

Introduction to IDL v8.0

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IDL v8.0 Goals

- Streamline the IDL Workbench
- Enhance and expand core programming language features
- Create a graphics system that's modern, powerful and easy to use
- Redesign the Help system
- Maintain backwards compatibility

Language Enhancements

- negative array indexing
- !NULL variable
- LIST and HASH datatypes
- FOREACH loop
- new syntax for object instantiation, method/member access
- operator overloading
- automatic heap garbage collection
- FOR loop counter defaults to long integer

Miscellaneous New Stuff

- Updates to HDF5 1.8.4 and NetCDF 4.1 libraries
- New NetCDF routines (groups)
- Save to PDF now available
- New cylindrical equal area map projection
- New variable type functions `ISA` and `TYPENAME`

Graphics

Visualization routines

WINDOW IMAGE
PLOT SURFACE
BARPLOT CONTOUR
ERRORPLOT MAP
POLARPLOT VECTOR
PLOT3D STREAMLINE

Annotation routines

POLYGON ELLIPSE
POLYLINE MAPGRID
TEXT MAPCONTINENTS
ARROW COLORBAR
LEGEND
AXIS

Bugs/Issues

- PNG and JPG output files are gigantic (600 DPI).
- New graphics does not allow multi-page postscript output files
- Errors in a few functions/methods