# Free Software for Schools

Catalog of Open Source Software for Education



# **Table of Contents**

Table of Contents	2
How to Use this Catalog	6
Title of Application is shown here	6
A Note on the Software	6
Introduction	7
Copying and Redistribution	7
A Note on Sources.	7
Open Source Victoria – The Organisation	7
Why Consider Open Source Software	8
Additional Software	8
Acknowledgments	8
Three Paths of Open Source Software for Schools	9
Using Windows	9
Using Linux (or dual boot Linux/Windows)	9
Office Productivity Applications	10
OpenOffice.org – The Future of Office Suites	10
OpenOffice.org Writer – Word Processor	10
OpenOffice.org Math – For Mathematical Equations	11
OpenOffice.org Calc – The Convenient Spreadsheet	11
OpenOffice.org Impress – More Powerful Presentations	12
OpenOffice.org Base – Creates Accessible Databases	12
Abiword - Fast, Light, Simple & Usable Word Processor	13
Kword – KOffice Word Processor	13
KSpread – KOffice Spreadsheet	14
KPresenter – KOffice Presentation Application	14
Kexi – KOffice Database Application	15
Kivio – KOffice Flowcharting	15
KPlato – KOffice Project Management	16
KChart- KOffice Charting Application	16
KFormula – KOffice Mathematical Formula Formatting	17
Alexandria – Manages your Book Collection	17
Graphics	
GIMP – Photo Manipulation Program	
OpenOffice.org Draw – The Ultimate Graphics Bundle	
Karbon14 – KOffice Vector Drawing	
Xara Xtreme – Fast & Versatile Vector Graphics	
Inkscape – Scalable Vector Graphics	20
Blender 3D – Powerful Design & Rendering System FracPlanet – Make Your Own Planet!	open source victoria
POV Ray – Ray Tracer Program	21

Krita – KOffice Paint Application	22
QCAD – 2D Computer Aided Design and Drafting	22
Desktop Publishing.	23
Scribus – Desktop Publishing Suite	23
Lyx – Advanced Document Processor	23
Multimedia	24
VLC – Networked Media Player	24
MPlayer – Versatile Media Player	24
Audacity - The Free, Cross-Platform Sound Editor	25
Rosegarden – MIDI Sequencer.	25
Note Editor – Score Editor.	26
CinePaint – Movie Image Processing	26
Mixxx - Digital DJ System	27
MythTV – Versatile Media Center	27
Jahshaka - Realtime Editing and Effects System	28
Scientific Applications	29
KStars – The Desktop Planetarium.	29
Kalzium – Periodic Table	29
MayaVi – Scientific Data Visualiser	30
Celestia – A True Space Simulator	30
Resistor – For Converting Resistor Color Codes to Values	31
Tkgate – A Digital Circuit Simulator	31
Quantum GIS - Geographic Information System	32
The R Project – Statistics Package	32
Stellarium – A Planetarium for the Classroom	33
SciCraft – Data Analysis Tool.	33
Virtual Terrain Project – 3D Real World Simulations	34
Edukator – Physics & Maths	34
MOLO – Molecular Workbench.	35
Scilab - Scientific Software Package.	35
Mathematical Applications	36
Kig – Geometric Construction Program.	36
KmPlot – Mathematical Function Plotter	36
KMathTool – A Resourceful Maths Tool	37
KBruch – Fractional Exercises.	37
Maxima – Computer Algebra System.	38
YACAS - Computer Algebra System	
KAlgebra – A MathML-based graphic calculator	
ElectricForm – A program to calculate electronic values	39
KMathsTest – Random Mathmatical Equation Generator  Octave – Numerical Computations	open source victoria
Fung-Calc – An Advanced Graphing Calculator	41

