

# SmartPlant License Manager

## *Installation and User's Guide*

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Process, Power & Marine



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# Preface

This document is the installation and user's guide for Intergraph® SmartPlant® License Manager. SmartPlant License Manager (SPLM) allows you to accurately track how many users are concurrently accessing plant design software. It also helps you comply with your Software Licensing Agreement.

Send documentation comments or suggestions to [PPMdoc@intergraph.com](mailto:PPMdoc@intergraph.com).



# Introduction to SmartPlant® License Manager

Intergraph® SmartPlant License Manager allows you to accurately track how many users are concurrently accessing plant design software. It also helps you comply with your Software Licensing Agreement.

SmartPlant License Manager (SPLM) is client/server-based software. One or more central servers can be used to maintain licensing information for all plant design software on a network. The licensing information can be on a single server, but the licenses float so any computer on the network can use them. Both the client computer and the license server must have SmartPlant License Manager installed. Because licensing has little impact on computer performance, any computer can be a license server. However, systems with a high volume of network traffic may negatively impact licensing performance.

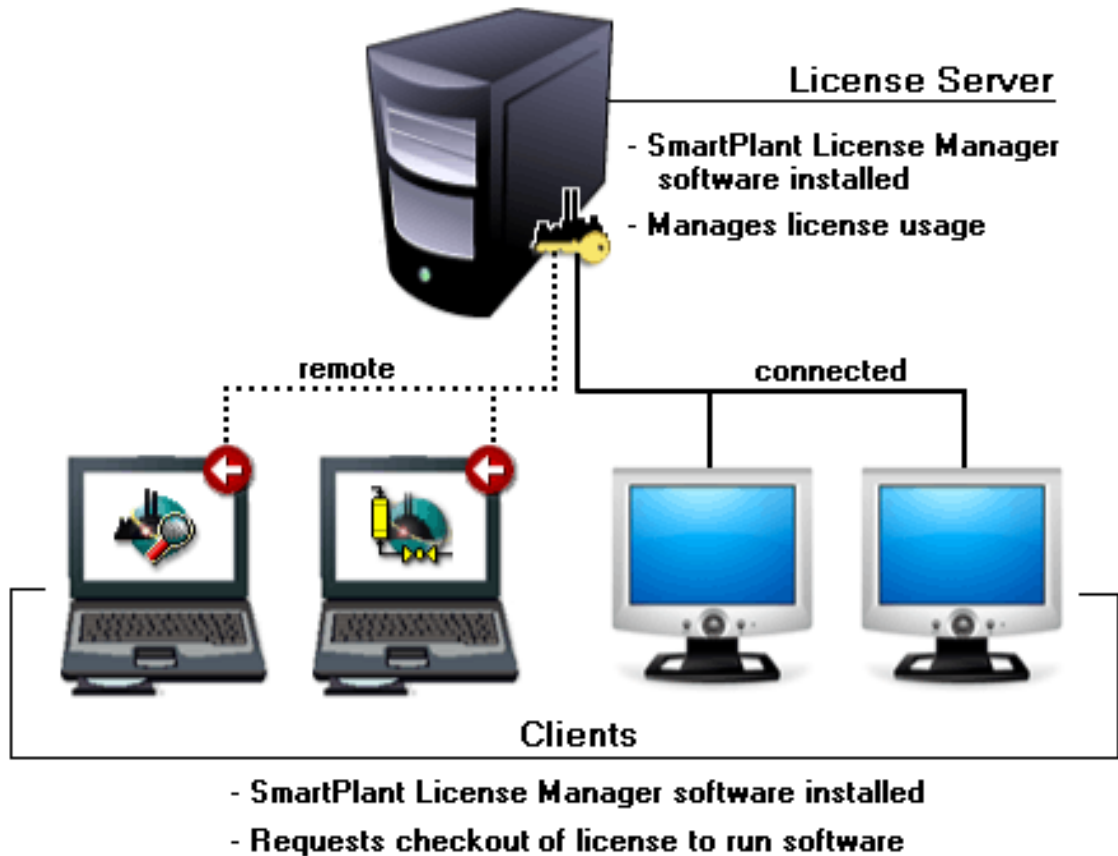
SmartPlant License Manager supports the following products and license types:

- FrameWorks® Plus
- ISOGEN (Batch ISOGEN and Interactive ISOGEN)
- Pelican Forge SupportModeler™ and SupportManager™
- PDS®: PDS 3D, PDS 2D, PDS IDM, PDS 2D PID
- SDNF Import
- SmartPlant® Electrical
- SmartPlant Instrumentation (formerly INtools®)
- SmartPlant P&ID
- SmartPlant Review
- SmartPlant 3D
- SmartPlant 3D Import commands
- SmartPlant Layout
- SmartSketch®

## Notes

- Some SmartSketch installations do not require licensing. Ask your System Administrator or contact Intergraph Support Services if you have a question about SmartSketch licensing requirements.
- This guide includes SmartPlant Instrumentation (formerly INtools) licensing information and request forms, even though SmartPlant Instrumentation uses its own internal licensing software and not SmartPlant License Manager.

Refer to the General Topics FAQ for answers to licensing setup and configuration questions.



Intergraph software is purchased or leased by the license. For example, if you purchased 30 licenses, you are licensed for 30 processes to concurrently access the various software applications. SmartPlant License Manager keeps a running inventory of how many licenses are in use and how many are available for use.

When an application is started, the application sends a request to one or more SmartPlant License Manager license servers to obtain a license to run the software. If a license of the requested type is available, the server grants the license and the application starts. If all licenses of the requested type are in use when you begin an interactive session, the software does not start. If all licenses are in use when a batch job requests a license, the batch job waits until a license is released when a user logs out or another batch job completes.



SmartPlant License Manager requires users to have administrator privileges to change the license usage options (**Display and Modify License Usage**).

The **Print** option on the SmartPlant License Manager Information dialog box saves displayed output to a file and/or prints the output to a selected printer.

**Related Topics**

- *Administrative Tasks*, page 37
- *General Topics FAQ*, page 58
- *Installation Checklist*, page 24
- *License Key Request Forms*, page 87
- *Requesting Software Upgrades and License Keys*, page 18
- *Troubleshooting*, page 75
- *What's New in SmartPlant License Manager*, page 10

## What's New in SmartPlant License Manager

The following changes have been made to SmartPlant License Manager.

*Version 2007 (9.0)*

- SmartPlant License Manager now supports and includes Product Tags for SmartPlant 3D (S3D), SmartPlant Layout (SLA), and SmartPlant 3D Import commands (SIM). Refer to Testing for Reserving a Seat for more information.
- The License Checkout Utility is now available for SmartSketch. Refer to Check Out a License for SmartSketch for more information.
- SmartPlant License Manager now includes a silent install process. Refer to Install SmartPlant License Manager in Silent Mode for more information.
- For the recommended installation workflow, refer to the installation checklist named *SPLMInstall\_Checklist.xls*. The file is available on the product CD in the CDSetup\Help folder. A file named *SPLMInstall\_Checklist.pdf* is also available in the same folder for reading with Adobe Reader.

## Terms

**License Key** – An alphanumeric code entered on a license server that activates a license. The encrypted code tells the license server how many licenses and type(s) that have been leased or purchased and, therefore, how many it can issue. A key can be from 26 to 280 characters long.

**License** – A contractual right to run a copy of the software. A license key activates a license.

**Remote License Mode / Checkout** – Running SmartPlant Review and SmartSketch without a network connection to the license server. You must install and run the SmartPlant License Checkout Utility to use this mode. For more information, refer to Appendix A of this document or refer to the SmartPlant License Checkout Utility User's Guide delivered with SmartPlant Review and SmartSketch.

**Site LAN** – The Local Area Network (LAN) at a physical site that is associated with a site license server.

**Site** – The fixed geographic area surrounding the site license server.

**Site License Server** – The computer where the key is loaded. The key contains a code that tells the license server how many licenses of each type it can issue. The license server can be a server or a standard computer.

## Setup Options

There are several options for setting up SmartPlant License Manager license servers and clients. Because licensing has little impact on computer performance, any computer can be licensed.

- **Single Site LAN and License Server**– You can assign all licenses at your site to a single server for the purpose of license administration. This greatly simplifies the license administration process. A single license server can be used to administer LANs within a 5-mile radius (assuming that adequate network bandwidth is available). A different license server must administer LANs outside the 5-mile radius.
- **License Servers on each LAN**– You can set up your system so that each LAN at your site has its own license server.
- **Multiple License Servers on one LAN**– You can have part of your licenses reside on one license server and the rest on another license server. Computers can be set up to retrieve licenses from a secondary server if all licenses on the primary server are in use.
- **SmartPlant Checkout License Utility**– You can obtain licenses for SmartPlant Review and SmartSketch for use on a non-networked computer (for example, a laptop). Using this utility allows you to run SmartPlant Review remotely without a network connection to the license server. This utility is available as part of SmartPlant Review and is not included in SmartPlant License Manager. SmartPlant License Manager supports this utility according to setting in the SmartPlant Checkout License Utility. When the product requests a seat to be checked out, you will be able to see the reserved seat in the display report and in the log report (if logging is enabled).

### Related Topics

- *Configuring and Testing Licenses*, page 37
- *General Topics FAQ*, page 58
- *Requesting Software Upgrades and License Keys*, page 18
- *Troubleshooting*, page 75
- *What's New in SmartPlant License Manager*, page 10

## Licensing Example

In connected license mode, a SmartPlant License Manager site license server is configured to manage the SmartPlant License Manager licenses.

For example, XYZ Engineering Ltd. purchases one license key that contains four SmartPlant Review licenses and three licenses of each of its seven modules.

To manage these licenses, the site administrator configures a networked workstation or server to be the SmartPlant License Manager license server, then installs and configures both SmartPlant Review and SmartPlant License Manager on the workstations within the company.

When a user starts SmartPlant Review on an individual workstation, one license for the core SPR product and one license for each installed module is automatically obtained from the SmartPlant License Manager license server. This means that if this particular workstation has all seven modules installed, then eight (one core and seven module) licenses are used by this workstation. When the SmartPlant Review session ends, the licenses are automatically returned to the SmartPlant License Manager license server. Those licenses are now available for use by another SmartPlant Review session on a networked workstation.

To continue this example, up to three SmartPlant Review sessions using seven modules each can be running concurrently. A fourth SmartPlant Review session can also run concurrently since there is one remaining core SPR license. However, this fourth session cannot run any modules because all of the module licenses are in use. If this fourth SPR session has modules installed, SmartPlant Review attempts to find licenses for the installed modules then displays a "no licenses available" message and closes the session. To run this fourth session without attempting to obtain licenses for the installed modules, use the SmartPlant Review Select Modules Utility to specify which installed modules you want to license.

### Related Topics

- *Configuring and Testing Licenses*, page 37
- *General Topics FAQ*, page 58
- *Requesting Software Upgrades and License Keys*, page 18
- *Troubleshooting*, page 75
- *What's New in SmartPlant License Manager*, page 10



# Hardware and Software Requirements

Before beginning an installation of SmartPlant License Manager, verify that your servers and end-user workstation computers meet the following hardware recommendations and software requirements.

## Related Topics

- *SmartPlant License Manager Database Servers*, page 15
- *SmartPlant License Manager Workstation*, page 16

## SmartPlant License Manager Database Servers

### Hardware Recommendations

- 100 BaseT or higher network interface
- Fixed TCPIP address.
- CD-ROM drive access, either locally or through a network connection
- 2.8 GHz Pentium 4 processor or higher
- 4 GB RAM
- Digital tape or DVD backup system for server

### Supported Operating Systems

- Microsoft Windows 2000 Server and Advanced Server Service Pack 4
- Microsoft Windows Server 2003 Service Pack 1

### Supported Databases

- Microsoft SQL Server 2005 Service Pack 1 (Standard edition for stand-alone environments; Enterprise edition for Global Workshare environments)
- Oracle Database 10g Release 2 (10.2) (Standard edition for stand-alone environments; Enterprise edition for Global Workshare environments)

### Software Prerequisites

- Microsoft .NET Framework 2.0
- Adobe Acrobat Reader 7.0 or higher (Required to view the Software License Agreement and Printable Guides. Version 7.0 is available on the product CD.)
- Microsoft Internet Explorer 6.0, Service Pack 1

# SmartPlant License Manager Workstation

## Hardware Requirements

- 2.8 GHz Pentium 4 processor or higher
- 2 GB RAM
- 100 BaseT network interface
- CD-ROM drive access, either locally or through a network connection

## Supported Operating Systems

- Microsoft Windows 2000 Professional Service Pack 4
- Microsoft Windows XP Professional Service Pack 2

## Supported Database Clients

- Microsoft SQL Server 2005 Standard Service Pack 1
- Oracle Database 10g Client Release 2 (10.2)

## Software Prerequisites

- Microsoft XML Core Services (MSXML) 4.0 Service Pack 2
- Microsoft .NET Framework 2.0
- Adobe Acrobat Reader 7.0 or higher (Required to view the Software License Agreement and Printable Guides. Version 7.0 is available on the product CD.)

## Software Requirements

- Microsoft Internet Explorer 6.0, Service Pack 1 (Required for viewing the online documentation delivered with the software)

## Related Topics

- *Hardware and Software Requirements*, page 15



# Requesting Licenses

This section provides detailed information about installing SmartPlant License Manager, requesting and installing upgrades, and requesting and installing license keys.

 **Note**

In a networked configuration where users workstations are accessing one or more engineering application servers, install SmartPlant License Manager server on a separate node. Do not install it on the application server. SmartPlant License Manager server is not supported when configured on an Application Server running Windows Terminal Server and/or products such as Citrix Server.

**Related Topics**

- *Installing the Software that Requires Licensing*, page 22
- *Requesting Software Upgrades and License Keys*, page 18
- *Starting SmartPlant License Manager*, page 30

## Requesting Software Upgrades and License Keys

The SmartPlant License Manager License Request form does not issue an upgrade of the product that requires licensing. An upgrade is not required unless it is needed for work or production purposes.

### Related Topics

- *Configuring and Testing Licenses*, page 37
- *General Topics FAQ*, page 58
- *Troubleshooting*, page 75
- *What's New in SmartPlant License Manager*, page 10

## Requesting a Software Upgrade: SmartPlant License Manager Version Compatibility

For the most current compatibility matrix, refer to the eCustomer Web site (<http://crmweb.intergraph.com>).

## Requesting a License Key for the License Server

SmartPlant License Manager uses the **Generate Machine ID** command to uniquely identify the machine (license server) where the license will be installed. You must generate a Machine ID on the license server and send the resulting code to Intergraph before you can obtain a new or updated license key. When you run **Start > Programs > Intergraph SmartPlant License Manager > Generate Machine ID**, a file is created that contains the code needed to send to Intergraph.

### Note

- There is a maximum of 2000 total seats per license key.

The following describes installing SmartPlant License Manager or upgrading your current installation of Plant Design Licensing (PD\_LICE) software.

### If the license server does not contain PD\_Lice or SmartPlant License Manager

1. Install SmartPlant License Manager using the Installation CD or download the SmartPlant License Manager product from the eCustomer Web site (<http://crmweb.intergraph.com>).
2. On your designated license server, click **Start > Programs > Intergraph SmartPlant License Manager > Generate Machine ID**.

3. Select **Browse** on the **Generate Machine ID** dialog box and define a path and file name for the Machine ID. This file will be a text file.

