

Basic 4 Android Object Browser

Version 3.2.x.x

Development, design and documentation by Dave Robinson, aka Vader

Table of Contents

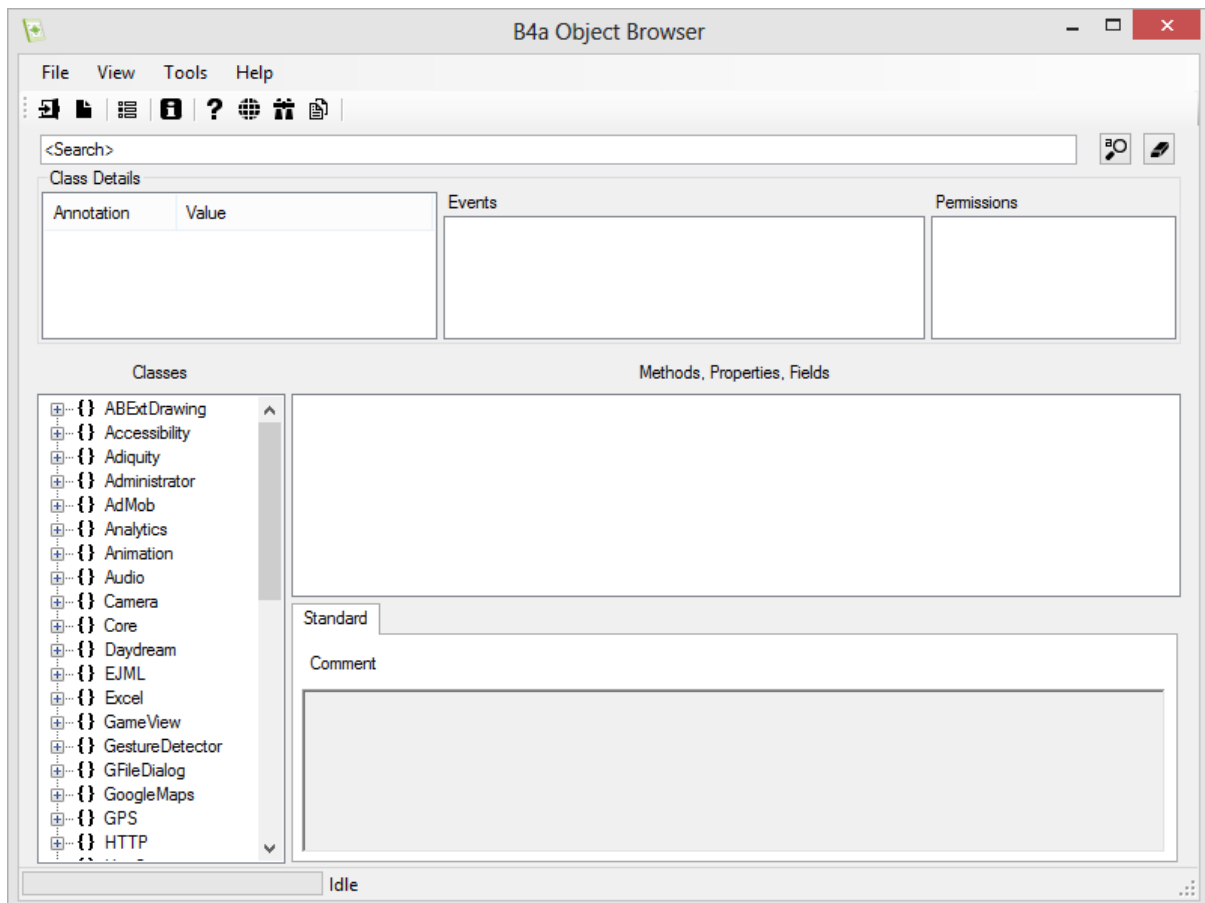
General information	3
Main screen.....	3
Toolbar	4
Search.....	5
Show Search Results in Class and Library TreeView	6
Library Details	6
Class Details	6
Classes and Libraries	7
Methods, Properties and Fields	7
Comments	8
Library	8
Class	8
Method / Property / Field	8
Options Screen.....	9
About screen	10