Kalamaris – Mathematics Framework	41
Shodor – 60+ Maths Applets	42
XPlot – Gorgeous Maths Plotting Tool	42
AERO – A Physically Based Simulation System	43
Human Languages	44
KMessedWords – Jumbled Words	44
KLearnSpelling – Learn to Spell	44
KLettres – Helps Begin Learning Different Languages	45
Kiten – Helps With Japanese	45
KVerbos – Helps With Spanish	46
KTranslator – Language Translator	46
PyKanjiCard – A flash card program to help with Japanese	47
Accha – A program to help learn the Hindi alphabet	47
Nihongo Benkyo – A Japanese Dictionary	48
Pythoñol – A program to help learn Spanish	48
Computer Programming.	49
KTurtle – Introduction to Programming	49
StarLogo – Modelling Complex Systems	49
KDevelop – Integrated Development Environment	50
Eclipse – Java Integrated Development Environment	50
PhpMyAdmin – To Handle the Administration of MySQL	51
DrPython – For Developing Python Programs	51
NVU – A Web content editor	52
Squeak - An Object-oriented Programming Environment	52
Quanta Plus – Web Development IDE	53
KDevDesigner – GUI Designer	53
Educational Games.	54
XiStrat – Geometric Recreation.	54
FreeCiv – Competitive Resource Planning Game	54
BZFlag – 3D Team Battle Tank Strategy Game	55
Vega Strike - A 3D Action Space Simulator	55
GL-117 – 3D Fighter Simulation.	56
XshipWars – Space Combat & Trading Game	56
Mars Simulation Project – Human Settlement Simulation	57
GalaxyHack – Programmable Starship Battles	57
LinCity NG – Build and Run Your Own City	58
DroidBattles – Build and Program Your own Battle Droids	
Thunder&Lightning – Futuristic Combat Simulator	
ORSA – Celestial Mechanics Simulation	59
Gravit - Gravity Simulator	open source victorie
Flightgear – High Quality Open Flight Sim	60
RealTimeBattle – Fun Software Development	61

NASA World Wind – Earth Discover Tool	61
Battle for Wesnoth – Real Time Strategy Team Game	62
Core Wars – Machine Code Warriors	62
Computer Infrastructure for Schools	63
SmoothWall - Internet Security Software Package	63
Snort – Intrusion Detection System	63
Squid - High Performance Web Proxy Cache	64
Apache – World's Best Web Server Server	64
ModSecurity - An Intrusion Detection and Prevention	65
Samba – Windows Network File Sharing Server	65
NASLite - Network Attached Storage	66
Securepoint Security Suite – A Complete Firewall	66
Information System Solutions	67
OPEN-XCHANGE – Collaboration & Integration Server	67
PHProjekt – Project Management	67
Drupal - A Modular Content Management System	68
CaMail – A Modular Webmail System	68
GroupOffice – Web-based Groupware	69
Greenstone - Digital Library Project	69
Moodle - Learning Management System	70
HyperJournal – Information Manager	70
DoKS - Document and Knowledge Sharing	71
Wikipedia on DVD -	71
LAMS – Learning Activity Management System	72
MRBS – Meeting Room Booking System	72
FreeMind – Mind Mapping Software	73
DOKEOS – eLearning System	73
Primary School Children	74
KTouch – Touch Typing Program	74
TuxPaint – Fun Paint Program for Kids	74
Pysycache – Application for teaching to move the mouse	75
blinKen – The Linux version of Simon Says	75
KHangMan – The classical game of Hang Man	76
KTuberling – A "potato editor" game for kids	76
Tux Print – Used to print a number of different documents	77
TuxMath – An educational "Missile Command" style game	77
Keyano – Use a PC keyboard as a Musical Instrument	78
Tux Typing – A fun typing program	78
ChildsPlay – A suite of fun educational games for kids	79
GCompris – An Educational Software Suite	open source victoria 80

# How to Use this Catalog

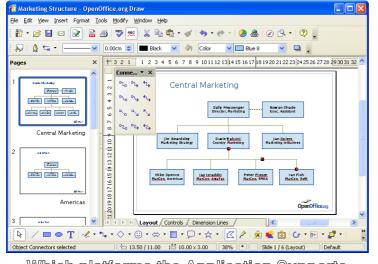
The majority of this document is a catalog of education-oriented applications, or applications which are potentially useful within an educational context. In order to make the best use of the catalog, it is important to understand what information it provides and how to find it.