## If the license server is currently running as a PD\_Lice server

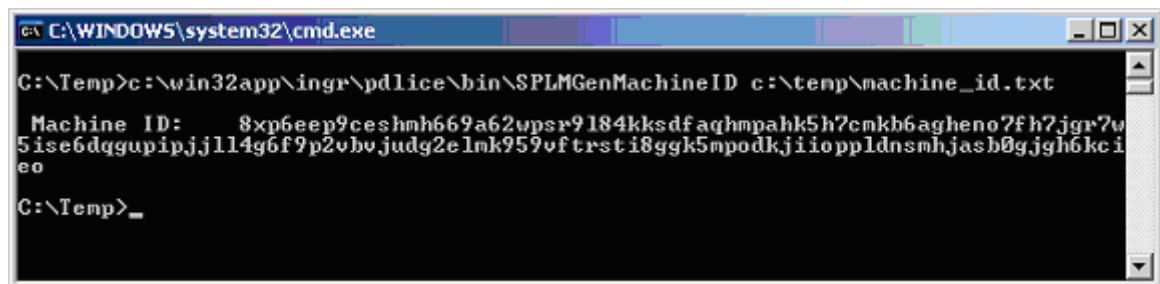
If PD\_Lice is already installed on your license server, you must remove the software before you can install SmartPlant License Manager.

1. Remove the existing license key using `pdlice -c` at the Command Prompt.
2. To remove the PD\_LICE product, click **Start > Programs > PD\_LICE > Remove**.
3. When PD\_LICE is successfully removed, you can install SmartPlant License Manager as previously described and then generate your Machine ID.

## Generating a Machine ID prior to SmartPlant License Manager installation with PD\_LICE already installed and in use

If you do not want your license server unavailable for processing licenses while you generate a Machine ID and install the SmartPlant License Manager software, you can install the Generate Machine ID executable in the existing `\pdlice` directory.

1. Download the Generate Machine ID executable from the eCustomer web site (<http://crmweb.intergraph.com/>).
2. Copy the `SPLMGenMachineID.exe` file to your `\PDLICE\bin` directory.
3. Run the executable from the command line with the output file included as an argument. For example, from the command line enter  
`c:\win32app\ingr\pdlice\bin\SPLMGenMachineID c:\temp\machine_id.txt`.



```

C:\WINDOWS\system32\cmd.exe
C:\Temp>c:\win32app\ingr\pdlice\bin\SPLMGenMachineID c:\temp\machine_id.txt

Machine ID:      8xp6eep9ceshnh669a62upsr9184kksdfaghmpahk5h7cmkb6aghen0?fh7jgr7v
5ise6dqgupip,jl14g6f9p2vbu,judg2elmk959vftrsti8ggk5mpodkjiiooplDNSmhjasb0g,jgh6kci
eo
C:\Temp>_

```

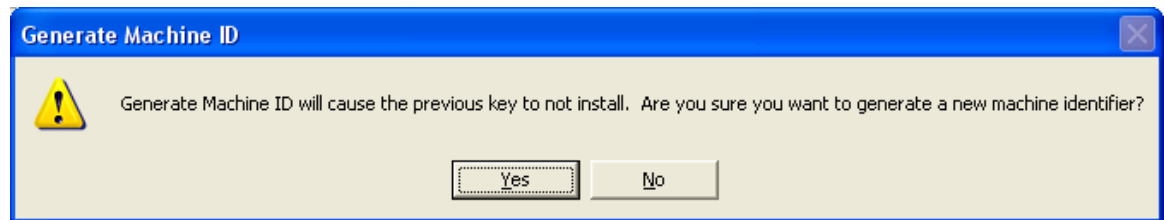
## Requesting a License Key

After generating the Machine ID for the license server, send the text file and the completed License Key Request form in an e-mail message to Intergraph using this address: [ppmserv@intergraph.com](mailto:ppmserv@intergraph.com). An Intergraph Software Delivery representative will e-mail your key to you within 48 hours of receipt of your request.

You can also call Intergraph Process, Power & Marine (PPM) Support. In the United States, call 1-800-766-7701 for the Global Order Desk. (Follow Support and Sales phone links.)

### Warnings

- If you remove SmartPlant License Manager or remove the existing key after generating and sending the Machine ID to Intergraph, the new license key you receive from Intergraph will not install.
- If you re-run the **Generate Machine ID** command, it will invalidate the existing Machine ID. The following warning displays when you re-run the **Generate Machine ID** command. Note that this warning message displays when you use the command from the Start menu but not from the Command Prompt (when entering `splmGenMachineID.exe`).



If you have already sent the Machine ID in an e-mail message to Intergraph but not yet received your license key, select No to not generate a new Machine ID. Otherwise, the key you receive from Intergraph will not install.

If you generate a new Machine ID after installing the license key, the license server will continue to work. However, you will have to submit this new Machine ID to Intergraph when requesting a new or updated license key.

The number of licenses covered by a license key is the same as the total number of licenses that you purchased or leased for each LAN ID listed for that license server. Intergraph records are used to determine the correct number of licenses for the key.

In cases where the system will not be connected to a network, such as running a laptop, the SmartPlant License Manager license server and the client are the same machine. The *Selecting a License Server for a Client* section explains how to specify the laptop name as the SmartPlant License Manager license server. A separate license key is required unless you are using SmartPlant Review or SmartSketch and check out a license for use on your laptop.

# Using eLicense to Generate SmartPlant License Manager Keys

Customers using the eLicense web site to manage their licenses receive them immediately by e-mail. If you do not have access to the eLicense web site, please contact your Purchasing Agent or Engineering Manager to request read and/or write privileges.

1. Log onto eLicense (<https://ppmapps.intergraph.com/ELICENSE/>).
2. Select your lease (**OrderID**) using the search option. You can apply filters to your search to select the lease.
3. Click the **Show Results** button.
4. You are now on the **Order Summary** screen. Click the **Edit Server** button.
5. The **Server** screen displays. In the **Server Type** column, select the drop-down list and select **MachineID**. To generate SmartPlant License Manager keys, select **MachineID**.
6. Copy the Machine ID from the email and paste it into the **MachineID** column on the **Server** screen.

The ServerType determines the key that will be generated. The product determines which ServerType is selected.

DiskSerialNbr = SPF  
DomainName = XPDA  
Machine ID = SPLM keys  
TCPIP = PD\_LICE Keys  
HostName = SPF, Marian, INtools 6.0 or earlier

7. Using the scroll bar at the bottom of the **Server** screen, scroll to the right to show the **Change Seat Count** button.
8. You are now ready to generate the SmartPlant License Manager key. Click the **Generate Key** button.
9. On the **Generate Keys** screen, select **SPLM** in the **Key Type** column.
10. If the export restrictions are accepted, click **Next**.
11. Select your country from the **Country** drop-down list.
12. Click the **Key Generate** button. The key has now been generated.

## Related Topics

- *Alphabetical List of Key-in Commands*, page 89
- *Key-in Commands Overview*, page 89

## Installing the Software that Requires Licensing

Install SmartPlant License Manager on every machine before installing any of the licensed products. During setup, products automatically search for SmartPlant License Manager on the machine. If it is not installed, a message box displays as shown in the following example.



### **Related Topics**

- *Installing Software from the Web*, page 26

# Installing SmartPlant License Manager

Before beginning the product installation, refer to the delivered SmartPlant License Manager readme file for the latest product installation updates. The readme file is delivered in the top level product folder of the product CD. Be sure you have the latest version of the SmartPlant License Manager software before beginning the installation. If you do not have the latest version of the software, you can install it using <http://ppmapps.intergraph.com/elicense>.

# Installation Checklist

For the recommended installation workflow, refer to the installation checklist named *SPLMInstall\_Checklist.xls*. The file is available on the product CD in the CDSetup\Help folder. A file named *SPLMInstall\_Checklist.pdf* is also available in the same folder for reading with Adobe Reader.

## **Related Topics**

- *Configuring and Testing Licenses*, page 37
- *General Topics FAQ*, page 58
- *Requesting Software Upgrades and License Keys*, page 18
- *Troubleshooting*, page 75



# Install SmartPlant License Manager

Remember, you must log in as Administrator to install this software.

1. Insert the Intergraph SmartPlant License Manager CD. If the CD does not start automatically, double-click **Setup.exe** in the root folder of the CD.
2. Select **SmartPlant License Manager Installation**.
3. Click **Next** on the **Welcome to the InstallShield Wizard for SmartPlant License Manager** page.
4. Enter your name and company name in the **User Name** and **Company Name** fields on the **Customer Information** page. Click **Next**.
5. On the **Software License Agreement** page, select your country from the list and click **Display** to view the license agreement.

## **Note**

- The license agreement is delivered as a PDF file, which requires Adobe Reader to be installed on the computer in order to view it. If the software detects that Acrobat Reader is not installed, an informational message box appears. To install Acrobat Reader and continue with the data installation, click **Yes**. If you click **No** on the message box, the setup process immediately stops without installing SmartPlant License Manager.
6. Carefully read the license agreement. Close the PDF document, and click **Yes** on the **License Agreement** page to accept the terms.
  7. On the **Choose Destination Location** page, click **Next** to install SmartPlant License Manager in the default location. If you want to install the software in another location, click **Change** and select the new location.
  8. Click **Install** on the **Ready to Install the Program** page. A status bar displays the progress of the installation on the **Status Setup** page.
  9. Click **Finish** on the **InstallShield Wizard Complete** page to complete installation of SmartPlant License Manager.

## **Note**

Do not delete any files that are created during installation or as a result of using SmartPlant License Manager. Removal of any files causes the licensing system to fail and can require install, repair, or possibly removal and re-install of SmartPlant License Manager.

## **Related Topics**

- *Install SmartPlant License Manager in Silent Mode*, page 27
- *Installing Software from the Web*, page 26

## Installing Software from the Web

In addition to installing from CDs, some products can be installed from the Intergraph eCustomer Web site. This example uses SmartPlant Review, but all products are available on the Products List. Check to see if your product can be installed from the Web site.

1. Log in as Administrator.
2. Go to the eCustomer web site: <https://crmweb.intergraph.com>
3. Enter your user name and password.

 **Note**

- If you are a new customer or do not have a user name and password, click the **I'm a New User** link to obtain your user name and password.
4. Click **Download Software Updates**.
  5. Select **SPLM/PDLICE**.
  6. Click **Products**.
  7. Select the latest version of SmartPlant License Manager.
  8. Click **Save** to download the SmartPlant License Manager Zip file to your computer.
  9. Open the SmartPlant License Manager Zip file and double-click setup.exe.
  10. After the files are extracted to your computer, click **Continue** to install SmartPlant License Manager.
  11. Read the Software License Agreement carefully, and if you agree to the specified terms, click **I Agree**.
  12. Specify the location where you want SmartPlant License Manager installed and click **Continue**.
  13. When the installation process is complete, click **OK**.
  14. Follow the instructions in the *Running SmartPlant License Manager* to configure SmartPlant License Manager.

### **Related Topics**

- *Installing the Software that Requires Licensing*, page 22
- *Requesting Software Upgrades and License Keys*, page 18

## Install SmartPlant License Manager in Silent Mode

Silent mode installation is a two-stage process. First, you perform a normal installation by running the setup.exe file from the command line with special parameters that cause the software to record the installation session and the options you choose to a setup.iss file. Then, from any workstation, you can run setup in silent mode using the recorded setup.iss file to provide the necessary setup information.

### Important

- The environment of the machine on which you run the normal setup to create the .iss file and the environment of the workstations on which you perform the silent mode installation must be identical; that is, they must have the same database platforms, software versions, installed files, drive partitions, and so forth. For example, if you create the .iss file and install the software on D drive, you must have a D drive on all the workstations.
1. Prior to creating a silent setup of SmartPlant License Manager over a network, ensure that the following conditions exist:
    - All existing versions of PD\_Lice on the target machine have been uninstalled prior to network installation.
    - The target machine meets the free disk space recommendations.
    - All applications are closed.
  2. Open a **Command Prompt** window from the **Start** menu.
  3. At the command prompt, type:

```
"<setup source folder path>\setup.exe" -r -f1 "<path>\<filename>.iss"
```

For example: C:\Software\SE281AA.A\CDSSetup\SPLM\setup.exe -r -f1 "c:\silent.iss"

### Caution

- Be sure the **<setup source folder path>** specifies the path to the folder that contains the setup.exe file that launches the SmartPlant License Manager InstallShield Wizard, not the setup.exe file that launches the SmartPlant License Manager AutoPlay executable.

 **Tips**

- The **-r** parameter tells setup to automatically generate the silent setup file (setup.iss) and to record all setup input.
- The **-f1"<path>\<filename>.iss"** parameter specifies the path and filename for the silent setup file. The double quotes are required around this path, with no space between the **-f1** and the opening double quotes. For example, if you type the following command string, the software places the resulting silent setup.iss file in the c:\silent install files folder.

**\\sourceserver\SPLM\setup.exe -r -f1"c:\silent install files\SPLMsilentsetup.iss"**

4. Work through the standard installation. As you begin the installation, you will see the following dialog box. Click **OK** to dismiss the information box and to display the Online Software License Agreement. Click **Yes** to accept the license agreement and continue the software installation.



5. At each workstation on which you want to install the software, open a **Command Prompt** window and type:

**"<setup source folder path>\setup.exe" -s -f1"<path>\<filename>.iss"  
-f2"<path>\<filename>.log"**

 **Caution**

- Be sure to use the same setup executable that you used in step 3, above.

 **Tips**

- The **-s** parameter tells setup to run in silent mode using the indicated .iss file.
  - The **-f1"<path>\<filename>.iss"** parameter specifies the path and filename for the silent setup (.iss) file you want to run. The double quotes are required, with no space between the **-f1** and the opening double quotes. For example, **-f1"c:\installfiles\silentsetup.iss"**.
  - (Optional) Use the **-f2"<path>\<filename>.iss"** parameter to record a log file of the setup process. The double quotes are required, with no space between the **-f2** and the opening double quotes. For example, **-f2"c:\installfiles\silentsetup.log"**. If **-f2** is not defined, a log file is created in the same location as the .iss file.
6. Check the .log file to ensure that the installation proceeded without errors. A successful silent installation produces a .log file looking something like this:

```
[InstallShield Silent]
Version=v7.00
File=Log File
[ResponseResult]
ResultCode=0
[Application]
Name=SmartPlant License Manager
Version=09.00.03.00
Company=Intergraph
Lang=0009
```

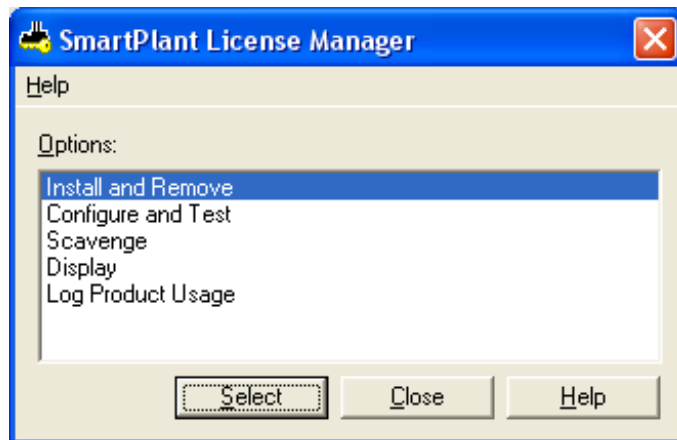
In general, if an error occurred, the ResultCode will be a number less than zero. Possible result codes include the following:

- Any value greater than 0 = Success.
- 1 General error.
- 2 Invalid mode.
- 3 Required data not found in the Setup.iss file.
- 4 Not enough memory available.
- 5 File does not exist.
- 6 Cannot write to the response file.
- 7 Unable to write to the log file.
- 8 Invalid path to the InstallShield Silent response file.
- 9 Not a valid list type (string or number).
- 10 Data type is invalid.
- 11 Unknown error during setup.
- 12 Dialog boxes are out of order.
- 51 Cannot create the specified folder.
- 52 Cannot access the specified file or folder.
- 53 Invalid option selected.

## Starting SmartPlant License Manager

The **Start > Programs > Intergraph SmartPlant License Manager** menu contains the **Generate Machine ID** and **SmartPlant License Manager** icons.

1. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager** to begin using SmartPlant License Manager. The **SmartPlant License Manager** dialog box appears. Intergraph recommends reading the Readme file included with every release.



