



CATALYST
PROFESSIONAL

CATALYST Professional
Installation and licensing guide

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Chapter

1

Installing CATALYST Professional on Windows

Supported operating systems and minimum requirements

Supported Windows operating systems

- Windows 10
- Windows Server 2019
- Windows Server 2016

Processor

- Intel i5 or better

Memory

- 8 GB or higher recommended ¹

Installing your standalone local-license software

When you install your software locally as a standalone license, the software is installed on your computer and will run in trial mode by default. A trial license lets you run the software for a period of 7 days, which begins when you use the software for the first time. The trial period is valid only before the designated expiration date, which is noted in the table at the bottom of the CATALYST License Utility window. The software will run in **Licensed** mode after you import the license file you receive from CATALYST Customer Support into the CATALYST License Utility.

Note: CATALYST Professional cannot be installed as standalone on a server operating system; for example, Windows Server 2016. If you have a server computer, you must first [install the license server](#), and then install CATALYST Professional as a client, borrowing the license from the license server.

Note: If you want to use the demo data provided with your software, you must run a separate install process. For more information, see [Installing the demo data](#) on page 6.

To install your standalone local-license software

1. If you are using a USB dongle (hardware key) to license your software, insert the dongle provided with your software in your USB port.

¹ Systems with less than 8 GB of RAM will page memory to the hard disk and have significantly reduced performance. Page files (swap files) should be at least 1.5 times the amount of RAM. For more information, see your operating-system requirements.

Important: If this is the first time you have installed a USB dongle, your operating system may prompt you to install default drivers. **Do not install them.** The only drivers you require are already included in your software installation.

2. From the folder to which you downloaded the software, from the CATALYST Earth website, double-click CATALYST Professional Full Software Install Windows64.exe.
3. Follow the instructions on each page of the wizard, clicking **Next**, to proceed.
4. On the **Licensing Mode** page, do one of the following:
 - If you are not using a dongle for licensing, click **Standalone (local license without a dongle)**.
 - If you are using a dongle for licensing, click **USB Dongle (local license)**.
5. Click **Next**, and then continue to follow the instructions in the wizard.

Note: If you are prompted to install the Sentinel drivers, install them by following the instructions in the Sentinel installation wizard.

6. On the final page of the wizard, click **Finish** to complete the installation of your standalone software.
7. After the software is installed, you must then import your license.

For information on setting up your standalone installation, including importing your license, see [Setting up CATALYST Professional as standalone](#) on page 6.

Installing the demo data

Demo data is provided with your CATALYST Professional software. You must run a separate installation to install the demo data on your computer. The demo data is required to run the sample models in Modeler.

To install the demo data

1. From the folder to which you downloaded the software, from the CATALYST Earth website, double-click CATALYST Professional Data Install Windows64.exe.
2. Follow the instructions on each page of the wizard, clicking **Next**, to proceed.
3. On the final page of the wizard, click **Finish** to complete the installation.

Note: Should you want to remove the demo data, you can manually delete the data files and folder using the file-management system of your computer.

Setting up CATALYST Professional as standalone



With the CATALYST License Utility, you can import a license file that provides you with access to the product features for which you are licensed.

Requesting a license file for your software

To obtain a license file, send your request in an email message to CATALYST Customer Support at:

support@catalyst.earth

You can also request a license on the [CATALYST Earth Support website](#) website.

If you do not have access to the Internet or an email program, contact CATALYST Customer Support via phone: +1 (905) 764-0614.

Your request for the license file must contain the following information:

1. Your customer number (if applicable)
2. Your name
3. Company name
4. Email address at which you want to receive the license file
5. Product name
6. Version
7. Fingerprint
8. Dongle ID (if applicable)

You will find the information for the product, version, fingerprint, and dongle ID in the CATALYST License Utility window under **Computer Configuration**.

With CATALYST Professional, the primary licensing mechanism is dongleless, which means computer-hardware characteristics, such as the Ethernet card ID and disk ID, are used to uniquely identify the computer. Alternatively, on Windows you can license against a PCI-issued hardware lock, known as a dongle, which connects to a USB port.