The main catalog concerns itself with software which is of direct interest to schools, students and teachers. The catalog is segmented into broad categories, such as Office Productivity Applications, Graphics, Multimedia, Computer Programming, Junior School and more. There are also a number of indices which allow you to quickly scan for applications which fit particular parameters. These provide software titles which match those parameters, along with a page finder.

Each software title is provided, along with a quick description, an indicative screenshot, and a web (URL) location with more information and from where that software application can be downloaded from. Additionally, the supported platforms (Windows, Mac, Linux and Unix) are are listed.

Here's an example:

### Title of Application is shown here



Quick and simple overview of the application is shown here...

Which platforms the Application Supports

Windows Mac OS Linux Unix <a href="http://www.URLofApplication/">http://www.URLofApplication/</a>

### A Note on the Software

Open Source Victoria makes this catalog available as an informational resource. We don't specifically endorse the quality or efficacy of the software for your needs or requirements.



### Introduction

Open Source Victoria (OSV), an industry cluster funded by the Victorian State Government in Australia, has prepared the following report for the primary and secondary education sector. Within it, we have researched and provided a synopsis on a range of software which we believe will be beneficial to educators and students. We have also included a large list of other open source applications.

Specifically, our objectives are:

- a) to increase the awareness of open source software amongst all Victorian schools,
- b) to provide an easy mechanism for educators to review and select software,
- c) to increase the understanding of the merits of open source Software amongst students of Information Technology courses in schools,
- d) to help the education sector save money on software licences, which could be re-deployed on hardware or staff professional development.

### **Copying and Redistribution**

This material is made available under a Creative Commons licence which allows you to copy, mirror and redistribute the document as you see fit.

### A Note on Sources

To ensure the maximal level of information fidelity we have sourced the descriptions and screen-shots used within this document from the primary sources which pertain to the applications in question.

# **Open Source Victoria – The Organisation**

Open Source Victoria is an Industry Cluster consisting of over 80 Victorian firms and developers which provide services and technology related to Free and Open Source Software (FOSS.)

Open Source Victoria offers marketing, advocacy and information referral services, and aims to raise the profile of FOSS in Victoria and work with other similar organisations across Australia, as well as improve Victoria's Information and Communication Technology (ICT) competitiveness through FOSS deployment and development.

We invite you to visit our website (<a href="http://www.osv.org.au/">http://www.osv.org.au/</a>) where you may find out more about us.

en source victoria

# Why Consider Open Source Software

There are a number of great reasons to use open source software, ranging from the fact that such software is totally free of licence cost, that there are no restrictions in how often you can copy and install the software and that you gain access to software technology your school would not normally be able to afford. We list a few of these reasons here. By using Open Source software you can:

- 1. Save money all the software is totally free.
- 2. Save time on licence administration you can install it on as many PCs as you want.
- 3. Legally copy and distribute software as many times as you like you can make copies of it for colleagues.
- 4. Reduce your school's licencing liabilities there is *no possibility* of piracy problems when you use open source.
- 5. Save your students money your students can take all the software home with them, to install on their home PCs
- 6. Many open source applications are easy for Mac and Windows users to understand there are over 100,000 open source applications available, including almost all of the common desktop productivity programs, so there is likely to be an application for most needs.
- 7. Upgrades are free and open source software generally has a very long life spans and is rarely ever made obsolete. This helps ensure your data and experience with the software stays meaningful for much longer,
- 8. Invest money elsewhere the money you save for your school could be used to purchase new hardware or for teacher professional development.