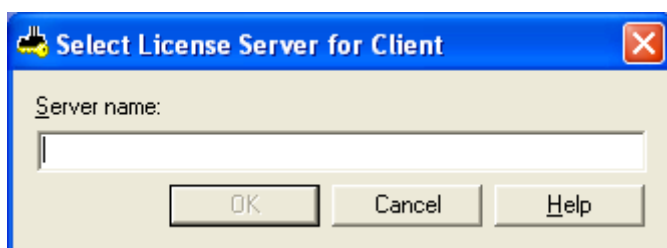
### Related Topics

- *Installing a License Key on the License Server*, page 32
- *Selecting a License Server for a Client*, page 31
- *Testing Communication*, page 35
- *Using SmartPlant License Manager Information Dialog Box*, page 36

## Selecting a License Server for a Client

Use the following procedure to select a license server for a client. You can also add more than one license server at a time by defining the server names separated by a space. For example, server1 server2 server3.

1. Log onto each computer that will reserve a license (including, possibly, the license server itself), and make sure SmartPlant License Manager is installed.
2. On the **Configuration and Testing** dialog box, click **Select License Server For Client**. (Or, type `pdlice -j` in a Command Prompt window.) The **Select License Server For Client** dialog box appears.



3. Type the computer name(s) of your license server in the **Server** field. The server name can be a maximum length of 29 characters.
4. Click **OK**. If you want to add another license server name, repeat step 2.

### Notes

- To verify that the computer correctly points to the license server, refer to *Displaying the License Server for a Client*.
- To test checking out (reserving) a license on the client computer, refer to *Testing for Reserving a Seat*.
- To release the license you just reserved, refer to *Testing for Unreserving a Seat*.

### Related Topics

- *Installing a License Key on the License Server*, page 32
- *Testing Communication*, page 35
- *Using SmartPlant License Manager Information Dialog Box*, page 36

## Installing a License Key on the License Server

After SmartPlant License Manager is installed and you have received your license key from Intergraph, you are ready to install the license key on the server. This installation must be done on the installation date you specified or within 5 days after the key was generated. This command requires administrator privileges on the license server.

### Notes

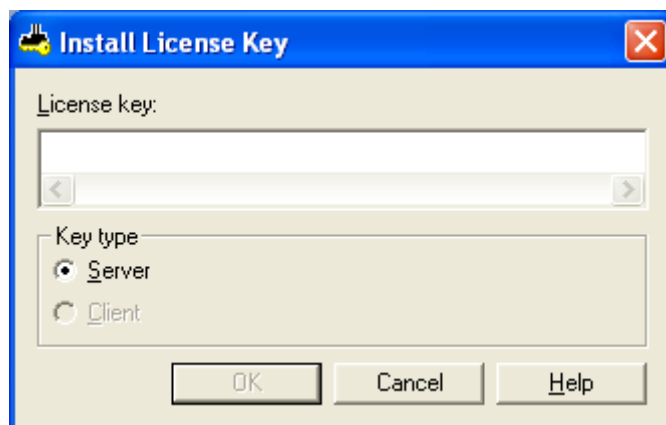
- In a Command Prompt window, you can type `pdlice -a license_key`, where `license_key` is the series of alphanumeric characters that make up the license key.
- You do not need to remove the existing license key if you are using SmartPlant License Manager 8.0 or later. If you have already requested a new license key by sending your Machine ID, you should not remove the existing license key. Otherwise, the new license key obtained from Intergraph will not install and you need to re-generate the machine ID and request another license key.

A license key is 26 to 280 alphanumeric characters, and looks like this example:

```
Oyeibppymfahfqhqrmeedsn7r6fqmfnfdaalwnowjnodr3wbvkkmn7r8jde6dfnwnd7  
jenm7dbf79sdiqn43jmcjwl7c3bj53ifq8hsfdct5t9ragaqrbg9v9silorjmvbsgclfi3  
tjdppbp9njcinp88n5i85udv8qn8vpj1ledpm8nbc39flnlkc6doktcd47enofaqfdps85  
cbmhrijdfy95nkh55h7j3egopledffcldhpm85ycf58vfl8cjf9f1pjdgbobldtl
```

Use the following procedure to install your license key.

1. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager** to start SmartPlant License Manager. The SmartPlant Licensing Manager dialog box appears.
2. Click **Install and Remove Options** on the **SmartPlant License Manager** dialog box.
3. Click **Install License Key**. The **Install License Key** dialog box appears.





4. Enter your license key in the **License key** field. The **OK** button activates when you enter a valid license key.
5. The type of key is automatically defined as **Server**.
6. Click **OK**.
7. Verify that the key installed correctly. Click **Show Key Status** on the **Display Options** dialog box. For more information, refer to *Displaying the Status of a License Key*.
8. Be sure to close the application prior to reserving a license.

After SmartPlant License Manager verifies the license key, the license database is installed. Then you can begin setting up the client computers that will be reserving licenses.

For information about setting up client computers, refer to *Administrative Tasks Configuring and Testing Licenses*.

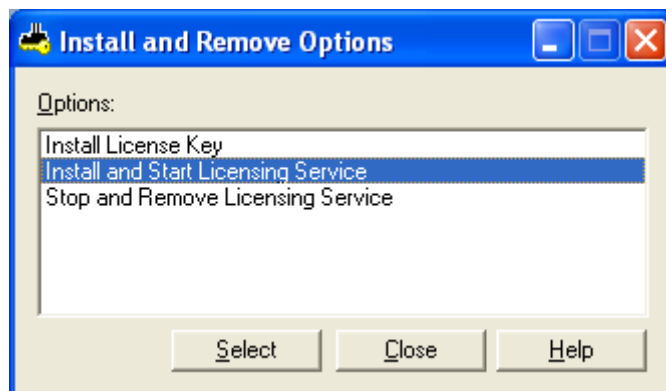
#### Related Topics

- *Selecting a License Server for a Client*, page 31
- *Testing Communication*, page 35
- *Using SmartPlant License Manager Information Dialog Box*, page 36

## Installing and Starting the Licensing Service

Use the following procedure to install and start your license service.

1. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager** to start SmartPlant License Manager. The **SmartPlant Licensing Manager** dialog box appears.
2. Click **Install and Remove** on the **SmartPlant License Manager** dialog box. The **Install and Remove Options** dialog box appears.



3. Click **Install and Start Licensing Service**.

4. Click **Select**. The system displays a message box indicating that the licensing service is successfully installed and started.



5. Click **OK** to dismiss the information dialog box.

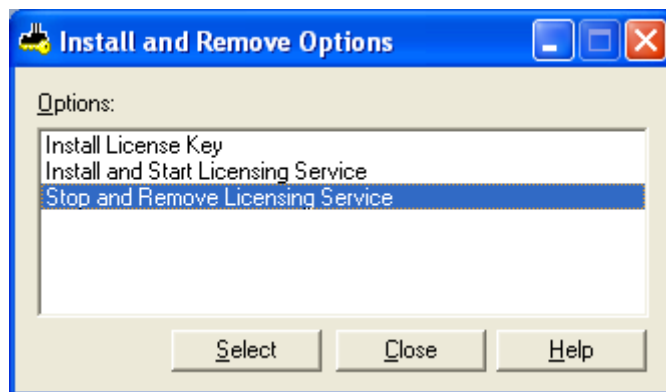
### **Related Topics**

- *Installing a License Key on the License Server*, page 32
- *Stopping and Removing the Licensing Service*, page 34
- *Testing Communication*, page 35

## Stopping and Removing the Licensing Service

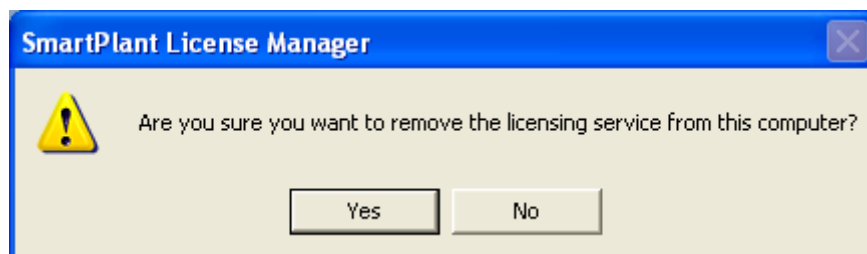
Use the following procedure to stop and remove your license service. The command stops the software without leaving any process active.

1. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager** to start SmartPlant License Manager. The **SmartPlant Licensing Manager** dialog box appears.
2. Click **Stop and Remove Options** on the **SmartPlant License Manager** dialog box. The **Install and Remove Options** dialog box appears.

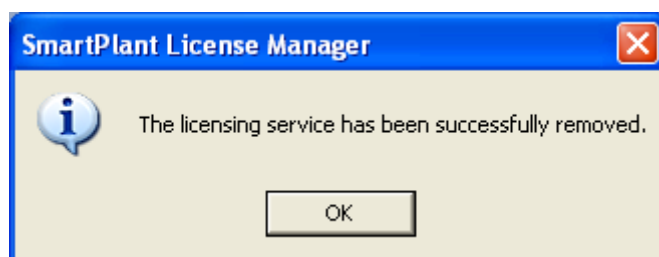


3. Click **Stop and Remove Licensing Service**.

4. Click **Select**.



5. Click **Yes** to stop and remove the licensing service.
6. Click **OK** to dismiss the message box indicating that the licensing service has been successfully stopped and removed.



#### **Related Topics**

- *Installing a License Key on the License Server*, page 32
- *Installing and Starting the Licensing Service*, page 33
- *Testing Communication*, page 35

## Testing Communication

After the installation, check communication between the license server and client. Refer to *Testing for Reserving a Seat*, *Testing for Unreserving a Seat*, and *Troubleshooting and Error Messages*.

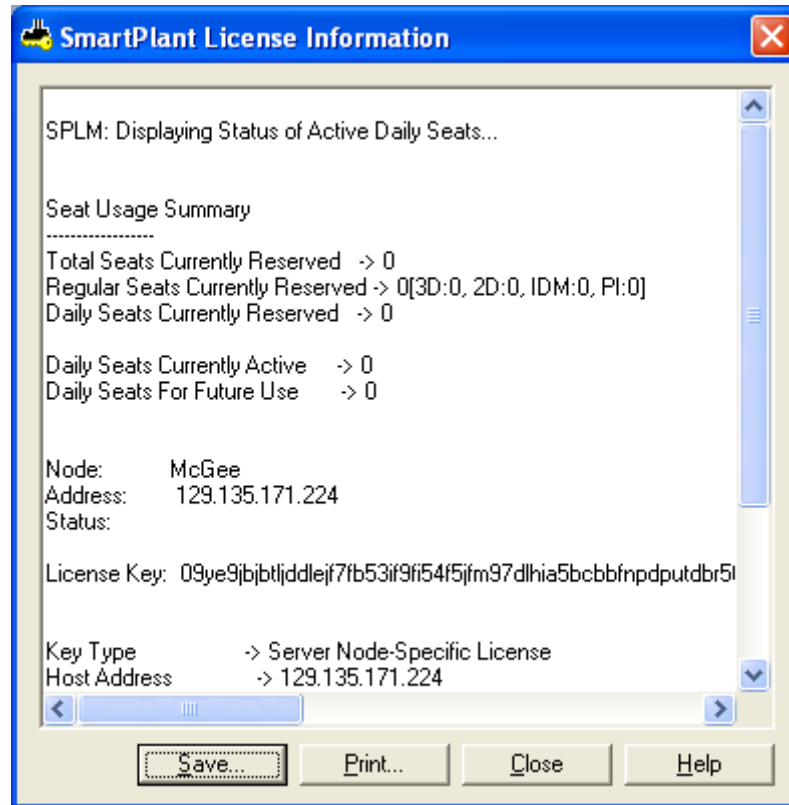
#### **Related Topics**

- *Error Messages*, page 83
- *Testing for Reserving a Seat*, page 40
- *Testing for Seat Release*, page 43
- *Troubleshooting*, page 75

## Using SmartPlant License Manager Information Dialog Box

The **SmartPlant License Manager Information** dialog box displays requested information about SmartPlant License Manager. You can save its displayed information to a file, print the information, review on-line Help, or close the dialog box.

The following **SmartPlant License Manager Information** dialog box shows that the server has been successfully added to the SmartPlant License Manager Server List.



### Related Topics

- *Installing a License Key on the License Server*, page 32
- *Selecting a License Server for a Client*, page 31
- *Testing Communication*, page 35
- *Using SmartPlant License Manager Information Dialog Box*, page 36

# Administrative Tasks

The following sections describe administrative tasks including configuring and testing licenses, monitoring license usage, returning unused licenses, and so forth.

## Related Topics

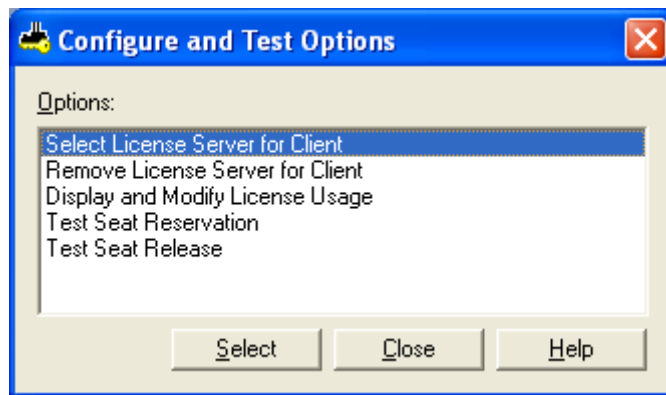
- *Configuring and Testing Licenses*, page 37
- *Managing License Usage and Returning Unused Licenses*, page 51
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

## Configuring and Testing Licenses

When the SmartPlant License Manager key is successfully installed, you can configure and test your client computers. This section covers selecting a license server for a client, removing a client from the license server, displaying and modifying the license usage, and reserving and unreserving a seat.

Use the following procedure to access the Configure and Testing Options dialog box.

1. Click **Configure and Test** on the **SmartPlant License Manager** dialog box. The **Configure and Test Options** dialog box appears.



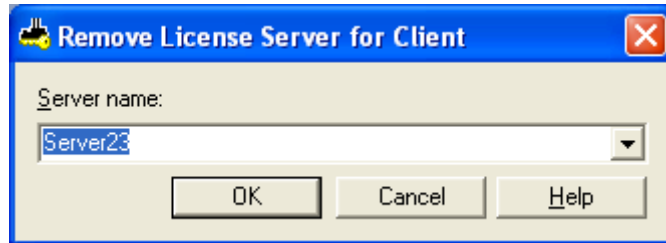
## Related Topics

- *Displaying and Modifying PDS Daily License*, page 39
- *Logging Product Usage*, page 44
- *Removing a License Server from a Client*, page 38
- *Testing for Reserving a Seat*, page 40
- *Testing for Seat Release*, page 43

## Removing a License Server from a Client

Use the following procedure to remove a license server from the client's license server list.

1. Click **Remove License Server for Client** on the **Configure and Test** dialog box. (Or, type `pdlice - k` in a Command Prompt window.) The **Remove License Server for Client** dialog box appears. This option removes the server name and the internet address from the registry.



2. Type the name of the server you want to remove in the **Server name** field. If you selected your license server using the **Select License Server For Client** option, the server name automatically appears in the **Server name** field or you can select it from the list.
3. Click **OK**. The **SmartPlant License Manager Information** box appears.

### Related Topics

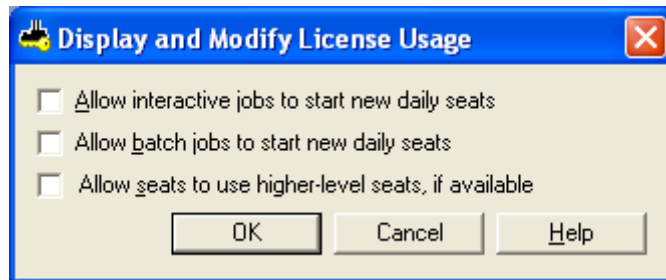
- *Configuring and Testing Licenses*, page 37
- *Displaying and Modifying PDS Daily License*, page 39
- *Logging Product Usage*, page 44
- *Testing for Reserving a Seat*, page 40
- *Testing for Seat Release*, page 43

## Displaying and Modifying PDS Daily License

Daily keys are available for PDS customers. PDS lease customers can specify whether daily keys can be used by interactive users only, interactive and batch users, batch users only, or neither. By default, a daily key cannot be activated without selecting this option. This command requires administrator privileges. These options are available only on the license server.