Note: For multiple, standalone installations, ensure that you provide the dongle ID (if applicable) and fingerprint of each computer on which the software is installed.

Saving and importing the license file

After you receive the license file from CATALYST Customer Support, you must:

1. Save the file to a folder of your choice
2. Import the license file

To continue setting up CATALYST Professional as standalone, see:

Opening the CATALYST License Utility

You can open the CATALYST License Utility to quickly obtain the information required for your standalone software license request. After you obtain your license, you must import it into the CATALYST License Utility.

Note: When you are using a license server, the CATALYST Professional toolbar does not display the CATALYST License Utility button.

To open the CATALYST License Utility

Do one of the following:

- Click **Start > CATALYST Professional > CATALYST License Utility** .
- If you already have CATALYST Professional open on your desktop, on the CATALYST Professional toolbar, click **CATALYST License Utility**.

Importing the license file

After you receive and save the requested license file for your standalone software, you must import it into the CATALYST License Utility. Importing the license file provides you with access to the product features for which you are licensed.

To import the license file

1. In the CATALYST License Utility window, click **Import**.

The **File Selector** window appears.

2. In the folder to which you saved the license file, select the file, and then click **Open**.

The CATALYST License Utility window appears, displaying the details of your license. At the bottom of the window, the number of entries (rows) in the table correspond to the number of licenses.

Note: At least one fingerprint in the table must match the value in the **Fingerprint** box under **Computer Configuration**.

Importing a backup license

When you replace a license in the CATALYST License Utility, a backup is made of the original. You can recover the original license by re-importing it into the CATALYST License Utility.

To import a backup license

1. In the CATALYST License Utility window, click **Import**.

The **File Selector** window appears.

2. In the **Files of type** list, click **All Files**.
3. Open the folder in which you installed the software, and then open the exe folder.
4. Select the license <license_name>.back file, and then click **Open**.

The CATALYST License Utility window appears, displaying details of the backup license.

Installing the CATALYST License Server

The **CATALYST License Server** provides the licenses for each client computer on the network.

To install the license server on a Windows system, you can choose to use a nonprogrammable interlock device (USB Dongle) or install without a dongle.

- The benefit of using a dongle is that it is easy to change the computer on which the license server is installed. It is rare that you'll need to change where the license server is installed.
- In the case of a dongleless server installation, the fingerprint corresponds to a combination of hardware characteristics. The benefit of dongleless install is that you can start working almost immediately. You don't have to wait until you receive the dongle from CATALYST Customer Support. With a dongleless installation, the license is tied to that specific server computer.

Note: UDP Port 5093 must be open for CATALYST Professional client computers to provide them with access to the license server. You may need to add entries in Windows Firewall for each CATALYST Professional-related product, such as Focus and OrthoEngine.

To install the license server

1. If you are using a USB dongle (hardware key) to license your software, insert the dongle provided with your software in your USB port.

Important: If this is the first time you have installed a USB dongle, your operating system may prompt you to install default drivers. **Do not install them.** The only drivers you require are already included in your software installation.

2. From the folder to which you downloaded the software from the CATALYST Earth website, double-click: CATALYST License Server Install.exe
3. Follow the instructions in the CATALYST License Server installer wizard.

If a warning about hardware not passing Windows Logo testing appears, click the **Continue Anyway** button.

Obtaining licenses for the CATALYST License Server

The **CATALYST License Server** uses **Sentinel RMS License Manager** service. A license file is required to license the server. This file is generated based on the fingerprint information from your server. The fingerprint information is dependant upon whether you have a USB dongle or not.

If you have a USB dongle for your server, the fingerprint corresponds to the dongle. The benefit of a dongle is that it is easy to change the computer on which the license server is installed. You can transfer the licenses to the new server by installing the **CATALYST License Server** software on the new computer, plugging in the dongle, and then applying the same license file.

In the case of a dongleless server installation, the fingerprint corresponds to a combination of hardware characteristics.

Note: With a dongleless installation, the license is tied to that specific server computer.

Running the CATALYST License Registration tool

To run the license registration tool, on the **Start** menu click:

CATALYST License Server > License Registration

In the **CATALYST License Server** window, enter the information requested.

