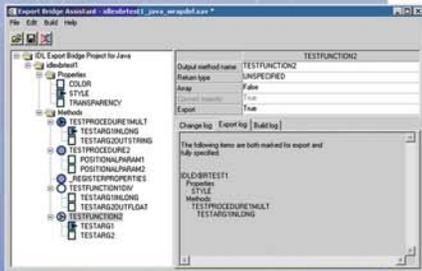
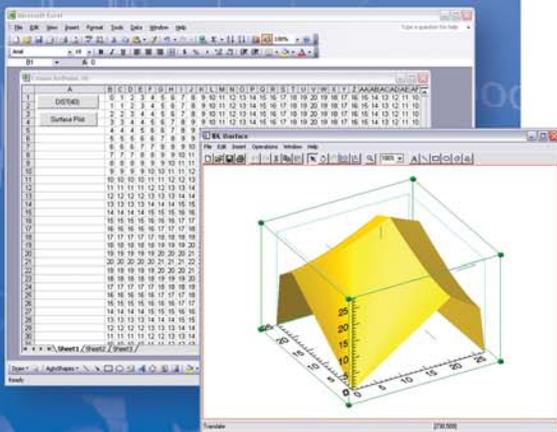


What's New in IDL 6.3



The IDL Export Bridge Assistant Module allows users to export custom IDL functionality to Java and COM applications.



The IDL COM & Java Connector Objects are included in IDL 6.3, and are used to integrate IDL into other environments, such as Microsoft® Office®.

The most feature-loaded release since IDL 6.0, IDL 6.3 provides powerful, new core visualization and analysis functionality, and new capabilities that allow data analysts and application developers to leverage IDL's power in multiple software environments.

Incorporate IDL functionality in COM & Java applications with IDL Connector Objects

The development and implementation of Java and COM applications in many scientific and commercial environments is quite prevalent today, and many IDL users recognize the need to incorporate IDL capabilities into these applications. IDL 6.3 includes the new IDL Connector Objects – pre-built, stock objects that allow IDL users and client application developers to easily access IDL's visualization and analysis capabilities within COM and Java applications. The IDL Connector Objects give users and developers the ability to execute IDL commands and manipulate variables within other applications easily and conveniently, and with very little programming.

Perform multiple IDL functions simultaneously with the IDL-IDL Bridge

IDL users often need to perform long, computationally-intensive tasks that sometimes interrupt IDL applications for extended periods of time. Now, IDL 6.3 introduces the IDL-IDL Bridge, a new process management object that gives IDL users the ability to distribute tasks to separate IDL sessions. This functionality is ideal for users who would like "heavy lifting" tasks, such as data processing, file reading or simulations, to occur in the background while other work continues in the main IDL session.

Make distributed applications more user friendly with IDL tree widget drag and drop functionality

IDL 6.3 introduces Tree Widget Drag and Drop, which allows IDL developers to make applications more intuitive for end users. This new IDL functionality gives users the ability to drag and drop within and between tree widgets, and to drag from a tree widget and drop on a draw widget.

New IDL Module for integrating IDL functionality with other software applications

The IDL Export Bridge Assistant Module is a new add-on module to IDL being released in conjunction with IDL 6.3. This module gives IDL users and application developers the ability to access IDL functionality from within Java and COM applications. Building on the IDL Connector Objects, this module adds powerful functionality that allows users to specify the objects, methods and parameters they want to export. The Assistant then automatically creates "wrappers" for the specified IDL objects that can easily be imported into the native client application. These automated tools give developers quick and convenient access to IDL's powerful visualization and analysis capabilities in other software applications without all of the tedious programming typically required for this kind of integration.

Visualization system enhancements improve the IDL user experience

- **Multiple Monitor Support** - IDL 6.3 builds on IDL's industry-leading graphics support by providing users with the ability to control placement of windows and dialogs across multiple monitors.
- **Text Object Rendering Performance Improvements** – IDL users and developers often manage extensive text in their applications. Now, IDL 6.3 offers these users functionality to help render text more quickly and efficiently, increasing overall IDL performance.



IDL 6.3 is available for Windows®, Mac OS X, Linux and UNIX.