Use the following procedure to activate daily keys in PDS.

1. Click **Display and Modify License Usage**. (Or, type `pdlice - Q` in a Command Prompt window.) The **Display and Modify License Usage** dialog box appears.



2. Place a check mark beside the option you want to use.

**Allow interactive jobs to start new daily seats** – Allows PDS daily license keys to be accessed by interactive users if checked. Daily licenses are active for one 24-hour period.

**Allow batch jobs to start new daily seats** – Allows PDS daily license keys to be accessed by batch users if checked. Daily licenses are active for one 24-hour period.

**Allow seats to use higher-level seats, if available** – Allows PDS license keys to use higher-level seats, if any are available. This option applies only to PDS P&ID, IDM, and PDS 2D seats. For example, if no 2D seats (licenses) are available this option allows use of a 3D seat (license).

Daily keys, once activated, expire in 24 hours, regardless of how much actual processing time has been used. When a process that uses a daily license key completes and the 24-hour period for the daily license key has not expired, the daily license key becomes available for use by other processes regardless of what is specified using this option.

If a job is running at the end of the 24-hour period, the job is allowed to complete processing. When the processing is complete, the daily license key then expires. To display the status of the daily license keys, refer to *Displaying the Status of Active PDS Daily Licenses*.

 **Note**

- If you cannot access your PDS PID Standalone or Frameworks Plus licenses, check to be sure that you used the correct serial number when either product was installed.

**Related Topics**

- *Configuring and Testing Licenses*, page 37
- *Logging Product Usage*, page 44
- *Testing for Reserving a Seat*, page 40
- *Testing for Seat Release*, page 43

## Testing for Reserving a Seat

Use the following procedure to test whether a license can be reserved from the client. This is especially helpful in testing server and client communication after installation.

 **Note**

- If you purchased a PDS PID license, only the PDS PID application is available to use. If you purchased PDS 2D, the PDS PID, IDM, and PFD applications are available to use.
1. Click **Test Seat Reservation** on the **Configuration and Testing** dialog box. The **Test Seat Reservation** dialog box appears.





2. Set the applicable options.

**Server Name** – Using the drop-down list, select the name of the server that you would like to reserve a seat with.

**Batch** – Activates batch processing mode.

**Interactive** – Activates interactive processing mode.

**Time (Min)** – Defines a wait time in minutes. The server you are requesting wait time on must have SmartPlant License Manager installed and a valid server license key assigned.

**Product Tag** – Use the drop-down list to select the appropriate product, as detailed in the following table.

Product Tags	Product Names
2D0	PDS 2D PID
2D1	PDS 2D
2D3	PDS IDM
3D	PDS 3D
4D	ISOGEN - Batch
5D	ISOGEN - Interactive
FWP	FrameWorks Plus
INK	SmartPlant Instrumentation (Currently Not Used)
INM	SmartPlant Instrumentation (INtools) Maintenance
INB (Provides access to SmartPlant Instrumentation modules.)	Project Merger  SAP Module  Dimensional Data Piping (DDP) Module  Telecom Module  DeltaV Catalog Manager  Yokogawa Catalog Manager  System 800xA Catalog Manager (ABB)  ExperionPKS Catalog Manager (Honeywell)

Product Tags	Product Names
INS	SmartPlant Instrumentation (INtools) Standard
INV	SmartPlant Instrumentation (INtools) View Only / API
PMD	SupportModeler for PDS
PMN	SupportManager for PDS
S3D	SmartPlant 3D
SDF	SDNF Import
SEB	SmartPlant Electrical SAP Module
SEI	SmartPlant Electrical Import Manager
SEL	SmartPlant Electrical
SIM	SmartPlant 3D PDS Model and Data Translators
SLA	SmartPlant Layout
SPPD	SmartPlant P&ID
SPR	SmartPlant Review
SRM	SmartPlant Review Modules
SSK	SmartSketch

3. Select your server name that automatically appears in the **Server name** field or select it from the drop-down list.
4. Select **Batch** or **Interactive**. To execute this option as a batch process, click the **Batch** option. The **Time (Min)** and **Product Tag** fields activate. Type the wait time in minutes.
5. Click the **Product tag** drop-down list and select the product tag.
6. Click **OK**.

The **SmartPlant License Manager Information** dialog box appears. If you are testing client-server communication, note the seat number in the dialog box. The seat number information will be used in the **Test Seat Release** command.

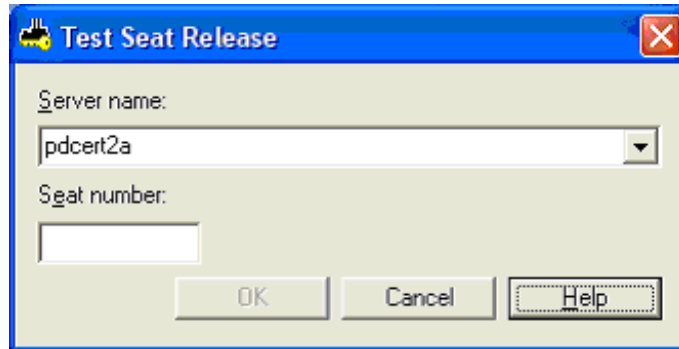
#### Related Topics

- *Configuring and Testing Licenses*, page 37
- *Displaying and Modifying PDS Daily License*, page 39
- *Logging Product Usage*, page 44
- *Testing for Seat Release*, page 43

## Testing for Seat Release

Use the following procedure to ensure that a seat has been unreserved or released from the license server.

1. Click **Test Seat Release** on the **Configuration and Testing** dialog box.



2. If the node name does not automatically appear in the **License Server** field, select it from the list or type the node name in the **License Server** field. Type the assigned number of the seat in the **Seat Number** field.
3. Click **OK**.

The **SmartPlant License Manager Information** dialog box appears with confirmation or error information.

### Related Topics


- *Configuring and Testing Licenses*, page 37
- *Displaying and Modifying PDS Daily License*, page 39
- *Logging Product Usage*, page 44
- *Testing for Reserving a Seat*, page 40

## Logging Product Usage

Use the following procedure to track product usage. If enabled, the Log Product Usage command tracks all licenses requested by a client. For example, when SmartPlant P&ID is opened on a client machine, a record is written to the log file. The log file also records closing SmartPlant P&ID on the client machine.

1. Select **Log Product Usage** on the SmartPlant License Manager main window and click **Select**. The **Log Product Usage** dialog box appears.



2. If you want to record product usage, click the **Start logging** option. To stop recording product usage, click **Stop logging**.
3. Click in the **Output file name** field and enter the path and a file name for the output file that will contain the logging information. You can also click the **Browse**  button and select an existing file. Logging information is appended to an existing file. You must have permission to write to this folder. If a UNC path is used, the domain user and the SmartPlant License Manager server (computer) must have write permission to the defined folder.

If the log file cannot be written to, the software attempts to write the record into a file in the /temp directory. The file is assigned the prefix SPLMLogData<number>. The record will not be recorded if the file cannot be written. If you are using the record's contents for another process, you must copy the record's contents while the file is open.

---

4. Click **OK**.

The **SmartPlant License Manager Information** dialog box appears with confirmation or error information.

 **Note**

- The Product Tag recorded in the log file is truncated to have up to 3 characters only. For example, for the SmartPlant P&ID application, the product tag is SPPD. This is recorded as SPP in the log file. The first column in the log file is called Operator. The value of Operator indicates the following:

1	Get license
2	Return license
11	No license available when requested
12	License returned by scavenge
31	Reserve license using SmartPlant License Checkout Utility
32	Returning a Checkout license

**Related Topics**

- *Configuring and Testing Licenses*, page 37
- *Displaying and Modifying PDS Daily License*, page 39
- *Testing for Reserving a Seat*, page 40
- *Testing for Seat Release*, page 43

## Monitoring SmartPlant License Manager Licenses and Keys

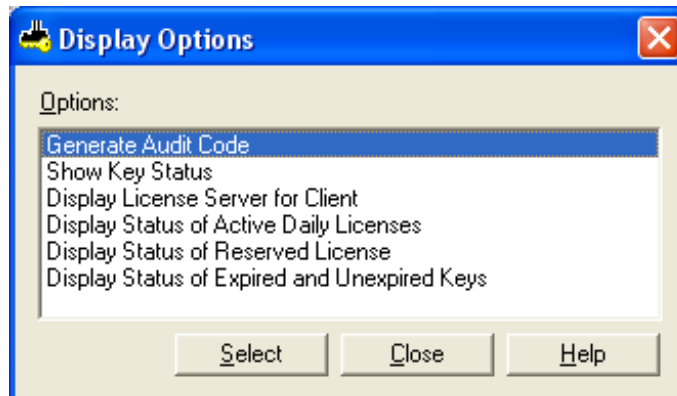
The **Display Options** commands display information in the SmartPlant License Information dialog box. In some fields on that dialog box, product abbreviations are used instead of the full product names. Here is a list of the products and their abbreviations as used in this dialog box.

Product Tags	Product Names
2D0	PDS 2D PID
2D1	PDS 2D
2D3	PDS IDM
3D	PDS 3D
4D	ISOGEN - Batch
5D	ISOGEN - Interactive
FWP	FrameWorks Plus
INK	SmartPlant Instrumentation (Currently Not Used)
INM	SmartPlant Instrumentation (INtools) Maintenance
INB (Provides access to SmartPlant Instrumentation modules.)	Project Merger SAP Module Dimensional Data Piping (DDP) Module Telecom Module DeltaV Catalog Manager Yokogawa Catalog Manager System 800xA Catalog Manager (ABB) ExperionPKS Catalog Manager (Honeywell)
INS	SmartPlant Instrumentation (INtools) Standard

Product Tags	Product Names
INV	SmartPlant Instrumentation (INtools) View Only / API
PMD	SupportModeler for PDS
PMN	SupportManager for PDS
S3D	SmartPlant 3D
SDF	SDNF Import
SEB	SmartPlant Electrical SAP Module
SEI	SmartPlant Electrical Import Manager
SEL	SmartPlant Electrical
SIM	SmartPlant 3D PDS Model and Data Translators
SLA	SmartPlant Layout
SPPD	SmartPlant P&ID
SPR	SmartPlant Review
SRM	SmartPlant Review Modules
SSK	SmartSketch

Use the following procedure to access the SmartPlant License Manager monitoring functions.

1. Click **Display** on the main **SmartPlant License Manager** dialog box. The **Display Options** dialog box appears.



### Related Topics

- *Displaying the Status of a License Key*, page 48
- *Displaying the Status of Active Daily Licenses*, page 49
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Displaying the Status of Reserved Licenses*, page 50
- *Generating an Audit Code*, page 48

## Generating an Audit Code

Intergraph Support Services uses the audit code from a customer's system for monitoring and troubleshooting customer system issues. For example, Intergraph can help determine proper licensing involving new servers and moving software. There is no need to generate an audit code unless Intergraph Support Services requests it.

1. Click **Generate Auditing Code** on the **Display Options** dialog box. (Or, type `pdlice - e` in a Command Prompt window.) The **SmartPlant License Manager Information** dialog box appears with the audit code.
2. Click **Save** to save the audit code information to a text file. Send the text file to Intergraph.

### Related Topics

- *Displaying the Status of a License Key*, page 48
- *Displaying the Status of Active Daily Licenses*, page 49
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Displaying the Status of Reserved Licenses*, page 50
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

## Displaying the Status of a License Key

Use the following procedure to verify the correct installation of a license key or to check the status of the currently installed license key.

1. Click **Show Key Status** on the **Display Options** dialog box. (Or, type `pdlice - f` in a Command Prompt window.)

The **SmartPlant License Information** dialog box appears with the following information: node, address, key type, installation date, number of licenses, expiration date, and daily licenses (if purchased). You can save this displayed information to a file, print the information, review on-line Help, or close the dialog box.

### Related Topics

- *Displaying the Status of Active Daily Licenses*, page 49
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Displaying the Status of Reserved Licenses*, page 50



## Displaying the License Server for a Client

Use the following procedure to display the list of license servers for a client.

1. Click **Display License Server for Client** on the **Display Options** dialog box. (Or, type `pdlice -l` in a Command Prompt window.)

The **SmartPlant License Information** dialog box appears.

### Related Topics

- *Displaying the Status of Active Daily Licenses*, page 49
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Displaying the Status of Reserved Licenses*, page 50
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

## Displaying the Status of Active Daily Licenses

Monitoring the use of PDS daily licenses includes information about daily licenses currently reserved, licenses currently active, and daily licenses available for future use.

Use the following procedure to display the status of the daily keys.

1. Click **Display Status of Active Daily Licenses** on the **Display Options** dialog box. (Or, type `pdlice -M` in a Command Prompt window.)

The **SmartPlant License Information** dialog box displays.

### Related Topics

- *Displaying the Status of a License Key*, page 48
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Displaying the Status of Reserved Licenses*, page 50
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

## Displaying the Status of Reserved Licenses

Monitoring the use of PDS daily licenses includes information about daily licenses currently reserved, licenses currently active, and daily licenses available for future use.

Use the following procedure to display the status of the daily keys.

1. Click **Display Status of Active Daily Licenses** on the **Display Options** dialog box. (Or, type `pdlice - M` in a Command Prompt window.)

The **SmartPlant License Information** dialog box displays.

### Related Topics

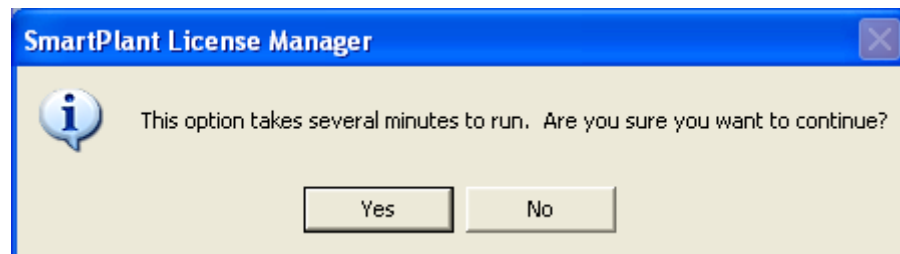
- *Displaying the Status of a License Key*, page 48
- *Displaying the Status of Active Daily Licenses*, page 49
- *Displaying the Status of Expired and Unexpired Licenses*, page 50
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

## Displaying the Status of Expired and Unexpired Licenses

Use the following procedure to list information about other license servers on your LAN. The displayed information includes the license expiration date, total licenses and available licenses, computer IP address, and computer name.

1. Click **Display Status of Expired and Unexpired License** on the **Display Options** dialog box. (Or, type `pdlice - B` in a Command Prompt window.)

A three-minute timer runs while SmartPlant License Manager waits for replies. It is possible that some computers may not reply during this three-minute period. A message box appears, reminding you that this option takes time to run.



2. Click **Yes** to continue.

The **SmartPlant License Manager Information** dialog box appears. It contains data about all license servers on your LAN. You can save its displayed information to a file, print the information, review on-line Help, or close the dialog box.

