



The IDL Virtual Machine

The *IDL Virtual Machine* is a fully functional runtime version of IDL that can execute IDL `.sav` files without an IDL license. It is designed to provide developers of IDL programs with a simple, no-cost method for distributing their applications to customers and colleagues.

This document covers the following topics:

- [Running a `.sav` File in the IDL Virtual Machine](#)
- [Limitations of Applications that Run in the IDL Virtual Machine](#)
- [Installing the IDL Virtual Machine](#)
- [Upgrading or Removing the IDL Virtual Machine](#)

Running a .sav File in the IDL Virtual Machine

Fully-licensed installations of IDL can create compiled binary versions of IDL applications; these compiled versions are stored in files with the extension `.sav`. Many applications stored in `.sav` files can be executed by the IDL Virtual Machine.

How you run a `.sav` file in the IDL Virtual Machine depends on your operating system:

Windows

Windows users can drag and drop the `.sav` file onto the IDL Virtual Machine desktop icon, launch the IDL Virtual Machine and open the `.sav` file, or launch the `.sav` file in the IDL Virtual Machine from the command line.

To use drag and drop:

1. Locate and select the `.sav` file in Windows Explorer.
2. Drag the file icon from the Windows Explorer list and drop it onto the **IDL Virtual Machine 6.0** icon that has been created for you on the desktop. The IVM window is displayed.
3. Click anywhere in the IDL Virtual Machine window to close the window and run the `.sav` file.

To open a `.sav` file from the IDL Virtual Machine:

1. Do either of the following to launch the IDL Virtual Machine and display the IDL Virtual Machine window:
 - Select **Start** → **Programs** → **RSI IDL 6.0** → **IDL Virtual Machine** or **Start** → **Programs** → **RSI IDL Virtual Machine 6.0** → **IDL**
 - Double-click the **IDL Virtual Machine 6.0** desktop icon.
2. Click anywhere in the IDL Virtual Machine window to close the window and display the file selection menu.
3. Locate and select the `.sav` file, and double-click or click **Open** to run it.

To run a `.sav` file from the command line prompt:

1. Open a command line prompt. Select **Run** from the **Start** menu, and enter `cmd`.
2. Change directory (`cd`) to the `{rsi-dir}\bin\bin.x86` directory
3. Enter the following at the command line prompt:

```
idlrt -vm=<path><filename>
```

where *<path>* is the path to the *.sav* file, and *<filename>* is the name of the *.sav* file.

UNIX and Mac OS X

UNIX and Mac OS X users must launch the IDL Virtual Machine from the UNIX command line.

To run a *.sav* file in the IDL Virtual Machine:

1. Enter the following at the UNIX command line:

```
idl -vm=<path><filename>.sav
```

where *<path>* is the complete path to the *.sav* file and *<filename>* is the name of the *.sav* file. The IDL Virtual Machine window is displayed.

2. Click anywhere in the IDL Virtual Machine window to close the window and run the *.sav* file.

To launch the IDL Virtual Machine and use the file selection menu to locate the *.sav* file to run:

1. Enter the following at the UNIX command line:

```
idl -vm
```

The IDL Virtual Machine window is displayed.

2. Click anywhere in the IDL Virtual Machine window to close the window and display the file selection menu.
3. Locate and select the *.sav* file, and click **Open**.

Limitations of Applications that Run in the IDL Virtual Machine

The IDL Virtual Machine will run a compiled IDL `.sav` file on any platform supported by IDL — even if no IDL license is present. RSI's aim with the IDL Virtual Machine is to facilitate IDL code collaboration and application distribution. However, a few restrictions exist:

- The IDL Virtual Machine displays a splash screen on startup; the splash screen must be dismissed manually, by clicking with the mouse pointer.
- `.sav` files must be created using IDL version 6.0 or later.
- No access to the IDL command line or IDL compiler is provided.
- IDL programs that call the IDL EXECUTE function will not run in the IDL Virtual Machine.
- Callable IDL applications and applications that use the IDL ActiveX control will not run in the IDL Virtual Machine.
- The IDL Virtual Machine must be installed via the installation program provided by RSI. You are prohibited from modifying the IDL Virtual Machine distribution.

For information on creating applications that will run in the IDL Virtual Machine, see the *Building IDL Applications* manual.

Installing the IDL Virtual Machine

The IDL Virtual Machine can be installed, either from an IDL distribution CD-ROM or from the IDL Download Web site:

<http://www.rsinc.com/download>

Fully licensed installations of IDL 6.0 and later include the IDL Virtual Machine, but the Virtual Machine can also be installed by itself from the IDL Installer.

To install the IDL Virtual Machine from the IDL installer on the IDL 6.0 CD-ROM or from the RSI Download Web site:

- Windows users: Click the **IDL Virtual Machine** button at the IDL Selection screen.
- UNIX users: If you have the IDL CD-ROM, select **IDL Virtual Machine** from the Product menu on the Product Information screen. If you have downloaded the IDL Virtual Machine from the RSI web site, simply follow the on-screen instructions.
- Mac OS X users: Double-click the **IDLVirtualMachine6.0_Installer** icon on the IDL 6.0 CD-ROM.

For more information, see *Installing and Licensing IDL 6.0*.

Upgrading or Removing the IDL Virtual Machine

If you installed only the IDL Virtual Machine and wish to upgrade to a fully licensed version of IDL or remove the IDL Virtual Machine installation, do the following:

Windows

1. Select **Start** → **Settings** → **Control Panel**.
2. Double-click **Add/Remove Programs**, and select **RSI IDL 6.0** from the list.
3. Click **Change/Remove** to start the RSI IDL 6.0 InstallShield Wizard. Choose one of the following options:
 - **Upgrade to IDL**: Select this option to upgrade to a fully-licensed version of IDL.
 - **Repair**: Select this option to reinstall the IDL Virtual Machine.
 - **Remove**: Select this option to remove your IDL Virtual Machine installation.

Unix

To upgrade to a fully licensed IDL installation, re-run the IDL installer and select **IDL** from the Product menu on the Product Information screen.

To remove the IDL Virtual Machine, delete the directory in which you installed the IDL Virtual Machine distribution.

Mac OS X

To upgrade to a fully licensed IDL installation, run the `IDL6.0Installer.mpkg` file from the installation CD-ROM or the IDL Download Web site.

To remove the IDL Virtual Machine, delete the directory in which you installed the IDL Virtual Machine distribution, and remove all `IDL6.0.*.*` files from the `/Library/Receipts`.