1. Enter your **Order number**. This is required.
2. Enter the **Confirmation code**. This is required.
3. Enter an **email** address. An email will be sent to the email address when the license is available. It should only take a few minutes.
4. Press the **Get License button**. A panel logging the status of the request appears. Wait for a confirmation email.
5. Press the **Get License button** again to download the new license and register it with the license server.

Your license key is now applied to the server. To verify that your license keys are applied, look in the Server Administrator tool.

Manually obtaining a license

If you have any issues with the procedures described above, please contact CATALYST Customer Support for help.

To obtain a license file, send your request in an email message to CATALYST Customer Support at:

support@catalyst.earth

If you do not have access to the Internet or an email program, contact CATALYST Customer Support via phone: +1 (905) 764-0614.

Your request for the server-license file must contain the following information:

1. Your customer number (if applicable)
2. Your name
3. Company name
4. Email address at which you want to receive the license file
5. Product name
6. Version
7. Selector: value of the **Selector** box in the **Server Fingerprint Utility**
8. Code: value of the **Code** box in the **Server Fingerprint Utility**

Loading the licenses into the server

After you obtain your license file for the license server, you can load your licenses into the server.

To load the licenses into the server

1. On the **Start** menu, click **CATALYST License Server > Server Administrator** .
2. In the **Server Administrator** window, expand **Subnet Servers**, and then select a server.
3. Right-click the server entry, and then click **Add Feature > From a File > To Server and its File** .
4. Open the folder containing your license file, select it, and then click **Open**.

Managing the license server

From the Services window, described in the following procedure, you can manage your license server with Sentinel RMS License Manager.

Note: The procedure to open Control Panel, control-panel items, and some item names varies according to your version of Windows.

To manage the license server

1. Open Windows Control Panel, and then with **All Control Panel Items** displayed, under **Adjust your computer's settings**, click **Administrative Tools**.

The **Administrative Tools** window appears.

2. Double-click **Services**.

The **Services** window appears.

3. In the **Name** column of the table, right-click **Sentinel RMS License Manager**, and then do any of the following, as applicable.

To	Click
Start the server	Start
Stop the server	Stop
Pause the server	Pause
Resume operation of a paused server	Resume
Restart operation of a stopped server	Restart

Installing the license-server clients

When you install a client of the license server on Windows, CATALYST Professional is installed on your computer and is licensed from the license server installed on another computer on the network. To complete the installation, you need the IP address or UNC name of the computer on which the license server is installed.

To install the license-server clients

1. From the folder to which you downloaded the software, from the CATALYST Earth website, double-click CATALYST Professional Full Software Install Windows64.exe.
2. On the **Licensing Mode** page of the wizard, click **Client (server license)**, and then click **Next**, and continue to follow the instructions in the wizard.

3. On the final page of the wizard, click **Finish** to complete the installation of your client.

Capturing configuration settings

If necessary, you can capture the configuration settings in a file (Setup.iss). This is useful when you want to, for example, use a utility to run a silent installation of CATALYST Professional, typically on several computers from a remote location.

The settings you need to capture are:

- License mode
- Server name (when license mode is **License Server**)
- Folder in which to install Sentinel (when installation mode is **Standalone**)
- Folder in which to install Python

To capture the configuration settings, you run the CATALYST Professional installation program on a computer in a custom mode, which writes the configuration settings to a Setup.iss file. You can then use the setup file with your utility of choice to run a silent installation.

To capture the configuration settings

1. Open a command prompt, and then from the folder containing your CATALYST Professional installation program, run the following command with the switches indicated:

```
"CATALYST Professional Full Software Install Windows64.exe" /r /f1" c:\Setup.iss"
```

2. Press Enter.

The CATALYST Professional Software - InstallShield Wizard appears.

3. Follow the steps in the wizard to completion.

After completing the installation, you will find the Setup.iss file in the path specified in the command line. For example, C:\Setup.iss. This file now contains all of the configuration settings you need to run a silent installation.

Uninstalling CATALYST Professional

To properly remove the software from your computer, you must uninstall it from Windows Control Panel.