### Additional Software

Besides the software we showcase here, there are another 100,000 or so open source packages, running on a range of platforms. You can use your favourite search engine to find such software, for instance, if you are looking for geography software, search for:

open source geography software

You can also browse for or search additional software at repositories and foundries like <a href="http://sourceforge.net/">http://sourceforge.net/</a> and <a href="http://freshmeat.net/">http://freshmeat.net/</a>

# **Acknowledgments**

Open Source Victoria would like to that that State Government of Victoria, which through the grants made available through Multimedia Victoria have made this project possible.

# Three Paths of Open Source Software for Schools

You can use open source software in a number of ways. Many open source applications can happily run on various operating system platforms, such as Windows, Mac OS, Linux and Unix. However, there are many more open source applications which run on open source platforms, primarily Linux. You therefore have several paths towards using open source software. You can:

- 1. Use software which will work with existing Windows (and sometimes Macintosh) workstations.
- 2. Use software which will work with an installation on a Linux operating system partition, as part of a dual-boot PC (which can also continue to run the existing Windows platform.)
- 3. Use software which will work on a Linux-only server and be accessible from Windows or Mac OS via a web browser.

### **Using Windows**

We perceive that the easiest option for many teachers and schools when starting to use open source software, is the first approach, namely to install and use software which runs on Windows. *Appendix A* lists a number of open source programs which are available for the Windows PC. You are able to download and install this software, directly from the websites nominated.

### **Using Linux (or dual boot Linux/Windows)**

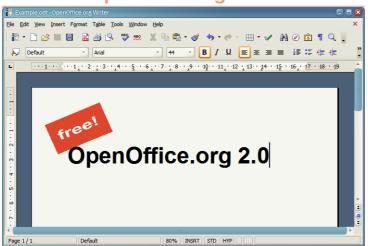
While there are hundreds of open source programs which are available for Windows, there are far more which run on top of the Linux operating system. You are able to use these programs by installing Linux on some of your PCs, or perhaps making your existing Windows PCs dual-boot, so they can be made to run with Linux (and therefore Linux software) as well. This will not affect the Windows operating system and software you may already have installed on that PC.

While some time back, Linux was quite complex to install and use. Nowdays, it is no more complex than Windows, and looks much like the modern Windows desktop.



# **Office Productivity Applications**

### OpenOffice.org - The Future of Office Suites



OpenOffice.org mostly works and looks like Microsoft Office. With OpenOffice.org, you are able to create, read and write Word, Excel and Powerpoint files, as well as create complex vector drawings. OpenOffice.org also allows you to directly save your documents into industry-standard XML and PDF. OpenOffice.org is available in over a dozen languages.

Windows

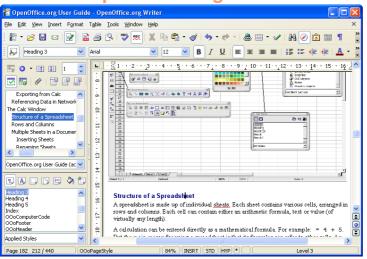
Mac OS

Linux

Umix

http://www.openoffice.org

# **OpenOffice.org Writer – Word Processor**



*Writer* has everything you would expect from a modern, fully equipped word processor or desktop publisher.

It's simple enough for a quick memo, powerful enough to create complete books with contents, diagrams, indexes, etc. You're free to concentrate on your message - while *Writer* makes it look great.