### Related Topics

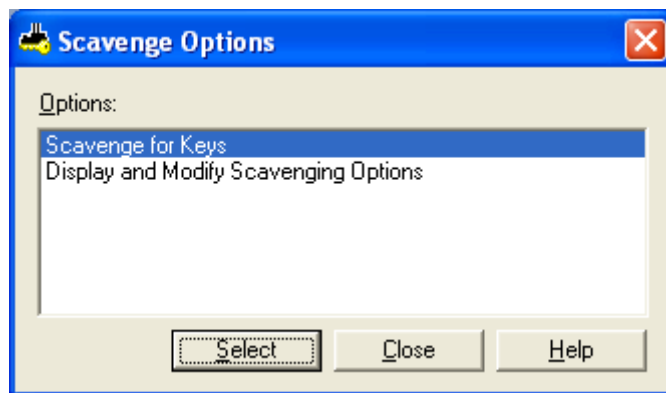
- *Displaying the Status of a License Key*, page 48
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 46

# Managing License Usage and Returning Unused Licenses

SmartPlant License Manager enables you to control license usage from the license server and to find (scavenge) and return unused licenses.

Use the following procedure to access the **Scavenge Options** dialog box.

1. Log onto the license server. (This option is available only on the license server.)
2. Click **Scavenge** on the main **SmartPlant License Manager** dialog box. The **Scavenge Options** dialog box appears.



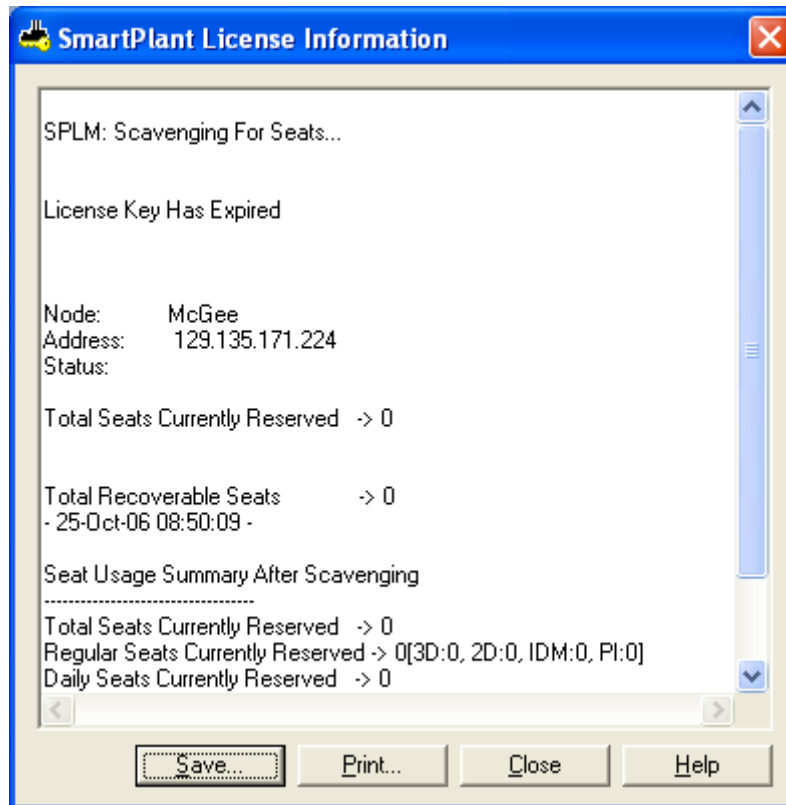
## Related Topics

- *Finding Unassigned Licenses*, page 52
- *Modifying and Displaying Scavenging Processes*, page 53

## Finding Unassigned Licenses

Scavenging for license keys finds licenses that have been reserved. This situation can happen when a computer fails while a license is reserved or an unexpected termination occurs.

1. Click **Scavenge for Keys** on the **Scavenging Options** dialog box. (Or, type `pdlice -n` in a Command Prompt window.) The **SmartPlant License Information** dialog box appears.



If a license remains reserved when you think it should have been returned, check to be sure the process identified with the process ID is legitimate. This may involve asking the user who is using the client node and checking to make sure that the process is still running by monitoring how much CPU time it is using.

If obtaining an available license is a higher priority than preserving an active process, you can kill the process using Task Manager so the license it is using is made available. Use this drastic measure only when other options to get the license returned have failed. You must be absolutely certain that the process in question is no longer needed.

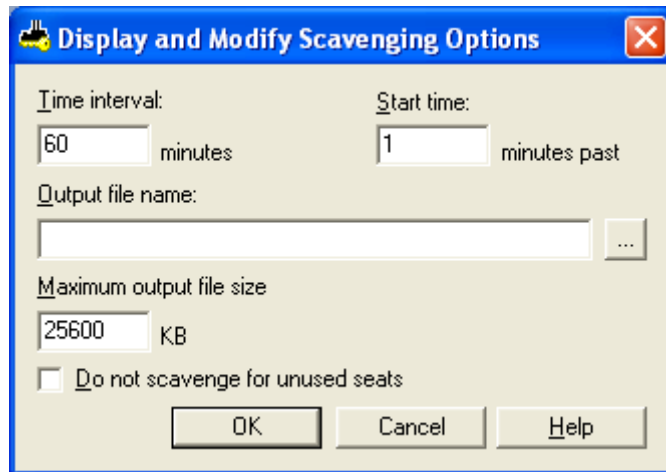
### Related Topics

- *Managing License Usage and Returning Unused Licenses*, page 51
- *Modifying and Displaying Scavenging Processes*, page 53

## Modifying and Displaying Scavenging Processes

Scavenging is automatically enabled for one minute past the hour.

1. Click **Display and Modify Scavenging Options** on the **Scavenge Options** dialog box. (Or, type `pdlice - N` in a Command Prompt window.). This command requires system administrator privileges. The **Display and Modify Scavenging Options** dialog box appears.



2. Set the applicable options.

**Time interval (minutes)** – Modifies/sets scavenging time in minutes.

**Start time (Minutes past)** – Sets a scavenging time to begin at any specified minute past the hour. Valid values are 0-59 minutes.

**Output file name** – Defines an output file name that contains your scavenging information. If you are defining the output file to a shared folder located on a different machine, write permissions must exist for the domain user and the SmartPlant License Manager server (computer).

**Maximum output file size** – Defines the maximum size of your output file.

**Do not scavenge for unused seats** – Click to place a check mark in the check box if you do not want the system to scavenge for unused seats.

3. Click **OK**.

### Related Topics

- *Finding Unassigned Licenses*, page 52
- *Managing License Usage and Returning Unused Licenses*, page 51

## Removing SmartPlant License Manager

Use this procedure with caution and only when you want to remove the complete SmartPlant License Manager product from your computer.

1. Click **Start > Control Panel**. The **Control Panel** window displays.
2. Click **Add or Remove Programs**.
3. Select SmartPlant License Manager.
4. Click **Remove**.

### **Related Topics**

- *Administrative Tasks*, page 37

# Frequently Asked Questions (FAQ)

Refer to the SmartPlant License Manager FAQ on the Web in the eCustomer system for the most current FAQ. It is continually updated. Click <https://crmweb.intergraph.com> and select **Products > SPLM/PD\_Lice**.

## **Related Topics**

- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

## Purchasing Licenses FAQ

### **Do I have to request a software upgrade from my local office before I request a license?**

No, you can request licenses without upgrading the software. If you are upgrading software, you must request the upgrade before you request licenses. A license request does not include a software upgrade and a software upgrade does not include a license request.

### **Is there a form to use for requesting licenses?**

Yes, there is a PDF form and the same content in an Excel spreadsheet. All products except INtools 6.0 and older use the same form, which is found on each product's Web page. For example, go to the following Web page for SmartPlant Review and click SmartPlant License Manager Request Form.

[http://www.intergraph.com/smartplant/review/Additional\\_Information.asp](http://www.intergraph.com/smartplant/review/Additional_Information.asp)

The following Web page lists all products:

<http://ppm.intergraph.com/products/>

INtools 6.0 and older uses its own form, also found on the INtools Web page. Both forms are included in the SmartPlant License Manager Installation and User's Guide, are delivered with the licenses, and are available on the Web in the eCustomer system. Click in the Product Documentation link under the Search entry box.

<https://crmweb.intergraph.com>

### **How do I purchase licenses at the eLicense web site?**

Contact the local Intergraph office or access the eLicense web site to request an upgrade of the lease profile to include purchase licenses.

<https://ppmapps.intergraph.com/elicense/>

### **Where can I find SmartPlant License Manager and other products to download?**

SmartPlant License Manager is available from the following web page:

<https://crmweb.intergraph.com>

Select **Self Service > Download software updates > Products > SPLM (PD\_Lice) > SmartPlant License Manager**. You do not need a serial number to install SmartPlant License Manager. For more information, refer to Using eLicense to Generate SmartPlant License Manager Keys.



**Can I divide the licenses for one LAN into several license servers for the purpose of managing project access, for example, or as coverage in the event that my license server goes down?**

Yes, you can divide the licenses. You need a form for each license server.

**Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

## General Topics FAQ

Refer to the SmartPlant License Manager FAQ on the Web in the eCustomer system for the most current FAQ as it is continually updated. Click <https://crmweb.intergraph.com> and select **Products > SPLM/PD\_Lice**.

### **What is SmartPlant Licence Manager (SPLM) and what happened to PD License (PD\_LICE)?**

SPLM is an upgrade to PD LICE. In fact, SPLM is just the latest version of PD\_LICE with a new name.

### **Is SPLM an upgrade for PD\_LICE?**

Yes, SPLM is an upgrade for PDLICE.

### **Can I have PD LICE and SPLM installed on the same machine?**

No. It's required to uninstall PD LICE before installing SPLM.

### **I currently have SPLM 8.0 installed. Can I install SPLM 9.0 on top of the previous version? What will happen with my current license key?**

Yes. You can install SPLM 9.0 on top of SPLM 8.0 and the license key won't be affected. Also you can use the same Machine ID generated with SPLM 8.0 to generate any new license key.

### **How can I find the version of SPLM I have installed?**

You can find that information in the readme.txt located in the product directory (by default, C:\win32app\INGR\SPLM) or you can select HELP à About Smartplant License Manager located in the top left corner of the SPLM GUI.

### **Why did Intergraph change the name of PD LICE?**

The name was changed to SPLM (SmartPlant License Manager 2007 (9.0)) to better reflect its usage since now more and more SmartPlant products have adopted this licensing method.

### **What product licenses are managed with SPLM?**

Licenses managed by SPLM 2007 (9.0) include PDS 3D, PDS 2D, FWP, SDNF, ISOGEN Batch, ISOGEN Interactive, SmartPlant Review and modules, SupportModeler, SupportManager, SmartPlant PID, SmartPlant Instrumentation, SmartSketch, SmartPlant Electrical, SmartPlant Layout and SmartPlant 3D. Additional product licenses will be added in future releases.

**Do I need to upgrade all machines immediately?**

License servers need to be upgraded when new license keys are requested. The same version (preferably the latest version) of SPLM needs to be installed on the license server and clients. You cannot run a newer version of SPLM on a client with an older version of SPLM server. The latest SPLM will also support existing older versions of application software running on the clients. PD LICE on the client machines will need to be updated to SPLM when the client applications are upgraded to the latest releases and/or fixes.

**Do I still send Intergraph my license server TCPIP address?**

You will be asked to send Intergraph a machine identifier (Machine ID) that is created from the utility run on the license server. The utility is named "SPLMGenMachineID.exe" and is included in the installation of SPLM or can be downloaded separately from Intergraph software distribution.

**What is the Machine ID?**

The Machine ID is a collection of hardware and software identifiers which together allow a machine to be uniquely identified and used to manage licenses. The Machine ID is used to generate the license key and is not useful to other software programs.

**Do I need to have SPLM installed in order to generate the Machine ID?**

No. The utility used to generate the machine identifier is included in the SPLM installation but can also be downloaded separately without installing SPLM. It is used to generate the Machine ID, which is used to produce the license key for the license server. SPLM and the new licenses may be installed at the same time, minimizing disruptions or down times. Please read the GenMachineID.doc for more details regarding generating the machine identifier and requesting a new license key.

**Do I need to uninstall the previous license key when I install a new license key for the same Machine ID?**

Once you have installed a SPLM key but wish to request a new key for the same Machine ID, you should not remove the old SPLM Key. Instead, you just over install (overwrite) the old SPLM key with the new SPLM key. If you uninstall the old key, you will need to generate a new Machine ID and request a new key.

**Will providing the Machine ID make my machine less secure?**

No. The Machine ID allows the license manager to uniquely identify your machine from a collection of hardware and software identifiers without explicitly publishing your machine's TCPIP address. Since the machine identifier cannot be used like a TCPIP address can, it is actually more secure than publishing your machine's TCPIP address.

**What are the hardware recommendations regarding the SPLM server?**

SPLM Server should be installed on a stable, single node, hardware configuration (such as a simple PC), with a static IP address, because license key installation and license seat usage authentication depends on the information gathered from the physical hardware. Any automated, intentional or unintentional changes that cause the hardware information not to match with the information used to generate the license key will result in a failure of the authentication process.

Virtual, shadowed, mirrored, dynamic, or distributed hardware configurations that may have worked with PD\_Lice Server will not work with SPLM Server. This can include terminal (application) servers, networked and distributed storage management systems, etc. When these specialized systems occur in the user's network, SPLM Server should be installed on a separate stable hardware configuration system. The SPLM Server system should be situated on the user's network where it can be accessed by all systems that are running application software that relies on the SPLM Server for license management. Multiple SPLM Servers can be used in the users' network as long as each system is a unique system/installation. If SPLM Server systems are used to clone other hardware systems after the license key has been installed then the license management will fail on the cloned system. Each SPLM Server system/installation requires its own unique license key.

**What is license stacking?**

This feature was introduced in SPLM V8 and . it will allow the administrator to schedule the installation of a new license key in a future date. This gives system administrators much more freedom and helps ensure no down time.

**Where can I find SmartPlant License Manager 2007 (9.0) and other products to download?**

SmartPlant License Manager 2007 (9.0) is available from the following web page:  
<https://crmweb.intergraph.com>

Select Downloads > Products > SPLM/PD\_LICE SmartPlant License Manager 2007 (9.0). You can also download the current version of SPLM from eLicense:  
<http://ppmapps.intergraph.com/elicense> You do not need a serial number to install SmartPlant License Manager 2007 (9.0).

**Can I divide the licenses for one LAN into several license servers for the purpose of managing project access, for example, or as coverage in the event that my license server goes down?**

Yes, you can divide the licenses. You will need to fill out a form for each license server.

**What happens if I install the new license key prior to expiration of the old license key?**

The new license will overwrite the existing key independent of the expiration date. You can only over install a key if the new key has at least the number of seats which are currently in use during the installation of the new key. For example, currently, five seats (three PDS and two SPPID seats) are reserved. The new key allows for five PDS seats and one SPPID seat. The new key will not install because there are two seats currently reserved of SPPID in the old key, but only one SPPID seat available in the new key. To allow for installation of this key, one of the SPPID seats must be returned.

**Will my existing key still run if I regenerate the Machine ID?**

Yes, but you will not be able to reinstall the old key. Instead you will need to request a new key for the new machine identifier.

**Can I install SPLM on top of an existing PD\_LICE installation?**

No, you will need to remove PD\_LICE before you can install SPLM.

**How do I remove SPLM?**

Select **Start > Control Panel > Add/Remove** programs. Please note, after you remove SPLM you will need to generate a new Machine ID and request a new key.

**How do I remove PD\_LICE?**

Select **Start > Programs > PDLICE > Remove**.

**Can SPLM be installed on a laptop computer?**

Yes.

Download the latest SPLM software from the eCustomer Web Site. ([https://crmweb.intergraph.com/ecustomer\\_enu/start.swe?SWECmd=Start&SWEHo=crmweb.intergraph.com](https://crmweb.intergraph.com/ecustomer_enu/start.swe?SWECmd=Start&SWEHo=crmweb.intergraph.com)) and Install.

Prepare the laptop for machine id generation. Disable all the network connections except the loopback adapter before generating the Machine ID. Do not attempt to generate the Machine ID more than once. (Refer to the corresponding section in the SPLM Installation and User Guide about how to set up the loopback adapter.)

Select Generate Machine ID from the Intergraph License Manager program group.

Send the Machine ID output to Intergraph to request a license key.