General information

- Requires .NET Framework 3.5 and B4a
- Saves last screen location and window size
- Allows many view settings to be customised
- Remembers configuration settings
- Allows the export (and subsequent import) of configuration settings
- Emulates the Visual Studio Object Browser in presentation
- Minimum supported screen resolution is 800x600
- Multi-language support

Main screen

By default, the B4a Object Browser main screen will open and be configured as the next graphic shows:











Sections of the screen can be resized according to your preferences, though this is not remembered between sessions.

The main elements of this screen are described in the following sections.


Toolbar



Each of these Icons are described below:

-  Exit
Exit the B4a Browser
-  Reload
Reload the B4a libraries
-  Options
Show the Options screen
-  About
Show the About screen
-  B4a Help
Show the B4a Forum help page in your default Web Browser
-  B4a Forum
Show the B4a Forum in your default Web Browser
-  B4a Site Search
Perform a Google search of the given term and return the results in your default Web Browser
-  Android Packages
Show the Google Android Packages page in your default Web Browser

Search

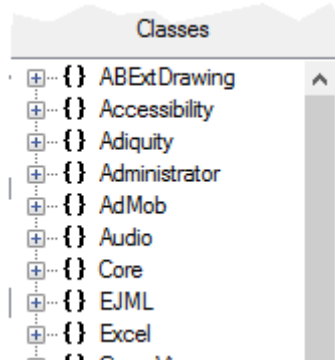
The search textbox allows you to search for specific text anywhere within currently loaded libraries. To use the search, enter the text you are searching for, and either press the Enter key, or click the search button shown immediately to the right of the search textbox ().

Items that are searched are:

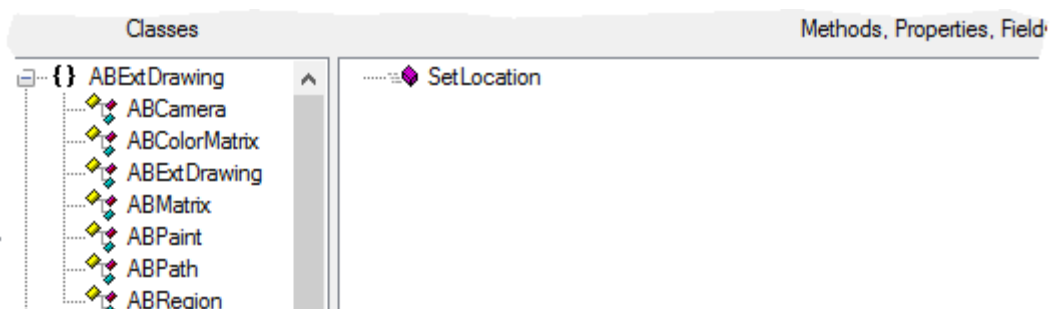
- Library Author
- Library DependsOn
- Library Name
- Library Path
- Library Version
- Class Events
- Class Name
- Class Object Wrapper
- Class Owner
- Class Permissions
- Class Short Name
- Annotation Name
- Annotation Value
- Method Name
- Property Name
- Field Name
- Parameter Name

For any search result, there will be a corresponding Library and Class. These will be shown in the Classes TreeView.

For example, searching for “set” returns the following Classes and Libraries:

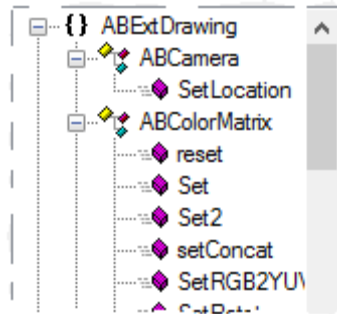


By expanding the returned Classes and Libraries, only Methods, Properties and Fields that match the search criteria will be displayed.