Note: The following procedure may vary according to your version of Windows.

To uninstall CATALYST Professional

1. Open Windows Control Panel, and then under **Programs**, click **Uninstall a program**.
2. Click CATALYST Professional, and then click **Uninstall**.
3. When prompted to confirm the removal of the software, click **Yes**.
4. If you want to remove the installation folder, select the **Completely remove the installation folder?** check box.
5. Click **Finish**.

The current installation of the software (and demo data if you selected the check box on the last page of the wizard) is removed.

Uninstalling the license server

You can uninstall the license server from Windows Control Panel.

Note: The following procedure may vary according to your version of Windows.

To uninstall the license server

1. Open Windows Control Panel, and then with **All Control Panel Items** displayed, under **Adjust your computer's settings**, click **Administrative Tools**.

The **Administrative Tools** window appears.

2. Double-click **Services**.

The **Services** window appears.

3. In the **Name** column of the table, right-click **Sentinel RMS License Manager**, and then click **Stop**.

4. Close the **Services** window and the **Administrative Tools** window.

5. In the **Control Panel** window, click **Programs and Features**, and then remove the following programs, in order:

1. **Sentinel RMS License Manager 9.3.0**
2. **Sentinel System Driver Installer 7.6.0**
3. **ServerRMS**

To remove a program, do the following:

- a) In the **Name** column of the table, right-click the program you want to remove, and then click **Uninstall**.

A message appears, prompting you to confirm the action.

- b) Click **Yes**.

- c) If removing a program opens a wizard, on the last page, click **Finish**.

6. Repeat the previous step to remove each additional program.

Removing the software manually (not recommended)

Sometimes errors can occur during the installation or removal of the software. For example, if the system is not restarted when requested and a second installation is performed, the uninstall links in the registry can become corrupted. This causes the system to perform the uninstall procedure each time the setup program runs. In this case, you may need to remove the software manually.

To remove the software manually

1. On your hard disk, delete the installation folder of the software.
2. Remove the Sentinel driver and services by running the following program:

C:\Program Files (x86)\PCI Geomatics\SentinelUtilities\License_server\SentinelDriver\V752\Sentinel System Driver Installer 7.6.0.exe

3. In the Windows registry, delete the PCIGroup folder from the HKEY_LOCAL_MACHINE\SOFTWARE\ folder.
4. Delete the alphanumeric folder that has the environment variable "display name" pointing to the version of the software that is installed from the HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall folder.

Chapter 2

Installing CATALYST Professional on Linux

Supported operating systems and requirements

Supported Linux operating systems

CATALYST Professional can be installed on the following Linux operating systems:

- Ubuntu 20.04

Note: You must be logged on as a **superuser** to install CATALYST Professional.

Processor

- Intel i5 or better

Memory

- 8 GB or higher recommended²

CATALYST Professional dependencies

Before installing CATALYST Professional on Linux, you must have **libgfortran** and **NumPy** installed on your computer.

Installing CATALYST Professional

You can license CATALYST Professional as a standalone or full-client installation on Linux platforms. The license mode is based on which environment variable you use and where the license file to run CATALYST Professional is stored.

Note: If you plan to use CATALYST Professional with a remote connection or in a virtual environment, you must install CATALYST Professional License Server with a valid license on the computer that is hosting CATALYST Professional. You cannot run CATALYST Professional in **Trial** or **Standalone** mode in any virtual or remote-access environment.

² Systems with less than 8 GB of RAM will page memory to the hard disk and have significantly reduced performance. Page files (swap files) should be at least 1.5 times the amount of RAM. For more information, see your operating-system requirements.

After the installation, your software will run in trial mode if the PCIHOME environment variable is set. A trial license lets you run the software for a period of 7 days, which begins when you use the software for the first time. The trial period is valid only before the designated expiration date, which is noted in the table at the bottom of the CATALYST License Utility window.

The software will run in either **Standalone** license mode or **Full Client** license mode after you have set the appropriate environment variable and have received your license.

In **Standalone** mode, you install and license CATALYST Professional on one computer. **Standalone** mode is determined by setting the PCILICENSEFILE environment variable to point to the location of the license file and importing the license into the CATALYST License Utility.

