

# Install and License IDL

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These instructions describe how to install and license IDL on Windows, UNIX, and Mac platforms. See the following sections:

- [Install on Windows](#)
- [Install on UNIX or Mac from a Shell Script](#)
- [Install on Mac from a .pkg File](#)
- [Manage Licenses from the License Administrator Tool](#)
- [Manage Licenses from the Command Line](#)
- [Contact Us](#)

## IDL System Requirements

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IDL has the following system requirements:

- **Operating systems:**
  - Windows 10 and 11 (Intel/AMD 64-bit)
  - macOS 10.14, 10.15 (Intel 64-bit), 11, and 12 (M1 and Intel 64-bit)
  - Linux (Intel/AMD 64-bit, kernel 3.10.0 or higher, glibc 2.17 or higher)
- **Disk space:** Approximately 4 GB for installation
- **Memory (RAM):** Minimum of 8 GB
- **Number of processing cores:** Minimum of 2, recommended 4 or more

An X-Windows manager is required for Mac. IDL was tested using XQuartz 2.8.1.

A Rosetta 2 emulator is required for Mac M1.

The 64-bit Windows installer contains 32-bit binaries so that you can launch IDL in 32-bit mode on 64-bit Windows systems. You can find shortcuts to start 32-bit versions of IDL Command Line and IDL Virtual Machine under `C:\Program Files\Harris\IDLxx`, or if ENVI is also installed, `C:\Program Files\Harris\ENVIxx\IDLxx`, where `xx` is the software version.

## Install on Windows

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**Tip:** If you need to install IDL on multiple computers, you can record an `.ini` file during an installation of IDL, then use that `.ini` file to silently install IDL on the other computers. See [Windows Silent Installation](#) for details.

If you are upgrading from an IDL 8.7.x release to IDL 8.8.2 on a different computer, you must first deactivate your license before you perform the upgrade.

You must have administrator privileges to install software on Windows. Install IDL from a web download or a DVD as follows:

1. Start the installer:
  - Web download: Navigate to the `idlxx-win.exe` file that was downloaded to your computer and double-click to run it, where `xx` is the version number.
  - DVD: Insert the disk and double-click `setup-idlxx-win.exe`, where `xx` is the version number.
2. Follow the prompts to install the software.
3. When installation is complete, license the software.
  - To activate node-locked licenses to a specific user and computer, see [Manage Licenses from the License Administrator Tool](#) for steps.

- To install a license server and activate the licenses for use by clients, see the *Install and Administer the Flexera License Server Service* documentation for Windows ([flexnetserver-windows-install.html](#)) or Linux ([flexnetserver-linux-install.html](#)), included with your software download.
- To connect a client to a license server, see [Use Licenses on a License Server](#).

**Note:** The `activate.exe` utility will be installed with read and execute privileges for all users in `INSTALL_DIR\IDLxx\license_utils\bin.x86_64`. This means that after initial license activation, *any* user with access to `activate.exe` can modify the license availability for that product installation. If the product is installed to a public directory on a computer, product administrators can choose to restrict execute privileges on the `activate.exe` file to prevent unauthorized use. For information on modifying file privileges, refer to your Windows system documentation, or contact a Windows system expert.

## Install on UNIX or Mac from a Shell Script

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If you are upgrading from an IDL 8.7.x release to IDL 8.8.2 on a different computer, you must first deactivate your license before you perform the upgrade.

The commands listed here may require root or sudo privileges. An X-Windows manager is required for Mac. Install IDL from a web download or a DVD as follows:

1. Uncompress the `filename.tar.gz` archive file that was downloaded to your computer, then unpack the file:

```
gunzip filename.tar.gz
tar -xf filename.tar
```

2. Start the installer with one of these commands:

- Web download: `./install.sh`
- DVD: `./install-idlxx-unix.sh`

3. Follow the prompts to install the software.

4. When installation is complete, license the software.

- To activate node-locked licenses to a specific user and computer, see [Manage Licenses from the License Administrator Tool](#) for steps.
- To install a license server and activate the licenses for use by clients, see the *Install and Administer the Flexera License Server Service* documentation for Windows ([flexnetserver-windows-install.html](#)) or Linux ([flexnetserver-linux-install.html](#)), included with your software download.
- To connect a client to a license server, see [Use Licenses on a License Server](#).

5. From a terminal window, change directories to `INSTALL_DIR/idlxx`. Enter a command at the shell prompt to start an application:

`idl`: Start command-line IDL.

`idlde`: Start the IDL Development Environment.

`idlhelp`: Start IDL Help.