Add power to your data analysis with additions to IDL image and signal processing libraries

IDL users count on IDL to provide the most robust library of high performance, pre-built image and signal processing filters and algorithms to streamline programming and improve application results. Now, IDL 6.3 adds new popular filters, transforms, and algorithms to the robust IDL library including:

- **The Impulse Response Filter** – This filter, popular with many electrical engineering professionals, processes vector data with an infinite or finite impulse response, allowing the user to specify the transfer function coefficients and maximize signal smoothing.
- **The Canny Edge Detection Algorithm Filter** – Popular with professionals analyzing images, this algorithm provides a very effective edge enhancement algorithm to generate accurate outlines for ROI and features of interest in 2D images.
- **The Butterworth Algorithm Filter** – This algorithm provides an effective, low-pass filter for 2D, 3D and vector data, allowing the user to specify the cutoff frequency and filter order to obtain optimum signal processing and image smoothing.

Visualize vector data easily with iVector

IDL 6.3 introduces iVector to the exclusive IDL iTools – a suite of interactive tools that provide data visualization and analysis power with minimal programming. iVector gives users the ability to visualize various types of data, such as vector fields, wind barbs and streamlines, easily and quickly. This new iTool allows users to mix vector data with image or map data in the same display, while manipulating size, color, style, and appearance of the data.

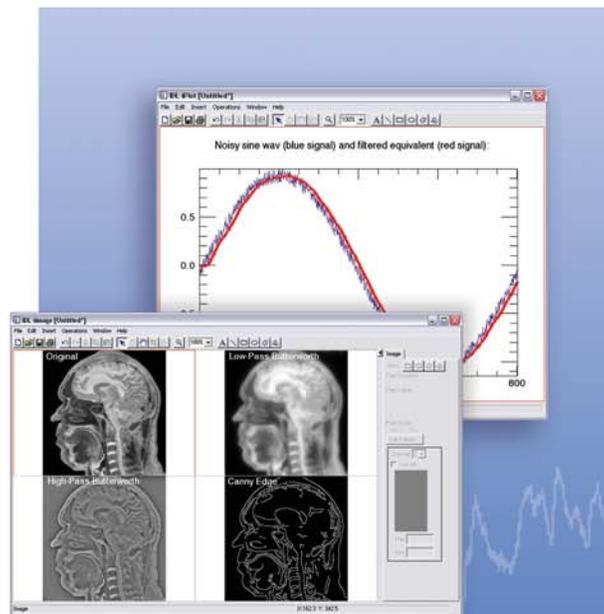
Added file format support increases flexibility

- **HDF5 File Format Support Enhancements** - IDL 6.3 builds on IDL's scientific data analysis capabilities by introducing the most robust HDF5 support available in any data visualization solution. In addition to IDL's existing HDF file support, scientific IDL users can now read and write opaque, variable length, and enumerated data types, as well as partial data sets within HDF5 files.
- **Motion JPEG 2000 Support** - With IDL 6.3, IDL users can now add the power of Motion JPEG 2000 (MJPEG 2000) in IDL routines, store multiple, lossless JPEG 2000 images in a single file, create animations, create data stacks, and read and write MJPEG 2000 files with IDL 6.3.
- **DICOM Network Services Module API** - IDL 6.3 exposes the API for programming control of the IDL DICOM Network Services Module. IDL programmers can now take advantage of the module's functionality in applications developed to suit unique medical image processing needs.

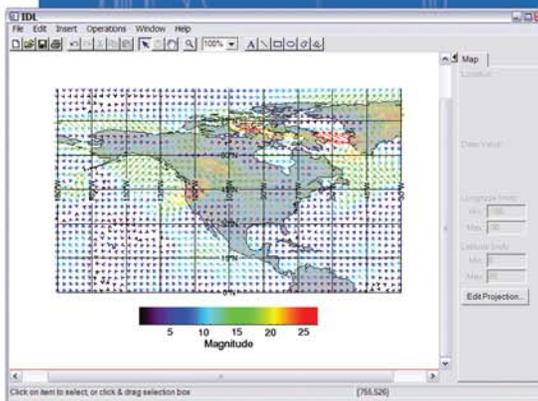
Get the most from your data with IDL 6.3

IDL 6.3 introduces new platform support:

- ▶ Windows® XP 64-bit
- ▶ Mac OSX large file support
- ▶ Solaris 10
- ▶ Linux Redhat Enterprise 4



Two screenshots show the Impulse Response Filter (top) and the Butterworth and Canny Edge Detection Algorithm Filters (bottom).



Display vector fields, wind barbs, and streamlines easily with IDL iVector.