In **Full Client** mode, you install CATALYST Professional on one or more computers and borrow the license from a license server installed on your network. **Full Client** mode is determined by setting the PCILICENSESERVER environment variable to point to a license server.

The current version of the product can operate independently of previous versions.

You must have administrator privileges to install CATALYST Professional on Linux operating systems.

Note: If you want to use the demo data provided with your software, you must run a separate install process. For more information, see [Installing the demo data](#) on page 14.

To install CATALYST Professional on Linux

1. Download the software from the CATALYST Earth website, save the .bin file to a location of your choice, and then change the permissions so the file will execute as a program.
2. At the command prompt, run the .bin file provided.

For example, type: `./CATALYST Professional-<version>-Full-Software-<platform>x86_64.bin`

3. Press Enter.
4. At the end of the license agreement, type yes, and then press **Enter** to accept the terms and conditions.
5. Enter a location in which to install the software.

Ensure that you have administrator access to the location you specify.

6. Press Enter.
7. After the installation is complete, set the environment variables and create an alias that provides a shortcut to CATALYST Professional.

For Standalone installations, set PCILICENSEFILE to point to where the license file is stored. For full-client installations, set PCILICENSESERVER to point to the location of the license server on your network. For more information about setting environment variables and creating an alias, see [Setting the environment variables](#) on page 21.

Installing the demo data

Demo data is provided with your CATALYST Professional software. You must run a separate installation to install the demo data on your computer. The demo data is required to run the sample models in Modeler.

To install the demo data

1. Download the software from the CATALYST Earth website, and then save the .bin file to a location of your choice.
2. At the command prompt, run the .bin file.

For example, type: `./CATALYST Professional-<version>-Data-<platform>x86_64.bin`

3. Press Enter.

4. At the end of the license agreement, type yes, and then press Enter to accept the terms and conditions.
5. Enter a location in which to install the data.
Typically, this is the same folder in which CATALYST Professional was installed. Ensure you have administrator access to the folder you specify.
6. Press Enter.

Setting up CATALYST Professional as standalone



With the CATALYST License Utility, you can import a license file that provides you with access to the product features for which you are licensed.

Requesting a license file for your software

To obtain a license file, send your request in an email message to CATALYST Customer Support at:

support@catalyst.earth

You can also request a license on the [CATALYST Earth Support website](#) website.

If you do not have access to the Internet or an email program, contact CATALYST Customer Support via phone: +1 (905) 764-0614.

Your request for the license file must contain the following information:

1. Your customer number (if applicable)
2. Your name
3. Company name
4. Email address at which you want to receive the license file
5. Product or products to license
6. Version
7. Fingerprint

The information for the product, version, and fingerprint displays in the CATALYST License Utility window under **Computer Configuration** .

The information for the product, version, and fingerprint is displayed in the CATALYST License Utility window under **Computer Configuration** .

In CATALYST Professional, the primary licensing mechanism is dongleless, which means computer hardware characteristics; that is, the Ethernet card ID and disk ID, are used to uniquely identify the computer. Alternatively, on Windows you can license against a PCI-issued hardware lock known as a dongle, which connects to a USB port.

Note: For multiple standalone installations, make sure you provide the fingerprint of each computer on which the software is installed.

Saving and importing the license file

After you receive the license file from CATALYST Customer Support, you must:

1. Save the file to a folder of your choice
2. Import the license file

To continue setting up CATALYST Professional as standalone, see:

Opening the CATALYST License Utility

You can open the CATALYST License Utility to quickly obtain the information required for your standalone software license request. After you obtain your license, you must import it into the CATALYST License Utility.

Note: When you are using a license server, the CATALYST Professional toolbar does not display the CATALYST License Utility button.

To open the CATALYST License Utility

1. In Linux, do one of the following:

- Navigate to the exe folder of your CATALYST Professional installation, type `./licenseutility`, and then press Enter.
-

On the CATALYST Professional toolbar, click the **CATALYST License Utility** button .

In the **Welcome** window, click **Apply License**.