## Install on Mac from a .pkg File

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If you are upgrading from an IDL 8.7.x release to IDL 8.8.2 on a different computer, you must first deactivate your license before you perform the upgrade.

An X-Windows manager is required for Mac. Install IDL from a web download or a DVD as follows:

1. Start the installer:

- Web download: Navigate to the `idlxx-mac.pkg` file that was downloaded to your computer and run it.
- DVD: Insert the DVD. If the installer does not automatically start, navigate to the disk drive and run `idlxx-mac.pkg`.

2. Follow the prompts to install the software.
3. When installation is complete, license the software.
  - To activate node-locked licenses to a specific user and computer, see [Manage Licenses from the License Administrator Tool](#) for steps.
  - To install a license server and activate the licenses for use by clients, see the *Install and Administer the Flexera License Server Service* documentation for Windows ([flexnetserver-windows-install.html](#)) or Linux ([flexnetserver-linux-install.html](#)), included with your software download.
  - To connect a client to a license server, see [Use Licenses on a License Server](#).
4. From the Mac Finder, go to `INSTALL_DIR/idlxx` and double-click `IDLxx` to launch IDL.

## Manage Licenses from the License Administrator Tool

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Activating a license transfers the license rights from the Download and License Center to a node-locked (local) computer or license server. It also creates the features and quantities of licenses that enable the software to run. When you purchase L3Harris Geospatial Solutions products, you will receive an email with an *activation code* to use to activate your software license.

You can activate licenses on a local computer (*node-locked* license), or on a license server that can serve licenses to connected clients. These instructions describe how to activate *node-locked* licenses. To install and set up a license server, see the *Install and Administer the Flexera License Server Service* documentation for Windows ([flexnetserver-windows-install.html](#)) or Linux ([flexnetserver-linux-install.html](#)), included with your software download or installation DVD.

This section describes how to activate licenses over the Internet. If you do not have Internet access, contact Technical Support to receive separate instructions to activate your licenses *offline*.

The steps that follow describe how to use the License Administrator Tool to:

- Activate node-locked licenses.
- Deactivate node-locked licenses.
- Connect to a license server to use served licenses.
- Disconnect from a license server.
- Borrow licenses from a license server for a limited time.
- Return borrowed licenses to the license server.
- View licenses and feature details.

To perform these same functions from the command line instead of the License Administrator Tool, see [Manage Licenses from the Command Line](#) for details.

## The License Administrator Tool

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To open the License Administrator Tool described in this section, use one of the following:

- **Windows:** From the Start menu, select **L3Harris License Administrator** under the shortcut group for your product installation. Administrator privileges are required.
- **Linux:** From a terminal window, launch the `harrislicense` command from the `INSTALL_DIR/idlxx/bin/` directory. Sudo or root permissions are required.
- **Mac:** From a Finder window, double-click the `LicenseAdminstrator.app` icon located under the `INSTALL_DIR/idlxx` directory. Administrator privileges are required.

## Activate Licenses

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To activate licenses:

1. In the License Administrator Tool, click **Activate Local License**.

2. Enter (or copy and paste) the activation codes from your product order email into the text box provided. The text box allows one activation code per line; press the **Enter** key after entering each code to start a new line.
3. Enter the **Quantity** of licenses you are entitled to.
4. Click **Activate**. A message appears when the codes are successfully activated. To view details on the activated licenses for the computer, click **View Licenses**. See [View Licenses and Feature Details](#) for more information.
5. Click **Close** to exit the tool.

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## Deactivate Licenses

Licenses remain activated on a computer until you deactivate them. Deactivating a license returns it to the Download and License Center. Deactivated licenses can then be used on another computer, by either the same person or another person. For example, if you receive a new computer and you want to install the software on it, first deactivate the licenses from the old computer. If you do not deactivate the licenses (and the old computer is no longer accessible to you), you will be unable to activate them on the new computer. If that occurs, Technical Support will need to deactivate the licenses for you.

To deactivate licenses:

1. In the License Administrator Tool, click **Deactivate Local License**.
2. Use the check boxes to select the individual activation codes to deactivate, or enable the **Select all** check box to deactivate all activation codes.
3. Click **Deactivate**.
4. Click **Close** to exit the tool.

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## Use Licenses on a License Server

A client computer can connect to only one license server at a time; however, a client can use a combination of node-locked licenses activated locally on the computer and served licenses from a connected license server.