If all the previous steps described in this section were performed correctly, SmartPlant License Manager should work if the laptop is connected to the network or not. No extra steps are required when the laptop is connected back to the network.

### **Can I install SmartPlant License Manager on a laptop with a Cingular Air Card?**

The following setup steps are required.

The laptop has SPLM server up and running.

Install Cingular communication manager software and reboot the machine. This is required by the application. - SPLM will fail reserving a license seat.

Insert the Cingular Air Card in the slot and Internet works fine.

Uninstall the Acceleration module on Cingular communication manager.

Reboot the machine.

### **What products are new to SmartPlant License Manager 2007 (9.0)?**

SP3D and SP Layout V7 are now utilizing SPLM.

SmartSketch 5.0/SP1 and SmartPlant Review Modules started using SPLM version 8 and above. The Plant Design User's Guide lists compatible software products and versions. Not all SmartSketch 5.0/SP1 installations require SmartPlant License Manager 2007 (9.0). Ask your System Administrator or contact Intergraph Support Services if you have a question about SmartSketch licensing.

### **Is the SmartPlant License Manager 2007 (9.0) User's Guide delivered with the software products?**

No. The SmartPlant License Manager 2007 (9.0) User's Guide (document number DPDS3PB200019x) is included on the SPLM product CD only. The document is also available with the product documentation at the following web site: <http://crmweb.intergraph.com> The document explains the features, setup options, installation, license control, software messages, and troubleshooting. It also includes samples of the online license request forms.

### **Where is SmartPlant License Manager delivered? Where is the SmartPlant License Manager documentation available?**

SmartPlant License Manager 2007 (9.0) is on its own product CD, which is delivered with each applicable product. It is no longer delivered on other product CDs. SmartPlant License Manager product documentation is delivered with SPLM and is also available on eCustomer at <http://crmweb.intergraph.com/>. The document explains the features, setup options, installation, license control, software messages, and troubleshooting. It also includes samples of the online license request forms.

**What is a license server?**

The license server is the computer where the license key is loaded; it can be a standard computer or a server. The license key tells the license server how many licenses it can issue. Clients of a license server are computers where SmartPlant License Manager 2007 (9.0) is installed and pointing to the server. The computer where you start the software (such as SP3D or SmartPlant P&ID) asks the license server for a license. If a license is available, the license server provides it. If all licenses are in use, the client is not granted a license.

**Do I have to have one license server for each LAN?**

No, your configuration is entirely up to you. A VPN (Virtual Private Network) connection will be required if you want to connect to a license server that belongs to a different LAN.

**How are the number of licenses for a given license server determined?**

The number of licenses covered by a license key equals the total number of licenses that you have purchased or are leasing for each LAN ID listed for that license server. Intergraph records determine the correct number of licenses for the key.

To change the number of licenses for a LAN, use the License Key Request Forms available at [http://www.intergraph.com/pds/Additional\\_Information.asp](http://www.intergraph.com/pds/Additional_Information.asp).

Sending this form does not change your number of licenses; it notifies Intergraph that you want to do so. A valid purchase order is required to increase the number of licenses for your LAN.

**How can I see the number of licenses?**

On your license server, click **Show Key Status** on the **Display Options** dialog box to show the status of your keys.

**Is there a limit for the number of seats that can be generated per key?**

The limit is 2000 seats per license key.

**Does the installation date have to be precise?**

The key can be installed any time during the 120-hour period that begins with the installation date you provide. For example, if you request 01-July-2005 as the installation date, the key can be installed on 01-July, 02-July, 03-July, 04-July or 5th of July.

**Can I make an educated guess at my installation date?**

Yes. Intergraph will provide a key within 48 hours of receipt of your request (via mail or phone). Be sure that the date you request is the actual date that you will install the key, making sure that all necessary software is available and loaded before that date. We request that you notify us as early as possible.

If you are consolidating license server administration on one license server for multiple LANs, use the form in the Plant Design Licensing Guide. You can also request to have access to eLicense, which will allow you to generate your own keys.

For further information regarding eLicense please contact your local Intergraph office.

**What happens if my licensing server goes down?**

You will be unable to reserve licenses from this server until it is back in use. Processes that already have licenses reserved are not affected by the fact that the license server is unavailable. In extreme situations, it is possible to request emergency license from Intergraph. Contact your local Delivery support representative for more information.

**What happens if the license server is rebooted in the middle of my design session?**

Nothing. Licensing does not depend on maintaining a continuous communication link to the license server.

**What happens if my license server goes down for an extended period of time?**

Intergraph can provide temporary emergency license. Contact your local Delivery support representative for more information.

**What happens if my local computer goes down after I've obtained a license?**

The scavenge command should be able to recover the license if the application and all the processes are closed.

**I am running out of licenses earlier than I believe I should be. How can I troubleshoot to understand what is happening?**

Have your users click Scavenge for Keys on the Scavenge Options dialog box or you can type `pdlice -n` in a Command Prompt window.

If you think that client nodes are improperly holding onto licenses, activate the generate scavenge log file. The report log will show you which client nodes have licenses reserved. If a client computer has no plant design-related activity and it is still holding licenses, rebooting that client and then scavenging from the server may free some licenses.



If possible, find out what was processing when the job stopped. This information can help you and/or Intergraph determine the underlying cause of the termination. Save the output of any scavenging process that returns a license. This information will provide the reasons why the license was returned. The output of the scavenger includes the following information: nodename, product tag, batch mode (Yes/No), process ID, and reserved time.

**How can I tell who is using a license?**

Click **Display Status of Reserved License** on the **Display Options** dialog box or look at the SPLM log.

**We installed a key for three licenses, but we can operate only two licenses at the same time. Why?**

There can be several reasons.

Click Display Status of Reserved License on the Display Options dialog box to determine the number of licenses that your key contains.

Click Scavenge for Keys on the Scavenge Options dialog box to scavenge for the third license that you are unable to use.

Verify that clients and servers can telnet to each other. Look for anomalies such as two nodes on the network with the same name or the reuse of an old name for a new computer, but with some traces of the old computer still existing in files on the network.

**Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

## PDS, FrameWorks Plus, and ISOGEN FAQ

**I am currently using PD\_Lice on my license server. Can I still register a new key for PD\_Lice?**

No. All new keys for Process, Power, and Marine software that utilize SmartPlant License Manager software require SmartPlant License Manager 8.0.2 or later on the license server.

**What version of SmartPlant License Manager is required for PDS 8.0?**

PDS 8.0, SmartPlant Review 6.1, and SmartSketch 5.1 require SmartPlant License Manager 8.0.2 or later on the client and server.

**Can I use different versions of SmartPlant License Manager?**

To guarantee compatibility, it is recommended to install SmartPlant License Manager 8.0.2 or later on a client and the server.

**SmartPlant License Manager 2007 (9.0) changed to include more products as of 9.0. How is Intergraph notifying its PDS U.S. customers about the use of SmartPlant License Manager 2007 (9.0)? Some customers may still be using PDS 6.4.1 / 7.0 / 7.1. Is there an official document from Intergraph to its customer to let them know about this change?**

Intergraph Software Distribution will notify PDS customer contacts. The eLicense Web page for requesting keys will also include a notice.

**How many licenses are recommended as a minimum for each operator (user) to work interactively as well as to start batch processes such as isometrics, reports, model creations, and so forth?**

There is no standard recommendation. If you are working in interactive mode only, then you only need one license. If you often run batch jobs while also working interactively, then you need two or more (although batch jobs can be scheduled to occur during off hours). Look closely at the site workflow to determine whether different formulas may be required within a customer site for different departments. For example, in a piping department where designers only are considered, the workflow requires four licenses for every three people.

**How are ISOGEN licenses handled?**

SmartPlant License Manager requires the use of a license to run ISOGEN, a third-party product. Interactive isometric generation uses one Interactive ISOGEN license, while batch isometric generation uses one Batch ISOGEN license and one PDS 3D license.

**How are batch jobs handled?**

Batch jobs request a license at the time they are scheduled to run. If a license is not immediately available, the jobs wait until a license is available, and then the jobs start.

**Will an ISOGEN batch job take an interactive license?**

No. The batch job will not take an interactive license and an interactive job will not take a batch license.

**What is required to extract an Isometric drawing?**

Extracting an isometric drawing requires either an SBISO or SIISO license in addition to a 3D license.

**How can I find the number of remaining PDS daily keys?**

On the license server, click **Display Status of Active Daily Licenses** on the **Display Options** dialog box to show the number of your remaining daily keys.

**How can I activate the use of daily seats?**

You will need to enable the options to allow interactive and batch jobs to start a daily seat located under **Configure and Test > Display** and modify license usage

**How can I save a weekly record of PDS daily keys?**

You can save the output from the auditing process. Click **Display Status of Active Daily Licenses** on the **Display Options** dialog box to show the number of your remaining PDS daily keys. Click **Save** to display the **Save File** dialog box. Select a folder and file name to save the information to a file that you can use for later reference. Click **OK** to save the file.

**Why does the plot command, in PD\_Draw, for example, require a license? Isn't plotting a non-PDS function?**

Plotting is not a PDS function. When a PDS module such as PD\_Draw starts a batch job, there are many processes that must complete before the job is submitted to the plotter. In the case of PD\_Draw, the software is doing tasks such as mounting files, setting their levels, and so forth. These processes must complete before the job is actually submitted to the plotter. After the job is submitted to the plotter, PD\_Draw is no longer executing a batch job and the license is released. PDS does not use a license after it has completed its work and submitted the job to the plotter.

**I expect PD\_ISO to release a license as soon as the .idf file is generated, but this does not seem to be the case. Why not?**

Batch isometric generation uses a PDS license from the time the batch job first starts pdsidf until the project database has been updated for the last line in a batch job. PDS is working until the last line has been processed. In addition, a batch isometric generation uses a Batch ISOGEN license. Refer to the *PDS ISOGEN Reference Guide* for a basic description of the processes involved during a batch isometric run.

**I purchased PDS, but I am not on maintenance and need to move my key to a new TCP/IP address. Since I cannot access the eCustomer Web site, how do I get the SmartPlant License Manager software?**

Call Huntsville Support at 1-800-766-7701 or the local Intergraph office. For U.S. customers, Huntsville Support will provide the software via e-mail or the Intergraph external ftp site. For international customers, the local Intergraph office can download SmartPlant License Manager from eCustomer Web site and provide it to customers.

**My company purchased copies of FrameWorks Plus Standalone in addition to the PDS licenses that we purchased. When I enter FrameWorks Plus through PD\_Shell, a PDS license is used. Why?**

When you access any module or product through PD\_Shell, you are using it as a PDS module and thus a PDS license is used.

**Does a FrameWorks Plus 7.2 or later Standalone license require SmartPlant License Manager? Can I still use my FrameWorks Plus Standalone license without taking a PDS 3D license?**

FrameWorks Plus 7.2 standalone licenses are controlled separately from PDS 3D licenses. Therefore, FrameWorks Plus standalone requires a separate license key from PDS 3D. However, as in previous releases, a PDS 3D license is used when FrameWorks Plus is installed with a PDS serial number.

**In PDS, is a license necessary to start only PD\_SHELL, or does the licensing process begin with choosing a module such as Design, Isometrics, or something else?**

Licensing begins when you actually select a module, such as PDS2D, PD\_Design, and so on.

**Working interactively in ISOGEN requires one license. Is it possible to start batch processes for a single workstation with one license?**

You can schedule batch processes to run when the interactive license is not being used.

**Is it possible to have purchased and leased licenses served from only one license server?**

Yes. The licensing software does not differentiate between leased or purchased licenses. It only considers what is executing on the LAN.

**Which products can have daily licenses?**

Only PDS has daily licenses.

**I have installed SmartPlant License Manager using a computer name of H2U8R3. Since installing SmartPlant License Manager, I have changed my old computer name to a new, more sensible name. SmartPlant License Manager still remembers my old computer name. Where does the system store this information and how can I change it?**

Computer names and TCP/IP addresses reside in a DNS (Domain Name Service) database. To specify the DNS database or TCP/IP address, the Network Connections in the Control Panel.

**My PDS PID Standalone licenses are never used. Why?**

Verify that your PDS PID Standalone product was installed using your PDS PID Standalone serial number.

**Which versions of PDS are compatible with SmartPlant License Manager?**

All PDS versions starting with 7.0 are compatible with SPLM 9.0. Please contact your PDS support group if you are still running PDS 6.4.1 or older.

**I am working on PDS 6.4 and do not want to upgrade to 7.x for this project. However, I would like to take advantage of the current 7.2 lease options. Is Batch ISOGEN 7.2 or Interactive ISOGEN 7.2 compatible with PDS 6.4?**

No. PDS 6.4 requires the ISOGEN that was delivered with PDS 6.4. PDS 7.2 requires ISOGEN 7.2 or later. A customer who wants to lease ISOGEN must upgrade to 7.2 or later.

**I have 10 licenses of PDS 7.0 lease, 2 licenses of SmartPlant Review 4.x, 1 ISOGEN license that was included with the PDS 7.0 license, and 2 licenses of FrameWorks Plus 7.0. Can I add another 2 licenses of PDS 7.0?**

Yes, new 7.0 licenses can be added. The version 7.2 or later license key will check the older versions of PDS. However, older versions of SmartPlant Review and FrameWorks Plus will not be controlled SPLM and will have to use their previous licensing model. New licensing for ISOGEN, FrameWorks Plus, SmartPlant Review and SDNF Import will only apply after you upgrade to the new versions of these products.

**Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

## SmartSketch FAQ

### **What's the first release of SmartSketch that requires SmartPlant License Manager 2007 (9.0)?**

Some installations of SmartSketch 5.0 SP1 require SmartPlant Licensing Manager, but not all of them. Check with your System Administrator or contact Intergraph if you are not sure about installation.

Beginning with v5.0/SP1, Intergraph sells and leases both SmartSketch and SmartSketch with SPLM. Purchasing and/or leasing SmartSketch with SPLM is optional.

### **Can SmartSketch 5.0 SP1 or later still be used on a laptop with SmartPlant License Manager 2007 (9.0)?**

Yes, there are 2 options:

The SmartPlant License Checkout Utility can be used to *check out* a SmartSketch license for remote use for up to 30 days. Note: This option is only supported in SmartSketch versions 2007 (5.2) or greater.

Install SmartPlant License Manager 2007 (9.0) and latest SPLM on the laptop and use the laptop as the license server. SmartPlant License Manager 2007 (9.0) can be installed from the SPLM product CD or downloaded from Ecustomer. You must request a license key for the laptop.

### **Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant 3D and SmartPlant Layout FAQ*, page 74
- *SmartPlant Instrumentation and SmartPlant Electrical FAQ*, page 73
- *SmartPlant Review FAQ*, page 72

## SmartPlant Review FAQ

### **Can SmartPlant Review 5.0 or later still be used on a laptop with SmartPlant License Manager 2007 (9.0)?**

Yes, there are 2 options.

1. The “SmartPlant License Checkout Utility” can be used to “check out” a SmartPlant Review license for remote use for up to 30 days. Note: This option is only supported in SmartPlant Review versions 6.1 or greater.
2. Install SmartPlant License Manager 2007 (9.0) and latest SPLM on the laptop and use the laptop as the license server. SmartPlant License Manager 2007 (9.0) can be installed from the SPLM product CD or downloaded from Ecustomer. You must request a license key for the laptop.

### **Is SmartPlant Review 5.0 compatible with PDS 6.4.1 or later?**

The .dri and .drv files generated by all PDS versions are compatible with SmartPlant Review 5.0 or later.

### **Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant 3D and SmartPlant Layout FAQ*, page 74
- *SmartPlant Instrumentation and SmartPlant Electrical FAQ*, page 73
- *SmartSketch FAQ*, page 71



# SmartPlant Instrumentation and SmartPlant Electrical FAQ

**When SmartPlant Instrumentation or INtools is on a machine that is disconnected from the network without exiting the product, how long is the license held?**

16 hours.

