

## Exercise 3 : Switching On Support for Additional Formats

Analyze supports over 45 different file formats. By default, only the most common formats are enabled. The Import/Export module's External Libraries tool can be used to enable and disable these formats. This exercise will show you how to use the External Libraries tool to switch on support for additional formats.



1. Open the **Import/Export** module (**File > Import/Export**).
2. To view the file formats currently supported in Analyze, choose **Help > Formats**.
3. File formats currently supported are listed in the bottom '**Formats**' section of the Supported Formats window (figure 1). When a format is selected, the associated properties will automatically become checked in the '**Properties**' section of the window. Experiment by checking several different formats and noting their properties. Click **Done** to dismiss the window.



4. Open the **External Libraries tool (Tools > External Libraries)**.
5. The External Libraries tool provides a graphical interface listing all formats supported by Analyze (figure 2). The green and red status indicators note whether a format is currently '**Loaded**' (L) and '**Configured**' (C) - green indicating yes and red indicating no.
6. If you wish to switch on support for a specific file format (for example, PICKERMRI), click on the format in the External Libraries tool. A Configure 'X' Format window will be returned (where 'X' is equal to the selected format) (figure 3).
7. In the Configure 'X' Format window, click **Load Now** to change the 'Currently Loaded' status to a green **Yes**.

*note* Users running multiple operating systems need to configure support for each file format for each operating system. The 'Platforms' option allows the format to be configured for all operating systems (ALL) or for a specific operating system (SPECIFIED).

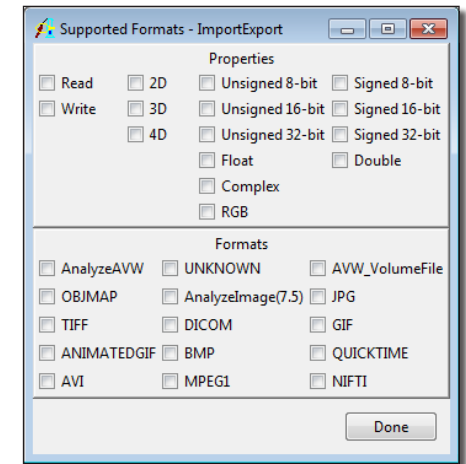


Figure 1

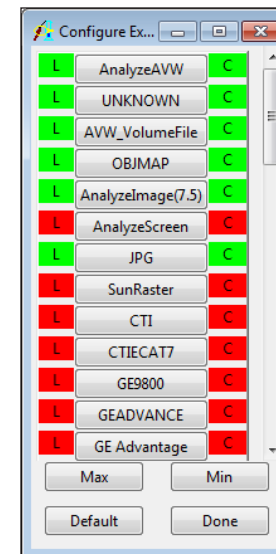


Figure 2

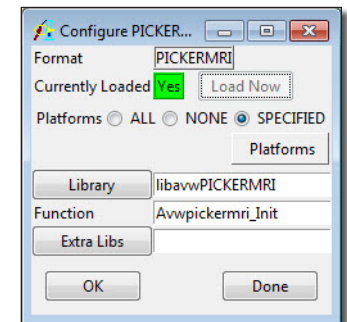


Figure 3

### Exercise 3 : Switching on Support for Additional Formats

- Click **OK**. A dialog box will be returned stating that your 'EXTEND.conf' file will be updated, click **OK** (figure 4). The format is now supported by Analyze.
- If you would like to load and configure all supported formats for your system, click **Max** in the External Libraries tool. All image file formats will now be supported by Analyze. The 'L' and 'C' status indicators will appear green next time you open the External Libraries tool (figure 5).

*note* Each file format enabled increases the amount of memory used by your system; it also increases the time taken for a module to open. However, this is typically only an issue on older systems or systems where memory resources are scarce.

- Click **Done** to close the External Libraries tool.
- Close the Import/Export module before proceeding to the next exercise.