Windows

Mac OS

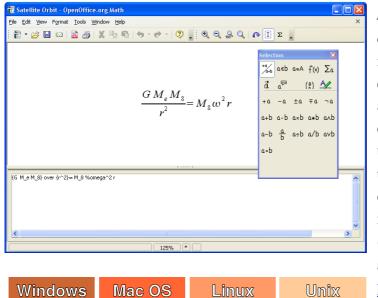
Linux

Umix

http://www.openoffice.org/



### **OpenOffice.org Math – For Mathematical Equations**



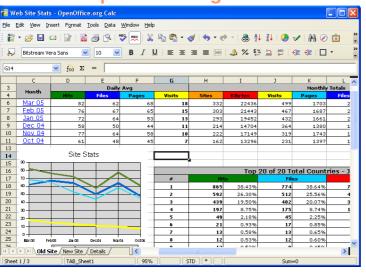
Linux

**Math** is the mathematical equation component for *OpenOffice.org*. It is most commonly used as an equation editor for text documents, but it can also be used with other types of documents or stand-alone. When used inside *Writer*, the equation is treated as an object inside the text document. Similarly, one can also insert these into other OpenOffice.org programs like Calc and Impress.

http://www.openoffice.org/

## OpenOffice.org Calc – The Convenient Spreadsheet

Umix



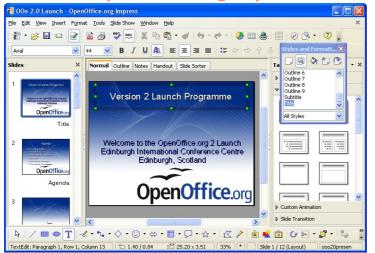
*Calc* is the spreadsheet program you've always wanted. Newcomers find it intuitive and easy to learn; professional data miners and number crunchers will appreciate the comprehensive range of advanced functions.

Mac OS http://www.openoffice.org/ Windows Linux Unix



Windows

### **OpenOffice.org Impress – More Powerful Presentations**



*Impress* is a truly outstanding tool for creating effective multimedia presentations. Your presentations will stand out with 2D and 3D clip art, special effects, animation, and high-impact drawing tools.

Windows

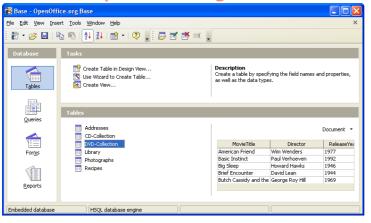
Mac OS

Linux

Unix

http://www.openoffice.org/

### **OpenOffice.org Base – Creates Accessible Databases**



Base enables you to manipulate database data seamlessly within OpenOffice.org. Create and modify tables, forms, queries, and reports, either using your own database or Base's own built-in HSQL database engine. Base offers a choice of using Wizards, Design Views, or SQL Views for beginners, intermediate, and advanced users.

Windows

Mac OS

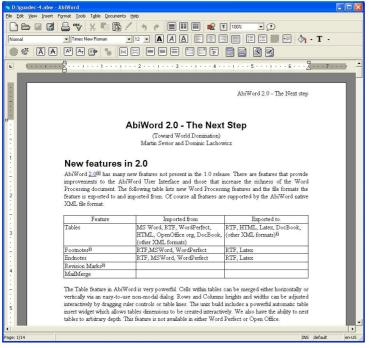
Linux

Unix

http://www.openoffice.org/



### Abiword – Fast, Light, Simple & Usable Word Processor



AbiWord is a free word processing program similar to Microsoft Word. It is suitable for a wide variety of word processing tasks. AbiWord is rapidly becoming a state of the art Word Processor, with lots of features useful for your daily work, personal needs, or for just some good old typing fun.

AbiWord is able to read and write all industry standard document types, such as OpenOffice.org documents, Microsoft Word documents, WordPerfect documents, Rich Text Format documents, HTML web pages and many more.

Windows

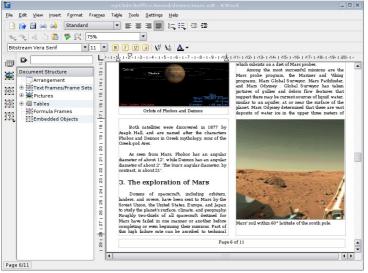
Mac OS

Linux

Umix

http://www.abiword.org/

### **Kword – KOffice Word Processor**



Linux Ur

Umix

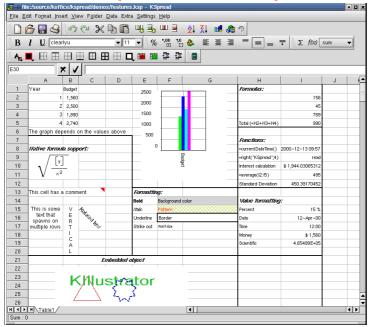
**KOffice** is a free, integrated office suite for KDE, the K Desktop Environment often used on Linux.