**Which versions of SmartPlant Electrical and SmartPlant Instrumentation (formerly INtools) that uses SmartPlant License Manager 2007 (9.0)?**

Starting with SmartPlant Electrical 3.5 and SmartPlant Instrumentation 7.0 the latest version of SPLM is required. Use the SmartPlant license request form to request license keys for SmartPlant Instrumentation, not the INtools license request form.

## **Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant 3D and SmartPlant Layout FAQ*, page 74
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

# SmartPlant 3D and SmartPlant Layout FAQ

## **What functions take a SmartPlant 3D seat?**

Each SmartPlant 3D tasks (each instance of the taskhost.exe process) take one SP3D seat. Note that when doing a Paste/Restore operation, you open two SP3D processes, and therefore this operation takes two SP3D seats. In addition, three functions take a separate additional seat: Remote IFC (Interference Checking), Batch Server, and Global Workshare Duplication and Synchronization service.

## **What about SmartPlant Layout?**

To use SmartPlant Layout, you must start SmartPlant 3D first. This takes one SmartPlant 3D seat and one SmartPlant Layout seat. This matches what you get when you purchase one license of SmartPlant Layout. You receive one seat of SmartPlant 3D and one seat of SmartPlant Layout.

## **Are there other activities in SmartPlant 3D seat that require a special seat?**

The only other activity that requires a different seat is importing XML files (that came from PDS export, or from other systems) into SmartPlant 3D. This requires a SmartPlant 3D Import seat.

## **Can SmartPlant 3D and SmartPlant Layout work with any version of SPLM?**

No. Both products only work with version 9.0 (and future versions) of SPLM.

## **If all my SmartPlant 3D seats are already in use, can a new instance of SP3D use another type of seat?**

No. SmartPlant 3D only works with a SP3D seat.

## **Related Topics**

- *Frequently Asked Questions (FAQ)*, page 55
- *General Topics FAQ*, page 58
- *PDS, FrameWorks Plus, and ISOGEN FAQ*, page 66
- *Purchasing Licenses FAQ*, page 56
- *SmartPlant Instrumentation and SmartPlant Electrical FAQ*, page 73
- *SmartPlant Review FAQ*, page 72
- *SmartSketch FAQ*, page 71

# Troubleshooting and Error Messages

The following provides a list of SmartPlant License Manager error messages with an explanation of each error. Also, the Troubleshooting topic provides solutions to issues than can occur.

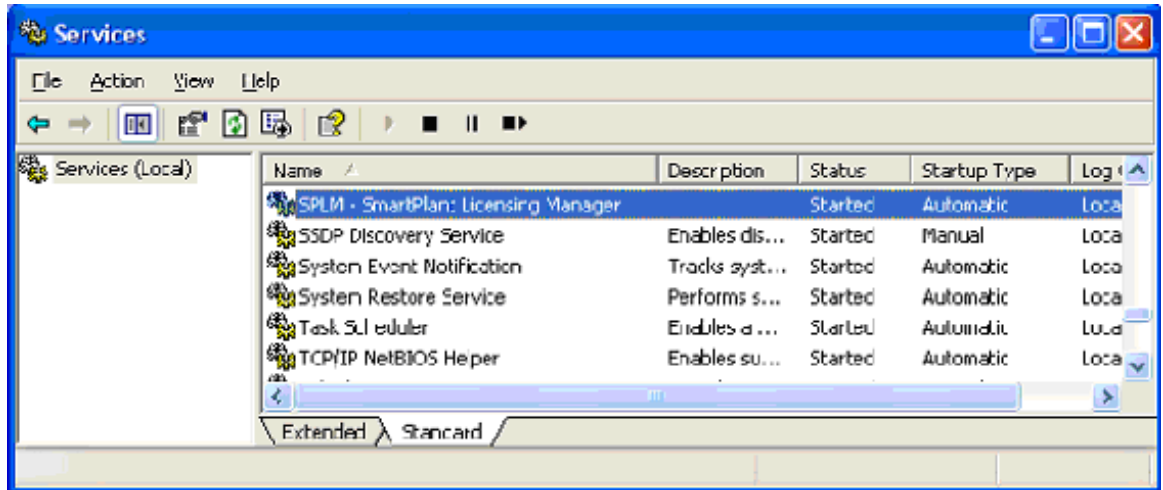
## Related Topics

- *Error Messages*, page 83
- *Troubleshooting*, page 75

## Troubleshooting

### Verify that the SmartPlant License Manager service is started

1. Click **Start > Settings > Control Panel > Administrative Tools > Services**.
2. In the **Services** dialog box, scroll down the list and verify that the SPLM - SmartPlant License Manager service has a status of **Started** and that Startup is set to **Automatic**.



## Installing and Starting the SmartPlant License Manager Service

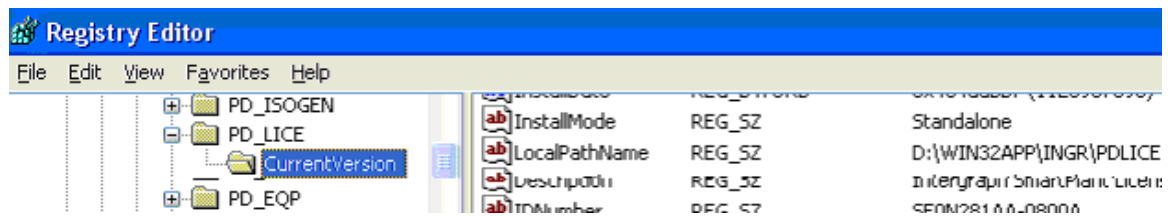
SmartPlant License Manager installs and starts the SmartPlant License Manager service during installation, so Administrators will not normally need to use this command.

Use the following procedure to install and start the SmartPlant License Manager service. This command requires system administrator privileges.

1. On the **Install and Remove Options** dialog box, click **Install and Start Licensing Service**. (Or, type `pdlice - I` in a Command Prompt window.) A message box confirms that the service has been installed and started.

## Verify that the registry keys have been created

1. In a Command Prompt window, type `regedt32`. Several Registry windows appear.
2. Select the `HKEY_LOCAL_MACHINE` window.



3. Expand the `SOFTWARE\Intergraph\PD_LICE\Current Version` folder to display information about the current version of SmartPlant License Manager.
4. Expand the `SOFTWARE\Intergraph\Pdlice_etc` folder. You should have a `Server_names` file. You may also have a `pdlice_key_S` file if it is a license server.

## Stopping the SmartPlant License Manager Service

In the rare instance when the SmartPlant License Manager executable stops running, you can restart it by stopping and restarting the SmartPlant License Manager service. Use the following procedure to stop the SmartPlant License Manager service. This command requires system administrator privileges.

1. On the **Install and Remove Options** dialog box, click **Stop and Remove Licensing Service**. (Or, type `pdlice - R` in a Command Prompt window.) A message box appears to ensure that you want to remove the service.
2. Click **Yes** to stop the licensing service on this computer. Click **No** to dismiss this dialog box and keep the licensing service running on the computer. If you click **Yes**, a message confirms that the licensing service is stopped.
3. Restart the SmartPlant License Manager service as explained in *Installing and Starting the SmartPlant License Manager Service*.

## License Timer is Newer Than License Server System Clock

This error indicates that SmartPlant License Manager will not work until the system clock time catches up to or passes the timestamp on the license file. In other words, the system clock time has been moved forward in time. When the system clock is returned to the correct time, SmartPlant License Manager stops and this error message displays. To fix the error, you need to remove the license key. Then, generate a new machine ID and request and install a new license key.

### Related Topics

- *Error Messages*, page 83
- *Troubleshooting and Error Messages*, page 75

## Installing SmartPlant License Manager on a Standalone System

SmartPlant License Manager requires a static IP Address in the license server. If it is not possible to have a static IP Address on your system, you can install a virtual network adapter. The following procedure explains how to install and configure Microsoft Loopback Adapter.

### Installing Microsoft Loopback Adapter using Microsoft Windows XP

1. Log on to the computer using the Administrator account.
2. Click **Start > Control Panel**.
3. If you are in Classic view of the Control Panel, click **Add Hardware**. If you are in the Category View, click **Printers and Other Hardware**.
4. Select **Add Hardware** under See Also in the left pane.
5. The **Add Hardware Wizard** appears.
6. Click **Next**.
7. Click **Yes, I have already connected the hardware**.
8. Click **Next**.
9. Select **Add a new hardware device**.
10. Click **Next**.
11. Click **Install the hardware that I manually select from a list**.
12. Click **Next**.
13. Click **Network adapters**.
14. Click **Next**.
15. In the **Manufacturer** list, click **Microsoft**.
16. In the **Network Adapter** list, click **Microsoft Loopback Adapter**.
17. Click **Next**.
18. Click **Finish**.

For more information refer to the Microsoft Web site (<http://support.microsoft.com/>). You can search for the following articles: How to install the Microsoft Loopback adapter in Windows XP and How To Install Microsoft Loopback Adapter in Windows 2000.

#### Related Topics

- *Configuring Windows Firewall for Windows XP and Windows 2003*, page 81

## Configuring a Static IP Address for the Microsoft Loopback Adapter

1. Log on to the computer using the Administrator account.
2. Click **Start > Control Panel**.
3. Double-click **Network Connections**. The **Network Connections** dialog box displays.
4. Right-click on the Loopback Adapter installed previously and select **Properties**. By default, the loopback adapter name is Local Area Connection # where # is the adapter's number.
5. Select **Internet Protocol (TCP/IP)**.
6. Select **Properties**. The **Internet Protocol TCP/IP Properties** dialog box appears.
7. Click **Use the following IP address**.
8. Type in the IP address, for example, 192.168.0.1.
9. Type in the Subnet mask, for example, 255.255.255.0.
10. Click **OK** to dismiss the **Internet Protocol TCP/IP Properties** dialog box.
11. Click **OK** to dismiss the **Loopback Adapter Properties**.

### Related Topics

- *Configuring Windows Firewall for Windows XP and Windows 2003*, page 81
- *Installing SmartPlant License Manager on a Laptop and Generating the Machine ID*, page 80
- *Installing SmartPlant License Manager on a Standalone System*, page 78

## Configuring Advanced Settings for the Microsoft Loopback Adapter

This section explains how to move the Microsoft Loopback Adapter to the top of the list of network connections so the Machine Identifier will gather the information from the Loopback Adapter to generate the code.

1. Click **Start > Control Panel**.
2. Double-click **Network Connections**. The **Network Connections** window displays.
3. Select **Advanced > Advanced Settings**. The **Advanced Settings** dialog box displays. The **Adapters and Bindings** setting displays a list of connections. These connections are listed in the order they are accessed by network services.
4. Click to highlight the **Loopback Adapter**.
5. Click the up arrow.
6. Click **OK** to dismiss the **Advanced Settings** dialog box.
7. Close the **Network Connections** window.

### **Related Topics**

- *Configuring a Static IP Address for the Microsoft Loopback Adapter*, page 79
- *Configuring Windows Firewall for Windows XP and Windows 2003*, page 81
- *Installing SmartPlant License Manager on a Laptop and Generating the Machine ID*, page 80
- *Installing SmartPlant License Manager on a Standalone System*, page 78

## **Installing SmartPlant License Manager on a Laptop and Generating the Machine ID**

1. Download the latest SPLM software from the eCustomer Web Site. (<https://crmweb.intergraph.com/ecustomer>)
2. Install SmartPlant License Manager in the default folder.
3. Disable all the network connections, except for the Loopback Adapter, before generating the Machine ID.
4. Select Generate Machine ID from the Intergraph SmartPlant License Manager program group.
5. Send the Machine ID output to Intergraph to request a license key.

### **Note**

- If all the previous steps described in this section were performed correctly, SmartPlant License Manager should work if the laptop is connected to the network or not. No extra step is required when the laptop is connected back to the network.

### **Related Topics**

- *Configuring a Static IP Address for the Microsoft Loopback Adapter*, page 79
- *Configuring Windows Firewall for Windows XP and Windows 2003*, page 81
- *Installing SmartPlant License Manager on a Standalone System*, page 78



## Configuring Windows Firewall for Windows XP and Windows 2003

SmartPlant License Manager utilizes Transmission Control Protocol (TCP) ports to pass license seats from the SmartPlant License Manager server(s) to the workstation(s). TCP port 807 is utilized by the SmartPlant License Manager server to 'listen' for requests from the workstation(s) for a license seat. If a request is made, a random TCP port is utilized to pass the seat from server to client.

Since a firewall is used to prevent unauthorized port access, SmartPlant License Manager has problems working properly with a firewall. Most firewall programs allow an Administrator to open ports to prevent the firewall from interfering with a program's execution. Because SmartPlant License Manager utilizes random ports, there is not a good way to do this unless the firewall program also allows programs to be added to a program list to open ports required by the program. The firewall that is delivered with Microsoft Windows XP and Microsoft Windows 2003 is such a firewall program.

If the user exits the application properly, the license used by the workstation is released back to the pool of licenses available. Sometimes, when an application process is abnormally exited, the license seat can be hung. This is where the SmartPlant License Manager server can help. A scavenger routine can be set up to run that will scavenge the network for seats that are reserved. If one is found, the seat can be returned to the pool if it is no longer in use. The firewall prevents the server from retrieving the seat and returns a timed out error message.

After installing SP 2 for Microsoft Windows XP or SP1 for Microsoft Windows 2003, pdlice.exe needs to be added to the Exception List for the Windows Firewall (if it is turned on). The following steps will add the appropriate SmartPlant License Manager program to the Exception List, allowing proper scavenging and access to the license server:

1. Click **Start > Control Panel > Windows Firewall**.
2. On the **Exceptions** tab in the **Windows Firewall** dialog box, click **Add Program**.
3. In the **Add a Program** dialog box, click **Browse**.
4. In the **Browse** dialog box, find the location of the pdlice.exe program (default location is: *c:\win32app\ingr\pdlice\bin* or *c:\win32app\ingr\splm\bin*) in the **File name** field.
5. Click **Open**.
6. In the **Add a Program** dialog box, click **Change Scope**.
7. Select the **My Network (subnet) only** option.
8. Click **OK**.
9. Click **OK** on the **Add a Program** dialog box.

10. On the **Exceptions** tab, verify that pdlice.exe has been added to the **Programs and Services** list.
11. Click **OK** to dismiss **Windows Firewall**.

 **Note**

- **[Connecting Socket] Connection Time Out** is the error message you receive if pdlice.exe is not defined in the Windows Firewall exception list.

# Error Messages

## **A valid license server cannot be located for this client**

This message displays when a client machine is pointing to another client machine as a license server. A valid license server must be defined.

## **Cannot Receive Full Packet**

### **Bad Network Packet; Check PDLICE (Cl/Srv) versions**

These messages both indicate a mismatch of SmartPlant License Manager versions. PD\_LICE Version 1.0 is incompatible with any later release of PD\_LICE. You must remove version 1.0 and install a later version of PD\_LICE or SmartPlant License Manager. To check your current version of PD\_LICE, click About PD\_LICE on the main PD\_LICE window or in SmartPlant License Manager, click **Help > About SmartPlant License Manager** on the main dialog box.

### **Check Size - Server Key File Improperly Modified - Remove and Reinstall**

Indicates that SmartPlant License Manager and PD\_Lice are installed on the same machine or the license server is a Windows Terminal Server. You need to remove PD\_Lice if you have it installed. Also, SmartPlant License Manager server is not supported when configured on an Application Server running Window Terminal Server and/or products such as Citrix Server.

### **[Connecting Socket] Connection Refused**

Reserving licenses on clients or the server fails. The SmartPlant License Information message box displays the Connection refused message. Restarting the service on the license server will solve the error.

### **[Connecting Socket] Connection Time Out**

The message displays if the pdlice.exe is not defined in the Windows Firewall exception list. To resolve the error add pdlice.exe in the Windows Firewall's exception list in the client and the server machine if the OS is Windows XP SP2 or Windows 2003 SP1.