Show Search Results in Class and Library TreeView

This is a View setting, enabled by checking the corresponding setting in the View menu. If this setting is enabled, results are shown a little differently, as the following shows:



There is no functional benefit to using this option. It is given only as a view preference.

Search mode is disabled by clicking the Clear button (), which is immediately to the right of the Search button. Search mode is also disabled if you press the Esc key whilst the Search windows has the focus.

Library Details

Library details are shown when you click on the Library Name, as shown below:

Library	
Annotation	Value
Author	Alain Bailleul
Version	1.7

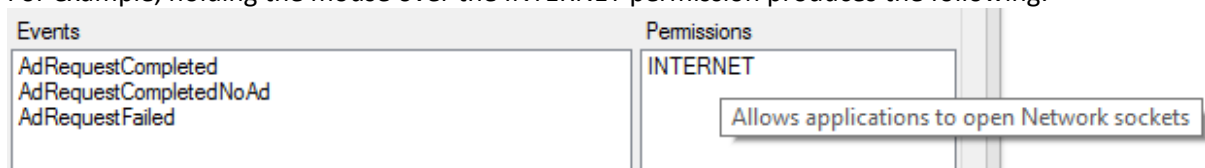
Class Details

Class Details are shown when you click on the Class Name, as shown below:

Class Details	
Annotation	Value
Name	ABCamera
Object Wrapper	
Owner	process
Short Name	ABCamera

When viewing Permissions, by holding the mouse over the specific permission, the Google-provided explanation of the permission is provided in the tool-tip.

For example, holding the mouse over the INTERNET permission produces the following:



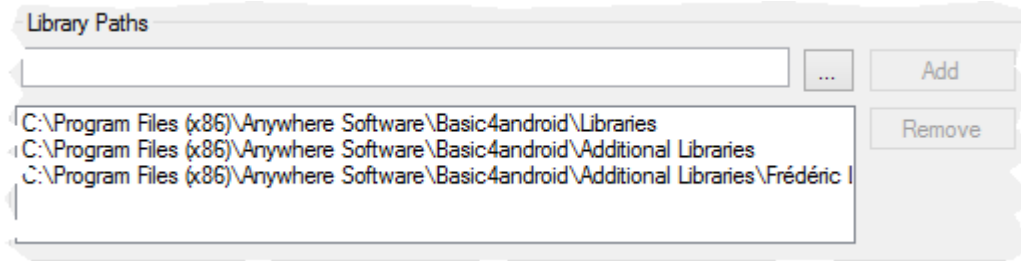
Class Details can be hidden by unselecting "Class Details" under the View menu. This setting is remembered between sessions.

Classes and Libraries

Classes and Libraries are loaded from the XML files located on your computer.

By default, B4a Object Browser does not know where to load your library XML files from, and it also does not know where you have saved any additional libraries.

To configure this, use the Options screen to define the locations.



Do not forget to use the Add button for each Path. Only after clicking the OK button will the Paths be saved.

By default, B4a Object Browser only loads each Library as you select it. To change this behaviour, change the "Load XML on demand" setting in the View menu.