2. Do one of the following, as applicable:

- To obtain a license, send the value of the **Fingerprint** box to *PCI*.
- To apply a license, see [Importing the license file](#) on page 16

Importing the license file

After you receive and save the requested license file for your standalone software, you must import it into the CATALYST License Utility. Importing the license file provides you with access to the product features for which you are licensed.

To import the license file

1. Open the CATALYST License Utility.
2. In the CATALYST License Utility window, click **Import**.

The File Selector window appears.

3. In the folder to which you saved the license file, select the file, and then click **Open**.

The CATALYST License Utility window appears, displaying the details of your license. At the bottom of the window, the number of entries (rows) in the table correspond to the number of licenses.

Note: At least one fingerprint in the table must match the value in the **Fingerprint** box under **Computer Configuration**.

Installing the license server

Before you can license your server client install of CATALYST Professional as a full client, you must install the license server. The license server is a program that manages licenses for client installations of CATALYST Professional. Clients are installed on various computers on your network. CATALYST Professional uses the Sentinel RMS License Manager for the license server.

Note: To install the license server, you must be logged in as an administrator or have administrator privileges.

To install the license server

1. Download the License Server installation file from the CATALYST Earth website website, and then save the LicenseServer-*.bin file to a folder on your server.
2. Change the permissions on the LicenseServer-*.bin file to run as a program.
3. At the command prompt, run the LicenseServer-*.bin file.
4. Press Enter.

The license-server program is installed in the /usr/local/srms folder.

Note: The /usr/local/srms/bin folder contains the Sentinel RMS License Manager program files. The /usr/local/srms/help folder contains the Help files for Sentinel RMS License Manager.

5. Find the fingerprint file as described in [Finding the fingerprint code](#) on page 17.
6. Obtain your licenses as described in [Obtaining a license file for the license server](#) on page 17.
7. Load your licenses into the license server as described in [Loading the license into the license server](#) on page 18.

To continue installing the license server, see:

Finding the fingerprint code

You require a fingerprint code to obtain a license from CATALYST Customer Support for the license server.

Note: You need not be logged in as an administrator nor have administrator privileges to generate the fingerprint.

To find the fingerprint code

1. Navigate to /usr/local/srms/bin and run the echoid program by typing: ./echoid

The fingerprint code appears in the terminal in the following format:

```
Sentinel RMS Development Kit 8.4.1.007 Host Locking Code Information Utility
Copyright (C) 2011 SafeNet. Inc.

Locking Code 1   : 14-*1AB C4EF GHIJ KLMN
Locking Code 1 (Old Style) : 14-ABCDE
```

2. Use the first locking code.

In keeping with the preceding example, this would be Locking Code 1 : 14-*1AB C4EF GHIJ KLMN.

Obtaining a license file for the license server

To obtain a license file, send your request in an email message to CATALYST Customer Support at:

support@catalyst.earth

Your request for the license file must contain the following information:

1. Your customer number (if applicable)
2. Your name
3. Company name
4. Email address at which you want to receive the license file
5. Product or products to license
6. Version
7. Fingerprint

Loading the license into the license server

After you receive your license file from CATALYST Customer Support, you must load it into the license server. The license file you receive will be in this format: license_10_none_16-Sep-2011.PCI. The license file can be copied to any location on your server.

Note: You must be logged in as an administrator or have administrator privileges to load the license.

To load the license into the license server

1. Navigate to the /usr/local/srms/bin folder.

The server was started during the installation and must be running in order to load the licenses.

2. Confirm that the server is running by typing the following at the prompt: service lservd status
3. If the server is not running, type: service lservd start

Tip: Alternatively, you can type: ./lserv

After the system restarts, the license server restarts and the license codes in the lservrc file load automatically into the server.

4. To load the license codes into the license server, type: ./lslic -F /path/license_10_none_date.PCI

The license codes are also copied into /usr/local/srms/bin/lservrc, which is a text file that contains the license information. After the system completes this operation, the license server ready to issue the license tokens.

Managing the license server

You can manage the license server by running any of the Linux commands described in the following table.

Note: You must be logged in as an administrator or have administrator privileges.

Do any of the following.

