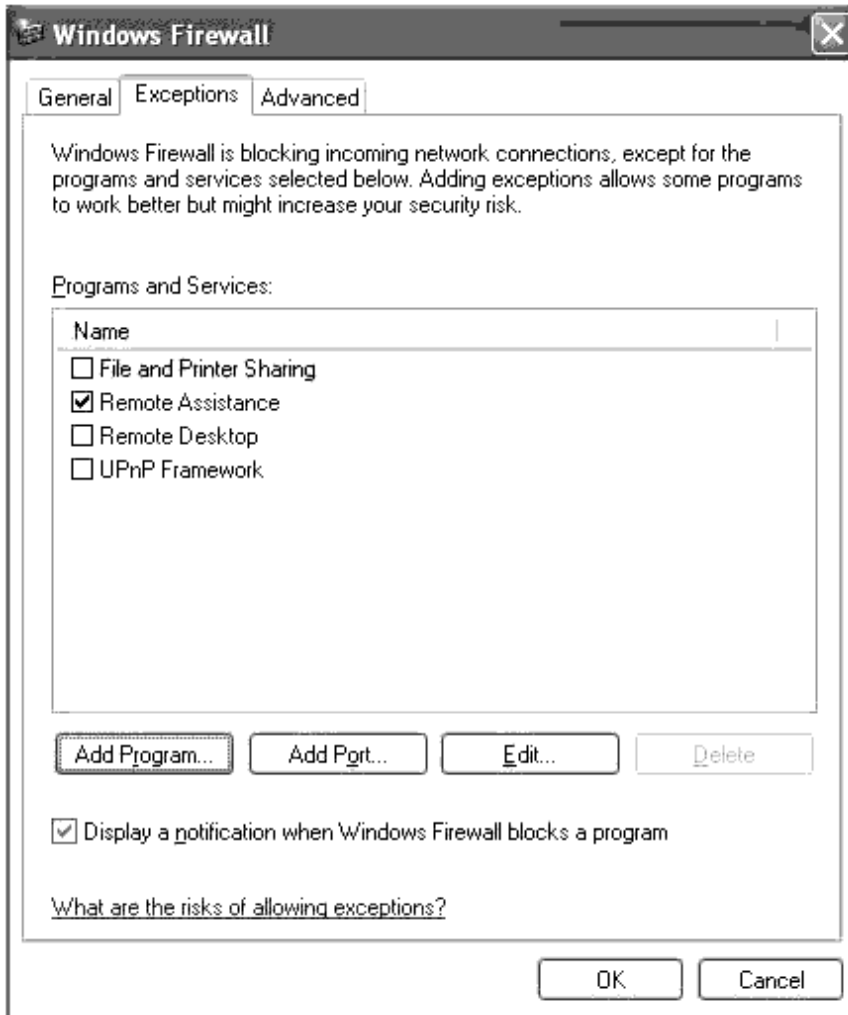
1. In the Windows menu bar, choose **Start > Settings > Control Panel**.
2. In the Control Panel dialog, click **Windows Firewall**.



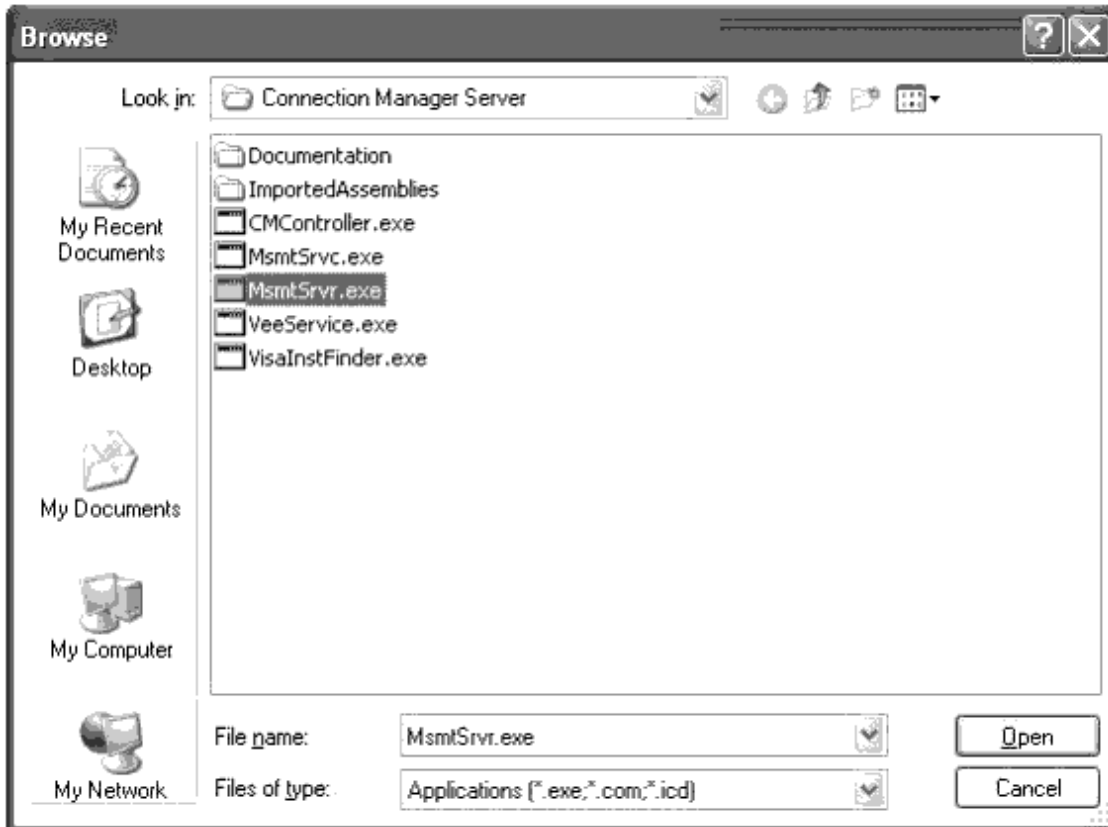
3. In the *Windows Firewall* dialog, ensure that the **Don't allow exceptions** checkbox is unchecked.