To connect a client to a license server:

1. On the client, open the License Administrator Tool.
2. In the License Administrator Tool, click **Use License Server**.
3. In the **Server** field, enter the server name or IP address.
4. In the **Port** field, enter the TCP/IP port number being used by the license server for communication with license clients. The default port is 7070.
5. Click **Connect**. A message appears when the client successfully connects. To view details on served licenses for the computer, click **View Licenses**. See [View Licenses and Feature Details](#) for more information.
6. Click **Close** to exit the tool.

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## Disconnect from a License Server

To disconnect a client computer from a license server:

1. In the License Administrator Tool, click **Use License Server**. The **Server** and **Port** number fields populate with the information for the connected license server.
2. Click **Disconnect**, then click **Yes** to confirm the request to disconnect. A message appears when the client successfully disconnects.
3. Click **Close** to exit the tool.

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## Borrow Licenses from a License Server

Client computers can optionally borrow licenses from a license server. Borrowing licenses activates them locally to the client computer for a limited time. One example of borrowing is when you need to work in a remote region for one week and will be unable to connect to the license server to acquire licenses. In this case, you *borrow* the needed licenses for 7 days; then when the specified time has expired, the licenses will be automatically returned to the license server.

License borrowing is enabled by default. To disable (or re-enable) some or all license borrowing, the license server administrator should contact Technical Support, or their regional sales office or distributor. When borrowing licenses is enabled, only the licenses that are borrowable will be visible to you as you use the steps below.

To borrow licenses from a license server:

1. In the License Administrator Tool, click **Borrow Licenses from a Server**.
2. The **Server** and **Port** fields populate with values if there is a current license server connection. Enter or change the values if needed.
3. Use the check boxes to select the licenses to borrow, or enable the **Select all** check box to select all licenses.
4. Enter the **Borrow time** in days. The default is 7. The maximum number of days allowed is 60.
5. Enter the **Quantity** of licenses to activate. The default is 1.
6. Click **Borrow from Server**. A message appears when the licenses are successfully borrowed. To view details on borrowed licenses for the computer, click **View Licenses**. See [View Licenses and Feature Details](#) for more information.
7. Click **Close** to exit the tool.

## Return Borrowed Licenses to a License Server

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Borrowed licenses are automatically returned to the license server at the end of the specified period, but you can return all of the licenses earlier.

To return licenses on a server:

1. In the License Administrator Tool, click **Borrow Licenses from a Server**.
2. The **Server** and **Port** fields populate with values if there is a current license server connection. Enter or change the values if needed.
3. Click **Return all Borrowed Licenses to Server**. All borrowed licenses are returned to the server.
4. Click **Close** to exit the tool.

## View Licenses and Feature Details

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Click **View Licenses** in the License Administrator Tool to view license details and features for the computer. The license names, activation codes, and maintenance IDs available to the computer will be listed in a table. Licenses that are available from a license server will be marked with an asterisk (\*) next to the **Name** column. To refresh the data in the table, click the refresh icon.

To view feature details for the licenses, select one or more table rows and enable the **Show feature details** check box. Select all table rows to show all licenses. To filter the details further to show only in-use features, enable the **Show in-use Counts** check box.

In the feature details Expiration column:

- The expiration date is listed for licenses that have a termination date.
- For licenses borrowed from a license server, the expiration date is listed as a maximum of 60 days from the date you are viewing the details.
- `Permanent` indicates the license does not have a termination date.

You can copy the details of all features to the clipboard, or save them to a `.json` file.

To view the license activity log for the computer, or to view device information for the computer, click **View Log**.

# Manage Licenses from the Command Line

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The steps that follow describe how to:

- Activate node-locked licenses using commands.
- Deactivate node-locked licenses using commands.
- Manually create a file to connect a client to a license server.
- Remove a client connection to a license server.
- Borrow licenses from a license server for a limited time using commands.
- Return borrowed licenses to a license server using commands.

These steps have you activate licenses over the Internet. If you do not have Internet access, contact Technical Support for separate instructions to activate your license *offline*.

## The Activate Utility

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For steps in the next sections that refer to using the `activate` utility, the utility is located in the following directories:

- **Windows:** `INSTALL_DIR\IDLxx\license_utils\bin.x86_64`. Administrator privileges are required.
- **Linux:** `INSTALL_DIR/idlxx/license_utils/bin.linux.x86_64`. Sudo or root permissions are required.
- **Mac:** `INSTALL_DIR/idlxx/license_utils/bin.darwin.x86_64`. Administrator privileges are required.

You can view parameter help for the `activate` utility by typing `activate.exe -h` on Windows, or `./activate -h` on Linux and Mac.