To	Do this
Start the server	At the command prompt, type service lservd start or from the /usr/local/srms/bin folder, type ./lserv.
Stop the server	At the command prompt, type service lservd stop or from the /usr/local/srms/bin folder, type ./lsrvdown.
Restart a stopped server	At the command prompt, type service lservd restart.
View the status of the server	At the command prompt, type service lservd status.
View the usage summary of the server	From the /usr/local/srms/bin folder, type ./lsusage (Refer to the license-server Help).
Run a search	From the /usr/local/srms/bin folder, type lswhere.
Run the license-cleaning utility	From the /usr/local/srms/bin folder, type lsclean.
Monitor the application	From the /usr/local/srms/bin folder, type lsmon.
Monitor the application	From the /usr/local/srms/bin folder, type lsmon.
Run the license-decoding utility	From the /usr/local/srms/bin folder, type lsdecode.
View the Help	In any browser, from the /usr/local/srms/help folder, open Default.htm.

Setting up CATALYST Professional as a full client of the license server

When you install CATALYST Professional in **Full Client** mode on Linux operating systems, you set the environment variable PCILICENSESERVER to point to the license server on your network. The license server contains the license required to run CATALYST Professional.

To set up CATALYST Professional as a full client of the license server

- Enable the environment PCILICENSESERVER variable.

For information about environment variables, see [Setting the environment variables](#) on page 21.

Uninstalling CATALYST Professional

You must have administrator privileges to uninstall CATALYST Professional on Linux operating systems.

Note: It is recommended that you back up or move any data that might be affected by the removal of CATALYST Professional. Only folders and files installed by CATALYST Professional will be removed during the uninstall process.

To uninstall CATALYST Professional

1. Navigate to the folder in which you installed CATALYST Professional.
2. To uninstall the software, type: `rpm -e CATALYST-Professional`
3. To uninstall the demo data, type: `rpm -e CATALYST-Professional-data`

Uninstalling the license server

To properly remove the license server in Linux, you must be logged in as an administrator or have administrator privileges.

To uninstall the license server

- At the prompt type: `rpm -e licenseserver`

The license server is shut down, and all of the folders and files installed by LicenseServer-*.bin are removed.

Appendix

A

Setting the environment variables

This section describes the environment variables used for your installation.

The environment variables are set automatically during a Windows installation.

With Linux systems, the environment variables need to be set to provide you with access to the software. The method of setting the variables varies between Linux systems that use C shell and those that use Bourne shell. With a Linux system that uses csh (C shell), add the environment variables to each user's .cshrc file. You may need to change some of the environment locations based on your specific computer. With a Linux system that uses sh (Bourne shell), ksh (Korn shell), or bash (Bourne-Again shell), add the environment variables to each user's .profile file (or equivalent). Examples are provided for each environment variable that must be set.

When setting the environment variables, make sure you specify the location of the files and folders according to your system configuration.

Aliases

In Linux, an alias can be set to create a shortcut to any CATALYST Earth program. The PCIHOMES environment variable must first be set, and then an alias can be set. For example, to create a shortcut to the CATALYST Professional toolbar, set the alias as follows:

```
alias catalyst $PCIHOMES/exe/catalystpro
```

LD_LIBRARY_PATH and PATH variables

If a system library is not available with the operating system, CATALYST Earth provides some share objects with the library path.

Use the examples below to set up the following environment variables.

With Linux (C shell):

```
setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$PCIHOMES/exe
or
if ($LD_LIBRARY_PATH) then
setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$PCIHOMES/exe
else
setenv LD_LIBRARY_PATH $PCIHOMES/exe
endif

setenv PATH $PATH:$PCIHOMES/exe
```

With Linux (Bourne shell):

```
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$PCIHOMES/exe
export LD_LIBRARY_PATH
```

```
PATH=$PATH:$PCIHOME/exe
export PATH
```

If you do not enter this path, the following error message may appear: excel file could not be found.

Note: The LD_LIBRARY_PATH environment variable is required if you want to run the executable directly from the exe folder (that is, catalystpro.exe). This variable is not required if you use the shell files to start CATALYST Professional.