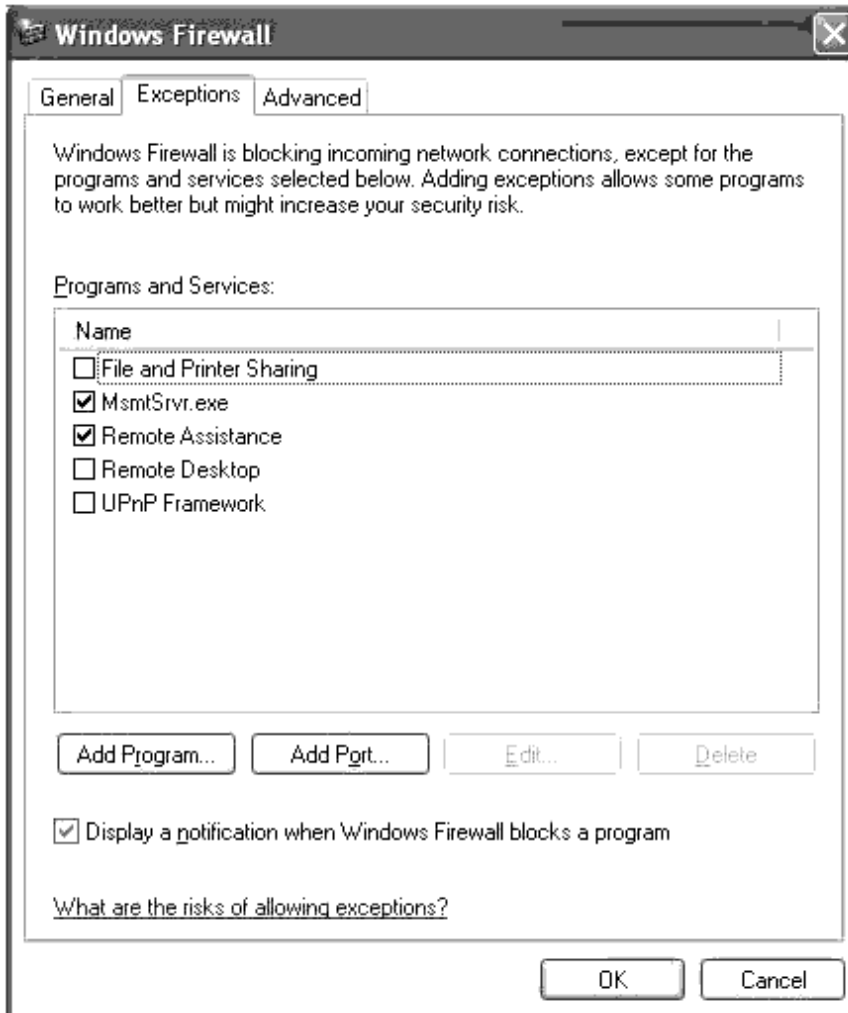
4. In the *Windows Firewall* dialog, click the **Exceptions** tab.



5. In the *Exceptions* tab, click **Add Program**.
6. In the *Add a Program* tab, click **Browse**.
7. Use the *Browse* dialog to enter the Connection Manager Server installation directory (by default, *<installation drive>\Program Files\Agilent\Connection Manager Server*).
8. From the *Connection Manager Server* installation directory, choose **MsmSrvr.exe** and click **Open**.



9. In the *Add a Program* tab, click **OK**.
The *Windows Firewall* dialog *Exceptions* tab shows the *MsmtSrvr.exe* exception.



10. If you are using VEE Service, in the *Exceptions* tab, click **Add Program....**
11. In the *Add a Program* tab, click **Browse**.
12. Use the *Browse* dialog to enter the VEE Pro installation directory (by default, *<installation drive>\Program Files\Agilent\VEE Pro 7.0*).
13. From the VEE Pro installation directory, choose **veesm.exe** and click **Open**.
14. In the *Add a Program* tab, click **OK**.
15. In the *Windows Firewall* dialog, click the **OK**.

Connections to the PC hosting the Connection Manager server and/or VEE Service are now enabled as firewall exceptions.

Running the CM Server as a Windows Service

By default, the Connection Manager server runs as a Windows application. If preferred, the server can run as a Windows service.

For instruction on configuring the server to run as a Windows service, see *Running the Server as a Windows Service* in the *Connection Manager* documentation.