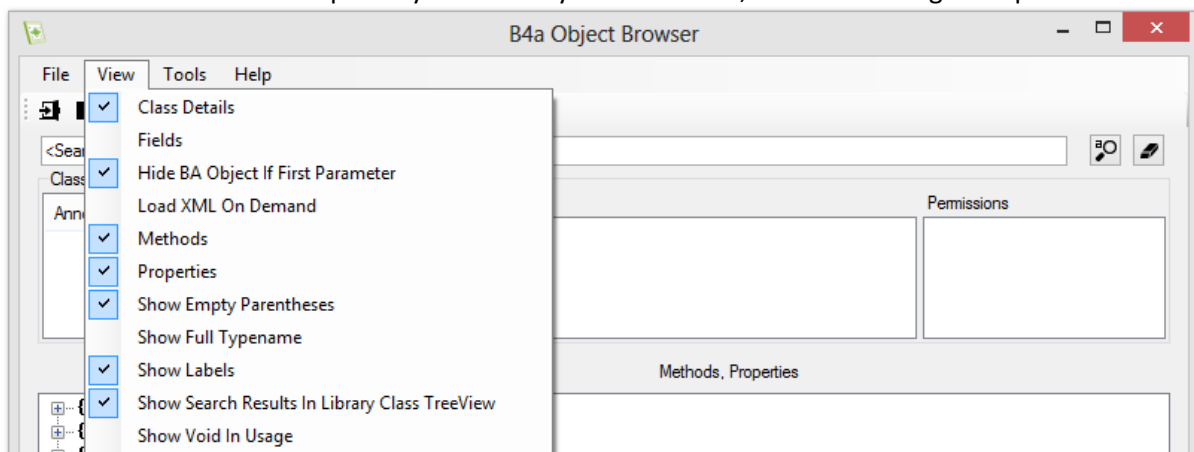
Methods, Properties and Fields

The Methods, Properties and Fields TreeView shows the Methods Properties and Fields of the currently selected Class.

This may be filtered by the Search text and also by the View settings in the Options screen.

An easy way of remembering what you currently have selected is to look at the label above the Methods, Properties and Fields TreeView (if "Show Labels" has been selected in Options).

This text reflects the view options you currently have selected, as the following example shows:



Comments

Comments may exist for each of the following:

- Library
- Class
- Method
- Property
- Field

To see the specific comment you desire, click on the corresponding object.

Library

The screenshot shows a library selection interface. On the left, a list of libraries is displayed, including Core, Daydream, EJML, Excel, GameView, GestureDetector, GFileDialog, GoogleMaps, GPS, HTTP, HttpServer, IME, InAppBilling, JSON, Licensing, LiveWallpaper, Matomy, Network, and NFC. The 'EJML' library is selected. The main content area displays the following information:

Standard

EJML Library Selected; Choose a Class

This library is based on EJML - efficient-java-matrix-library.
A fast and easy to use dense matrix linear algebra library written in Java
<http://code.google.com/p/efficient-java-matrix-library/>

Not all the functionality of EJML is exposed to Basic4android
This library exposes SimpleMatrix which is an interface that provides an easy to use object oriented way of doing linear algebra.
SimpleMatrix: <http://code.google.com/p/efficient-java-matrix-library/wiki/SimpleMatrix>

Class

The screenshot shows a class selection interface. On the left, a list of classes is displayed, including EJML, SimpleEVD, SimpleMatrix, SimpleSVD, Excel, GameView, GestureDetector, GFileDialog, GoogleMaps, GPS, HTTP, HttpServer, IME, InAppBilling, JSON, Licensing, and LiveWallpaper. The 'SimpleEVD' class is selected. The main content area displays the following information:

Standard

SimpleEVD

This object holds the Eigendecomposition of a matrix.
Eigenvalues and eigenvectors have the following property: $A \cdot v = \lambda \cdot v$
where A is a square matrix and v is an eigenvector associated with the eigenvalue λ .

In general, both eigenvalues and eigenvectors can be complex numbers.
For symmetric matrices the eigenvalues and eigenvectors are always real numbers.
EJML does not support complex matrices but it does have minimal support for complex numbers.
As a result complex eigenvalues are found, but only the real eigenvectors are computed.