ORACLE_HOME variable

The ORACLE_HOME variable is required to configure CATALYST Professional to support Oracle 11g. To work with Oracle data directly in CATALYST Professional, make sure the system that you are using has a proper Oracle installation.

If you are accessing Oracle data from a server system, ensure that the system you are using has a proper Oracle client installation. Check with your system (or database) administrator to find the location of the Oracle home folder. CATALYST Professional must know the Oracle home folder location to access and load the Oracle data. When installing Oracle in Windows-based systems, the registry and path variables are all updated automatically.

In Linux systems, you must set up the following environment variables.

With Linux (C shell):

```
setenv ORACLE_HOME /client_name/oracle/OraHome1
setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$ORACLE_HOME/lib
setenv PATH $PATH:ORACLE_HOME/bin
```

Where /client_name/oracle/OraHome1 indicates the location of the Oracle home folder.

With Linux (Bourne shell):

```
ORACLE_HOME=/client_name/oracle/OraHome1
export ORACLE_HOME
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib
export LD_LIBRARY_PATH
PATH=$PATH:ORACLE_HOME/bin
export PATH
```

PCIGROUP

This environment variable is intended for developers that want to access the procedures and executables they have developed for CATALYST Professional without copying them to the installed software tree. Executables and ancillary files, located in the pro, hlp, exe, etc, and models folders, are first searched for in the PCI folder tree pointed to by the PCIGroup environment variable, then in the PCIHOME tree, and finally in the PCI folder tree pointed to by the following PCIMASTER variable.

The standard location of the PCIGROUP variable in Linux is:

Linux (C shell):

```
setenv PCIGROUP $PCIHOME/where you put your shared location
```

Linux (Bourne shell):

```
PCIGROUP $PCIHOME=where you put your shared location
```

With Linux (C shell):

```
setenv PCIGROUP <alternate_directory_path> for example, /opt/username/easi_procedures
```

With Linux (Bourne shell)

```
PCIGROUP <alternate_directory_path> for example, /opt/username/easi_procedures
```

Note: The alternate folder must contain a subfolder named pro, in which you must copy all EASI procedure files. The EASI file names must be in uppercase; for example, FILE1.EAS, FILE2.EAS, and so on.

PCIHOME

The PCIHOME environment variable must be set to the root of the folder tree where CATALYST Professional is installed.

PCILICENSEFILE

This variable is required for a standalone installation on Linux systems. The PCILICENSEFILE environment variable must be set explicitly to the location where the valid License.PCI file resides. This location is normally \$PCIHOME/exe/License.PCI. The PCILICENSEFILE variable allows the software to point directly to the valid License.PCI file (not to the folder containing the file, but to the file itself).

The PCILICENSEFILE variable can be set as follows.

With Linux (C shell):

```
setenv PCILICENSEFILE $PCIHOME/exe/License.PCI
```

With Linux (Bourne shell):

```
PCILICENSEFILE=$PCIHOME/exe/License.PCI
export PCILICENSEFILE
```

PCILICENSESERVER

This variable is required for a full-client installation. If this variable does not exist, then it is assumed to be a standalone installation; CATALYST Professional will not search the local network for a license. If this variable is set, but you want to disable it, set the variable to 'no-net'.

With Linux (C shell):

```
setenv PCILICENSESERVER servername
```

With Linux (Bourne shell):

```
PCILICENSESERVER=servername
export PCILICENSESERVER
```

PYTHONPATH

This variable is required to use CATALYST Professional algorithms in Python scripting.

With Linux (C shell):

```
setenv PYTHONPATH $PYTHONPATH:$PCIHOME/exe
```

With Linux (Bourne shell):

```
PYTHONPATH=$PYTHONPATH:$PCIHOME/exe
export PYTHONPATH
```

PCIUSER

To maintain preferences from one session to another for each individual user, this variable should be set to a folder to which the user has **Write** permission. This variable can be set as follows.

With Linux (C shell):

```
setenv PCIUSER ../usr/workingdirectory
```

With Linux (Bourne shell):

```
PCIUSER=../usr/workingdirectory
export PCIUSER
```