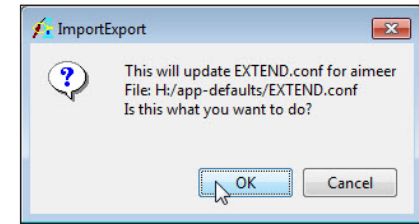


Figure 4

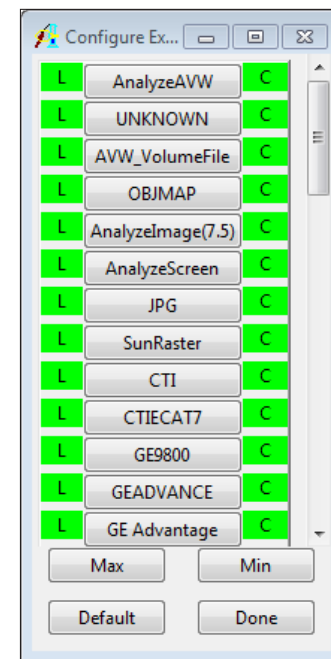


Figure 5

## Exercise 3 : Switching on Support for Additional Formats

### Supported File Formats

#### Analyze

---

<b>AnalyzeAVW</b>	used internally for memory mapping, supports all data types, 2D, 3D, and 4D.
<b>UNKNOWN</b>	enables reading raw binary data into images, and exporting image data as raw.
<b>VolumeFile</b>	enables lists of 2D files to be used as a 3D entity
<b>OBJMAP</b>	enables object maps to be treated as regular images
<b>ANALYZEIMG</b>	<i>old</i> Analyze 7.5 format, i.e. .hdr & .img pairs
<b>ANALYZESCRN</b>	<i>old</i> Analyze 7.5 format of old Screen Edit program

#### Raster

---

<b>BMP</b>	Microsoft Windows Bitmap
<b>GIF</b>	a common color indexed format
<b>JPG</b>	common format featuring lossy compression
<b>PBM</b>	ascii and binary formats used in Portable Bitmap Library
<b>PGM</b>	grayscale Portable Bitmap Library
<b>PPM</b>	24 bit Color Portable Bitmap Library
<b>PIC</b>	format used by Softimage
<b>PNG</b>	Portable Network Graphics
<b>PS</b>	output to a PostScript raster dump
<b>SGI</b>	format used by Silicon Graphics
<b>SUNRASTER</b>	format used by Sun Microsystems
<b>TARGA</b>	a common color format
<b>TIFF</b>	tagged information file format, a common format
<b>XBM</b>	an ascii 'c programming language' format used by the X Windows system
<b>XWD</b>	X Windows dump

#### Video

---

<b>QUICKTIME</b>	common movie format
<b>YUV</b>	single frame color video format
<b>AVI</b>	video format used by Microsoft Windows
<b>MPEG1</b>	standard movie format

#### Standard Radiological File Formats

---

<b>DICOM</b>	the standard medical image file format based on Mallincrodt ctn_3_0_3.
<b>ACR/NEMA</b>	precursor to DICOM
<b>PAPYRUS2</b>	3D extensions to DICOM from OSIRIS
<b>PAPYRUS3</b>	3D extensions to DICOM from OSIRIS
<b>NIFTI</b>	Neuroimaging file format

#### Vendor-Specific Radiological File Formats

---

<b>GE9800</b>	older CT format
<b>GEADVANCE</b>	Advance, nuclear medicine format
<b>GEADVANTAGE</b>	format for CT and MRI
<b>GESIGNA</b>	older MRI format Signa 4.x
<b>GESTARCAM</b>	older PET format
<b>INTERFILE</b>	a standard format for nuclear medicine
<b>PICKER MRI</b>	old MRI format used by Picker
<b>SIEMENSCT</b>	old Siemens CT format Somatom DR3
<b>SIEMENSMAGVIS</b>	Siemens Magnetom Vision (MRI format)
<b>CTI</b>	PET format used by CTI, early version of ECAT7
<b>7CTI</b>	PET format used by CTI; CTIECAT7
<b>IMATRON</b>	proprietary CT format
<b>SMIS</b>	proprietary MRI format
<b>BRUCKER MRI</b>	proprietary MRI format
<b>BIO RAD</b>	proprietary format
<b>VARIAN FDF</b>	Varian MRI format