## Activate Licenses

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To activate node-locked licenses, open a command or terminal window, change to the directory that contains the `activate` utility, and type the following at the command line:

### Windows:

```
activate.exe -a activation-code [-q quantity]
```

Example:

```
activate.exe -a AAAA-BBBB-CCCC-DDDD -q 1
```

### Linux and Mac:

```
./activate -a activation-code [-q quantity]
```

Example:

```
./activate -a AAAA-BBBB-CCCC-DDDD -q 1
```

Where:

- `-a` specifies the activation ID.
- `-q` specifies the quantity of licenses. The default is 1.

To view details on activated licenses for the computer, see [View Licenses and Feature Details](#) for commands.

## Deactivate Licenses

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Licenses remain activated on a computer until you deactivate them. Deactivating a license returns it to the Download and License Center. Deactivated licenses can then be used on another computer, by either the same person or another person. For example, if you receive a new computer and you want to install the software on it, first deactivate the licenses from the old computer. If you do not deactivate

the licenses (and the old computer is no longer accessible to you), you will be unable to activate them on the new computer. If that occurs, Technical Support will need to deactivate the licenses for you.

To deactivate licenses, change to the directory that contains the `activate` utility, and type the following at the command line:

#### Windows:

```
activate.exe -a activation-code [-q quantity]
```

#### Example:

```
activate.exe -a AAAA-BBBB-CCCC-DDDD -q 0
```

#### Linux and Mac:

```
./activate -a activation-code [-q quantity]
```

#### Example:

```
./activate -a AAAA-BBBB-CCCC-DDDD -q 0
```

If you originally activated a quantity greater than 1, you can reduce the quantity to a specified number without deactivating all licenses. For example:

#### Windows:

```
activate.exe -a AAAA-BBBB-CCCC-DDDD -q 1
```

#### Linux:

```
./activate -a AAAA-BBBB-CCCC-DDDD -q 1
```

## Connect a Client to the License Server

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Create a plain text file on the client computer to reference the license server. Perform the following steps:

1. Create a plain text file that contains a reference to the license server URL. Format the text as follows:

```
http://[license-server-hostname-or-IP-address]:7070/fne/bin/capability
```

For example:

```
http://myserver.mycompany.com:7070/fne/bin/capability
```

2. Save the file with the name `o_licenseserverurl.txt`.
3. Copy the file to the `license` subdirectory located under your Harris installation directory. The file should have read privileges for all product users.

Examples using the default locations:

**Windows client:** `C:\Program Files\Harris\license\o_licenseserverurl.txt`

**Linux client:** `/usr/local/harris/license/o_licenseserverurl.txt`

**Mac client:** `/Applications/harris/license/o_licenseserverurl.txt`

To view details on served licenses for the computer, see [View Licenses and Feature Details](#) for commands.

## Remove a Client Connection to a License Server

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To remove the client computer's connection to the license server, delete the `o_licenseserverurl.txt` from the `license` subdirectory located under your Harris installation directory.

## Borrow Licenses from a License Server

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Use the `activate` utility to borrow licenses from a license server for a period of time.

License borrowing is enabled by default. To disable (or re-enable) some or all license borrowing, the license server administrator should contact Technical Support, or their regional sales office or



distributor.

To borrow licenses, open a command or terminal window on the client, change to the directory that contains the `activate` utility, and type the following at the command line:

**Windows client:**

```
activate.exe -a activation-code -s serverName:serverPort -t seconds
```

Example:

```
activate.exe -a AAAA-BBBB-CCCC-DDDD -s LicenseServer:7070 -t 86400
```

**Linux and Mac client:**

```
./activate -a activation-code -s serverName:serverPort -t seconds
```

Example:

```
./activate -a AAAA-BBBB-CCCC-DDDD -s LicenseServer:7070 -t 86400
```

Where:

- `-a` specifies the activation ID.
- `-s` specifies a license server.
- `-t` specifies the borrow interval, in seconds. The default is 86400 seconds (one day). The maximum number of days allowed is 60 (5184000 seconds). When this value expires, the features are automatically returned to the license server for use by another process.

To view additional options for the this command, type `activate -h`.

To view details on borrowed licenses for the computer, see [View Licenses and Feature Details](#) for commands.

## Return Borrowed Licenses to a License Server

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Use the `activate` utility to return borrowed licenses before their expiration date.