Method / Property / Field

The screenshot shows a method selection interface. On the left, a list of methods is displayed, including GetEigenvalue, GetEigenvector, IndexMax, IndexMin, NumberOfEigenvalues, and Quality. The 'GetEigenvalue' method is selected. The main content area displays the following information:

Standard

GetEigenvalue

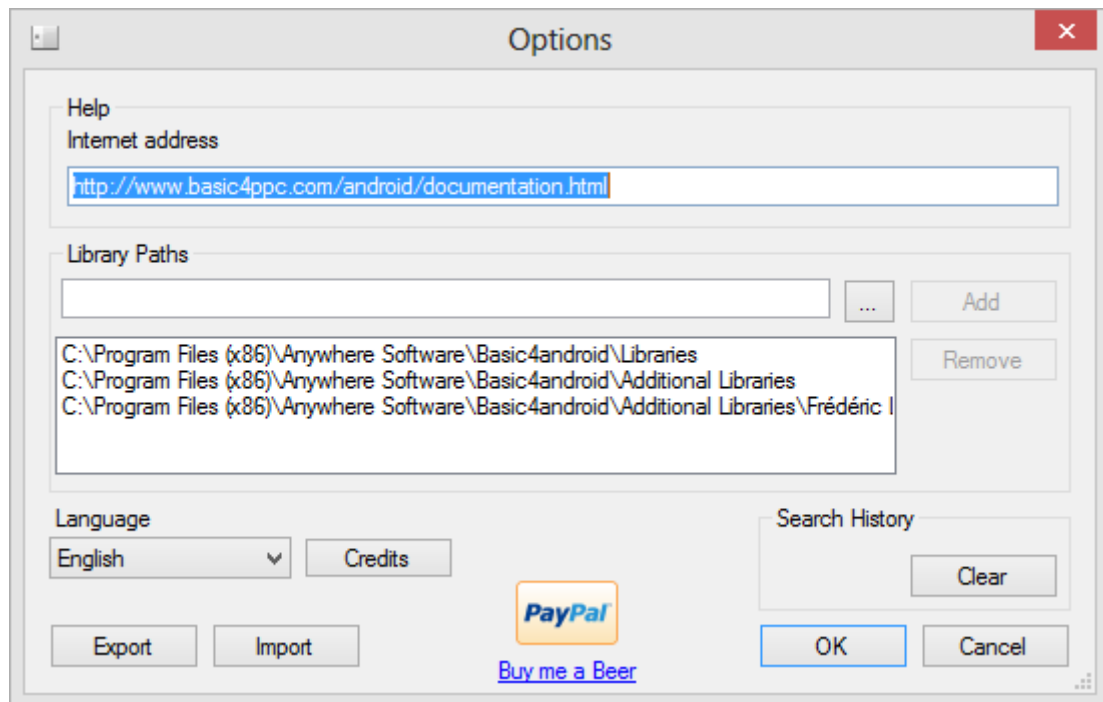
GetEigenvalue

Type
Method

Description
Returns an eigenvalue as a complex number, a Double(2) where 0 is the real component and 1 the imaginary.

Options Screen

Options have been provided to optimise your experience, as shown below:



The meaning of each option should be easily understood by the setting name. If you are unsure, you are encouraged to experiment.

The Export and Import buttons refer to the configuration shown on this screen.

About screen

The About screen shows simple version information.



It also allows you to see the version information for every currently loaded Library. Clicking the Libraries button shows the following:

The screenshot shows a dialog box titled "Libraries" containing a table of loaded libraries. The table has three columns: "Library", "Author", and "Version". The "ABExtDrawing" library is highlighted with a dotted border.

Library	Author	Version
ABExtDrawing	Alain Bailleul	1.7
Accessibility		1.0
Adiquity		1.0
Administrator		1.0
AdMob		1.4
Analytics		2.01
Animation		1.02
Audio		1.3
Camera		2.1
Core		2.47
Daydream		1.0
EJML	Andrew Graham	1.3
Excel		0.91
GameView		0.9
GestureDetector	Frédéric Leneuf...	1.01
GFileDialog		1
GoogleMaps		1.0
GPS		1.1
HTTP		1.25
HttpServer		1.0