### **Connection Reset by Peer**

This message displays if you have Panda Antivirus software installed on the machine.

### **Could not set install date**

This message appears during the installation of SmartPlant License Manager. This problem has been reported on machines with German Microsoft Windows XP (SP2) and Microsoft Windows 2003 (SP1). To resolve the problem, reinstall the operating system's Service Pack.

### **ftp server failing (looping), service terminated**

The inetd process is refusing your connection attempts. This indicates that the inetd daemon has too many connection requests. Requests are refused for 10 minutes. This can happen during scavenging or if too many clients are simultaneously requesting access.

On the computer that is refusing the connection, stop the SmartPlant License Manager service. To stop the service, click Stop and Remove Licensing Service on the Install and Remove Options dialog box. To restart the licensing service, click Install and Start Licensing Service on the Install and Remove Options dialog box.

### **License File Time is newer than License Server System Clock**

SmartPlant License Manager will not work until the system clock time equals or passes the timestamp on the license file. The changing of time zones will not have any impact on the way the software functions. If you set the time back to the correct time and receive an error message, you will need to remove the key and generate a new machine ID. Then, you must request and install a new key.

### **[Opening File] - No such file or directory - /etc/file\_name**

A license has not been installed or a server(s) is not known. Be sure the file name appears in one of these files:

/etc/pdlice/pdlice\_key\_S

/etc/pdlice/pdlice\_cfg\_S

/etc/pdlice/server\_names

### **PDLICE\_PUT\_SEAT error**

The license server was booting or otherwise not responsive. Possibly, another process, for example scavenger, kept the licensing files locked at that instant. The scavenging process should free the license shortly.

If you want to free the license sooner, type `pdlice -n` on the license server.

If you see this message while running `PD_SHELL`, exit `PD_SHELL` completely. If you do not exit and you execute another task, there will be two seats assigned to the same `PD_SHELL` process (new seat + old seat that is not released yet).

To free the license sooner using a Microsoft Windows computer, click Scavenge for Keys on the Scavenge Options dialog box.

### **Server Key File Mismatch (?) - Remove & Reinstall**

The key files for the server are corrupt. You must reinstall the key. Any corrupt code appears in parentheses. Call Intergraph to receive help with the corrupt code. You can still run all the Windows Display Options commands.

### **SPLM Failed: [Read Pipe] Garbled Data From SPLM (Client)**

The incorrect versions of software are installed. You must install the required versions of your product and SmartPlant License Manager. For example, you have installed PDS 8.0.1 and SmartPlant License Manager 8.0 client (or earlier version). You must install the latest version of SmartPlant License Manager on the client.

### **SPLM Failed: Invalid Key. Mismatching parameters.**

The physical network adapter is disabled. Enable your network adapter to correct the error.

### **SPLM Failed: Invalid Network Request - <license server>**

The incorrect versions of software are installed. You must install the required versions of your product and SmartPlant License Manager. For example, you have installed PDS 8.0.1 and SmartPlant License Manager 8.0 server (or earlier version). You must install the latest version of SmartPlant License Manager on the license server.

### **SPLM Failed: License server is not defined for this client**

Indicates that the license server is not defined on the machine. You need to define a license server for the machine. Refer to *Selecting a License Server for a Client* for more information.

**SPLM Failed: Server/Client Timers Mismatch by 6+ Hours - <license server>**

Indicates that the server times are not synchronized. You must match the client clock time to be within a 6-hour range of the SmartPlant License Manager server clock time.

**SPLM Failed: SPLM Client must be updated to the latest version.**

The SmartPlant License Manager client must be updated to SmartPlant License Manager version 09.00.03.00 or later.

**SmartPlant License Manager Warning: License expires with [days] - 20**

This message appears each time a license is allocated beginning 45 days before expiration. The example warning message used here indicates the license will expire in 20 days. Notify Intergraph to set an installation date for a new license.

**Unable to create file path\filename for machine ID**

This message appears when you run the Machine ID command in the Command Prompt window and the path (a folder) does not exist. To correct the error, create the path (or folder) where you want the Machine ID file to be created.

**Related Topics**

- *Troubleshooting and Error Messages*, page 75
- *Troubleshooting*, page 75

# License Key Request Forms

Use the following forms for all software, including SmartPlant Instrumentation 7.0 and later. For INtools 6.0 and older, use the INtools 6.0 (and older) License Key Request form. The request forms are available on the following product Web pages.

FrameWorks Plus, SDNF Import	<a href="http://www.intergraph.com/structural/Additional_Information.asp">http://www.intergraph.com/structural/Additional_Information.asp</a>
PDS 3D, PDS 2D, ISOGEN	<a href="http://www.intergraph.com/pds/Additional_Information.asp">http://www.intergraph.com/pds/Additional_Information.asp</a>
SmartPlant 3D	<a href="http://www.intergraph.com/smartplant/3d/Additional_Information.asp">http://www.intergraph.com/smartplant/3d/Additional_Information.asp</a>
SmartPlant Electrical	<a href="http://www.intergraph.com/smartplant/electrical/Additional_Information.asp">http://www.intergraph.com/smartplant/electrical/Additional_Information.asp</a>
SmartPlant Instrumentation (formerly INtools)	<a href="http://www.intergraph.com/smartplant/instrumentation/Additional_Information.asp">http://www.intergraph.com/smartplant/instrumentation/Additional_Information.asp</a>
SmartPlant P&ID	<a href="http://www.intergraph.com/smartplant/pid/Additional_Information.asp">http://www.intergraph.com/smartplant/pid/Additional_Information.asp</a>
SmartPlant Review	<a href="http://www.intergraph.com/smartplant/review/Additional_Information.asp">http://www.intergraph.com/smartplant/review/Additional_Information.asp</a>
SmartSketch	<a href="http://www.intergraph.com/smarts sketch/Additional_Information.asp">http://www.intergraph.com/smarts sketch/Additional_Information.asp</a>
SupportModeler	<a href="http://www.intergraph.com/pds/supportmodeler/Additional_Information.asp">http://www.intergraph.com/pds/supportmodeler/Additional_Information.asp</a>

## Related Topics

- *Requesting Software Upgrades and License Keys*, page 18.





# Key-in Commands Overview

Use the key-in commands to run SmartPlant License Manager in a Command Prompt window.

## Related Topics

- *Alphabetical List of Key-in Commands*, page 89
- *Functional List of Key-in Commands*, page 91

## Alphabetical List of Key-in Commands

Command	Alphabetical List Description
pdlice -a	Installs the SmartPlant License Manager server license key. For example, type pdlice -a 12AABBBCCCEDEFHKIPQRS. You must have administrative privileges to use this command.
pdlice -B	Displays the status of expired and unexpired license keys.
pdlice -c	Removes the current server license key. You must have administrative privileges to use this command.
pdlice -e	Generates an auditing code.
pdlice -f	Displays the current status of the license key.
pdlice -h	Displays an alphabetical list of available commands for SmartPlant License Manager.
pdlice -I	Install and start the SmartPlant License Manager service.
pdlice -j	Adds servers and their addresses to the server_names file. For example, type pdlice -j server1 server2.
pdlice -k	Deletes servers from the server_names file. For example, type pdlice -k server1 server2 ...
pdlice -l	Displays the server_names file.
pdlice -m	Displays the current status of reserved licenses.
pdlice -M	Displays the current status of active PDS daily licenses.
pdlice -n	Scavenges or searches for licenses.
pdlice -Q	Displays and allows you to modify the current license usage options. You must have administrative privileges to use this command.

<b>Command</b>	<b>Alphabetical List Description</b>
pdlice -r	<p>Reserves a license. For example,</p> <pre>pdlice -r A B C D license_name</pre> <p>where:</p> <p>A = Use i for interactive and b for batch.</p> <p>B = Wait time in minutes. This option only applies when A is set to batch mode.</p> <p>C = Product ID.</p> <p>D = Product Tag. For example, 3D.</p> <p>Example key-in: pdlice -r i 1 3D server1</p> <p>If no server names are supplied, SmartPlant License Manager searches the server_names file. The arguments are optional. -1 for the third argument allows for a default waiting time to be used. The default waiting time is currently 12 hours for batch jobs if all licenses have been taken.</p>
pdlice -R	Stop and remove the SmartPlant License Manager service.
pdlice -u	<p>Unreserves a license. For example,</p> <pre>pdlice -u Seat_number license_server</pre> <p>Example key-in: pdlice -u 8 server1</p>
pdlice -?	Displays an alphabetical list of available commands for SmartPlant License Manager.

**Related Topics**

- *Functional List of Key-in Commands*, page 91
- *Key-in Commands Overview*, page 89

## Functional List of Key-in Commands

Functional List Description	Command
Generates an auditing code.	pdlice -e
Displays an alphabetical list of available commands for SmartPlant License Manager.	pdlice -? pdlice -h
Install and start the SmartPlant License Manager service.	pdlice -I
Displays the current status of the license key.	pdlice -f
Displays and allows you to modify the current license usage options. You must have administrative privileges to use this command.	pdlice -Q
Stops and remove the SmartPlant License Manager service.	pdlice -R
Reserves a license. For example,  pdlice -r A B C D license_server  where:  A = Use i for interactive and b for batch.  B = Wait time in minutes. This option only applies when A is set to batch mode.  C = Product ID.  D = Product Tag. For example, 3D.  Example key-in: pdlice -r i 1 3D server1  If no server names are supplied, SmartPlant License Manager searches the server_names file. The arguments are optional. -1 for the third argument allows for a default waiting time to be used. The default waiting time is currently 12 hours for batch jobs if all licenses have been taken.	pdlice -r
Scavenges or searches for licenses.	pdlice -n
Installs the SmartPlant License Manager server license key. For example, type pdlice -a 12AABBBCCCEDEFHKIPQRS. You must have administrative privileges to use this command.	pdlice -a
Removes the current server license key. You must have administrative privileges to use this command.	pdlice -c
Displays the Server_names file.	pdlice -l

<b>Functional List Description</b>	<b>Command</b>
Adds servers and their addresses to the server_names file. For example, type pdlice -j server1 server2.	pdlice -j
Deletes servers from the server_names file. For example, type pdlice -k server1 server2.	pdlice -k
Displays the status of active PDS daily licenses.	pdlice -M
Displays the status of all license keys (expired and unexpired).	pdlice -B
Displays the status of reserved licenses.	pdlice -m
Unreserves a license. For example, pdlice -u Seat_number license_server Example key-in: pdlice -u 8 server1	pdlice -u

**Related Topics**

- *Alphabetical List of Key-in Commands*, page 89
- *Key-in Commands Overview*, page 89

# Appendix A: Using the SmartPlant License Checkout Utility

The SmartPlant License Checkout utility (License Checkout Utility.exe) allows you to obtain licenses for SmartPlant products and its modules for use on a non-networked computer (laptop). Using this utility allows you to run SmartPlant products without a network connection to the license server.

When you check out a license, the license and expiration information are branded into the local SmartPlant product executable. Each time you start the product during the checkout period, a message displays the expiration date for the checked out licenses.

When the checkout period for the license expires, the product returns to normal, connected licensing using SmartPlant License Manager the next time you start the product. For example, after the license expires at 11:59PM on the expiration date, the next time you start the product, it attempts to access the licensing server for base and module licenses prior to running.

## Notes

- You must install and configure SmartPlant License Manager before checking out a license.
- You must have administrator privileges to check out a license or to run the product using a checked out license.
- If you are using an evaluation license, you cannot check out licenses.
- To install this utility, select **SmartPlant License Checkout Utility** on the product CD. The utility is installed in C:\Program Files\SmartPlant\License Checkout Utility\Program by default and is available on the **Start** menu under **Programs > Intergraph SmartPlant License Checkout Utility > License Checkout Utility**.

## Install SmartPlant License Checkout Utility

1. Insert the product CD into the CD-ROM drive. If the installation does not start automatically, double-click **setup.exe** in the main folder.
2. Click **SmartPlant License Checkout Utility**.
3. Type your name and company name.
4. Verify your name and company name, then click **Yes**.
5. Click **Display** to read and accept the license agreement, then click **Yes**.

 **Note**

- You must have Adobe Reader 4.0 or higher to view the license agreement. Adobe Reader 7.0 is available on the product CD.
6. Specify the destination folder.
  7. Review your settings, then click **Next** to install the SmartPlant License Checkout utility.
  8. Click **Finish**.

 **Note**

- You can uninstall the License Checkout utility at any time, even if you are currently running a product in remote license mode.
- You must have administrative privileges to checkout a license or to run SmartPlant Review using a checked out license.

## License Checkout Utility Dialog Box

Allows you to select the product for which you want to check out a license..

**Product** - Displays the installed products available for license checkout. Select the product for which you want to check out licenses.

**Modules** - Displays the modules available with your product. A grayed-out entry means that module is not installed on your workstation. If no modules appear in the list, either your product contains no supported modules, or no modules have been installed. Check the box beside the module for which you want to check out a license. If you want to check out only the base product, do not check any of the modules.

**Duration** - Specify the number of days for which you want to check out a license for the selected modules. When the checkout period for the license expires, the product returns to normal, connected licensing using SmartPlant License Manager the next time you start the product.

## Check Out a License for SmartPlant Review

1. Be sure that SmartPlant License Manager is installed and configured on your computer.
2. Click **Start > Programs > Intergraph SmartPlant License Checkout Utility > License Checkout Utility**.
3. Select the module for which you want to check out a license, then click **OK**.

### Notes

- You must have administrator privileges to check out a license or to run SmartPlant Review using a checked out license. If you are using an evaluation license, you cannot check out licenses.
- If you want to check out only the base SmartPlant Review product, do not check any of the modules.

### Important

- Checked out licenses cannot be checked in. In other words, if you check out three modules (four total licenses: one base and three modules), then run the License Checkout utility again and select two other modules, three more licenses are checked out (one base and two modules) and the first four licenses are lost. This means that you have seven licenses checked out but only three that can be used. The other four licenses are lost until their checkout duration expires.

- When running in remote license mode, you cannot use setup to modify the product installation until the checkout duration expires and the system is working with SmartPlant License Manager in connected license mode once again. In other words, you cannot install or remove modules while running in remote license mode.
- If SmartPlant Review is running in remote license mode but is unable to confirm for any reason that it is running in that mode, SmartPlant Review automatically returns to connected license mode and attempts to obtain the licenses from SmartPlant License Manager. SmartPlant Review notifies you if it is unable to obtain licenses from SmartPlant License Manager.
- Each time you start SmartPlant Review while using remote license mode, the software displays a message informing you when the checked out licenses will expire. The first time that you run SmartPlant Review after the checked out licenses expire, the software displays a message informing you that the checked out licenses have expired and that the software is reverting to the standard connected license mode and attempting to get licenses from SmartPlant License Manager.

## Check Out a License for SmartSketch

1. Be sure that SmartPlant License Manager is installed and configured on your computer.
2. Click **Start > Programs > Intergraph SmartPlant License Checkout Utility > License Checkout Utility**.
3. Select the product for which you want to check out a license.

### Notes

- You must have administrator privileges to check out a license or to run the product using a checked out license.
  - If you are using an evaluation license, you cannot check out licenses.
4. Click **OK**.

### Important

- Checked out licenses cannot be checked in.
- When running in remote license mode, you cannot use setup to modify the product installation until the checkout duration expires and the system is working with SmartPlant License Manager in connected license mode once again. In other words, you cannot install or remove product add-ins while running in remote license mode.



- If the product is running in remote license mode but is unable to confirm for any reason that it is running in that mode, the product automatically returns to connected license mode and attempts to obtain the licenses from SmartPlant License Manager. The product notifies you if it is unable to obtain licenses from SmartPlant License Manager.
- Each time you start the while using remote license mode, the software displays a message informing you when the checked out licenses will expire. The first time that you run the product after the checked out licenses expire, the software displays a message informing you that the checked out licenses have expired and that the software is reverting to the standard connected license mode and attempting to get licenses from SmartPlant License Manager.



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