To return borrowed licenses, open a command or terminal window, change to the directory that contains the `activate` utility, and type the following at the command line:

**Windows client:**

```
activate -r -s serverName:serverPort
```

Example:

```
activate -r -s LicenseServer:7070
```

**Linux and Mac client:**

```
./activate -r -s serverName:serverPort
```

Example:

```
./activate -r -s LicenseServer:7070
```

Where:

- `-r` returns all borrowed licenses to a license server.
- `-s` specifies a license server.

## View Licenses and Feature Details

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To view license details and features, open a command or terminal window, change to the directory that contains the `activate` utility, and type one of the following at the command line:

**Windows:**

- `activate.exe -l`
- `activate.exe -i`

**Linux and Mac:**



- `./activate -l`
- `./activate -i`

Where:

- `-l` lists feature details.
- `-i` lists license-feature concurrent usage.

In the license feature output, the "name" value will have the following prefixes:

- `nl-`, to indicate a node-locked license.
- `sv-`, to indicate a served license.

Examples using IDL:

```
"name" : "nl-idl",
"name" : "sv-idl",
```

In the license feature output, the "expiration" value:

- The expiration date is listed for licenses that have a termination date.
- For licenses borrowed from a license server, the expiration date is listed as a maximum of 60 days from the date you are viewing the output.
- `permanent` indicates the license does not have a termination date.

## Windows Silent Installation

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If you are upgrading from an IDL 8.7.x release to IDL 8.8.2 on a different computer, you must first deactivate your license before you perform the upgrade.

These instructions describe how to record an `.ini` file you can use to silently install IDL on other Windows systems. This can be useful when you need to install IDL on multiple computers.

To record the `.ini` file, use the commands below, then follow the prompts to install IDL. The installation options you select will be recorded to the `.ini` file:

1. Open a command window, running as administrator.
2. Navigate to the location of the IDL installation executable file:
  - Web download: `idlxx-win.exe`
  - DVD: `setup-idlxx-win.exe`
3. Use the following syntax, where `IDL_INSTALL_EXECUTABLE` is the applicable IDL installation executable filename from above. This syntax initiates recording the `.ini` file and starts the IDL installer:
 

```
IDL_INSTALL_EXECUTABLE.exe /SAVEINF="INI_FILE_DIR\IDL_only.ini"
```
4. Follow the prompts to install the software. The options you select during the installation process will be recorded to the `.ini` file.

To use the `.ini` file to perform a silent install on other Windows systems:

1. Copy `IDL_only.ini` to a computer that needs to have IDL installed.
2. Open a command window, running as administrator.
3. Use the following command and flags to start the silent installation. In the example below, `IDL_INSTALL_EXECUTABLE_DIR` is the directory that contains the IDL installer, `IDL_INSTALL_EXECUTABLE` is the applicable executable filename from above, and `INI_FILE_DIR` is the directory that contains the `.ini` file:

```
IDL_INSTALL_EXECUTABLE_DIR\IDL_INSTALL_EXECUTABLE.exe
/LOADINF="INI_FILE_DIR\IDL_only.ini" /SP /VERYSILENT /SUPPRESSMSGBOXES /NOCANCEL
/NORESTART /FORCECLOSEAPPLICATIONS
```

The following is example syntax for a silent install from the DVD:

```
D:\setup-idlxx-win.exe /LOADINF="C:\Temp\IDL_only.ini" /SP /VERYSILENT /SUPPRESSMSGBOXES /NOCANCEL /NORESTART /FORCECLOSEAPPLICATIONS
```

#### Where:

- **LOADINF** tells the installer to load settings from the specified file after checking the command line. Use the **SAVEINF** flag to prepare the settings file.
- **SP** disables the prompt, "This will install...Do you wish to continue?" that appears at the beginning of the installer.
- **SILENT** tells the installer to display only the installation progress window, but not the installation wizard and background window.
- **VERYSILENT** prevents the installation progress window, installation wizard, and background window from displaying.
- **SUPPRESSMSGBOXES** tells the installer to suppress message windows. This flag only works when combined with **SILENT** or **VERYSILENT**.
- **NOCANCEL** prevents the user from cancelling the installation. It disables the **Cancel** button and ignores clicks on the **Close** button. This flag is also used in combination with **SILENT** or **VERYSILENT**.
- **NORESTART** prevents the installer from restarting the system following a successful installation or after a "Preparing to Install" failure that requests a restart. This flag is typically used in combination with **SILENT** or **VERYSILENT**.
- **FORCECLOSEAPPLICATIONS** tells the installer to force a close when closing applications.

## Contact Us

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If you need assistance, visit our website at <https://www.l3harrisgeospatial.com/Company/Contact-Us> to find worldwide contact information for technical support.

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