KWord is a frame-based word-processing and desktop publishing application. KWord is capable of creating demanding and professional looking documents. Whether you are a corporate or home user, production artist or student, KWord will prove a valuable and easy to use tool for all your word processing and layout needs.

http://www.koffice.org/kword/

open source victoria

### KSpread - KOffice Spreadsheet

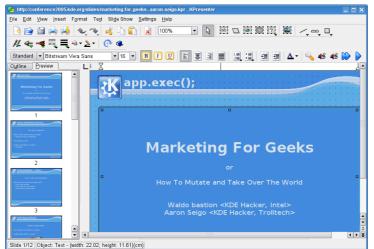


KSpread is a scriptable spreadsheet program which provides both tableoriented sheets and support for complex mathematical formulas and statistics.

Linux Unix

http://www.koffice.org/kspread/

### **KPresenter – KOffice Presentation Application**



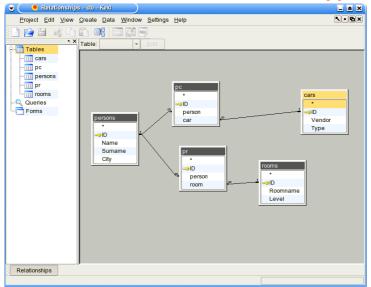
KPresenter is a presentation application. With KPresenter, you can prepare a set of slides for use in an on-screen slideshow or for printing. Your slides can include text and graphics in a variety of formats, and of course, you can embed all sorts of objects.

Linux Unix

http://www.koffice.org/kpresenter/



### **Kexi – KOffice Database Application**



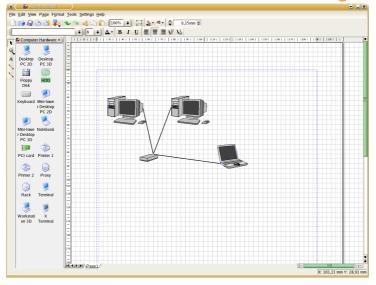
Kexi is an integrated data management application. It can be used for creating database schemas, inserting data, performing queries, and processing data. Forms can be created to provide a custom interface to your data. All database objects - tables, queries and forms - are stored in the database, making it easy to share data and design.

Linux

Unix

http://www.koffice.org/kexi/

# Kivio - KOffice Flowcharting



Kivio is a flowcharting and diagramming application for the KOffice application suite, and has an userinterface that is similar to Visio®. It is fully integrated into KOffice and can for example be embedded into KWord.

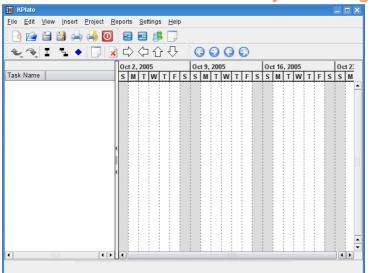
Linux

Unix

http://www.koffice.org/kivio/



### **KPlato – KOffice Project Management**

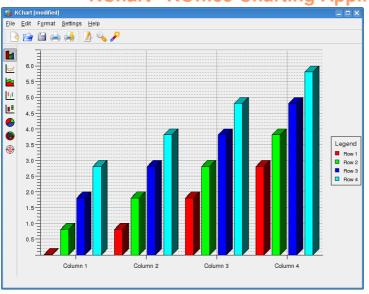


KPlato is a project management application, allowing for the planning and scheduling of projects. It is in the very early stages of development.

Linux Unix

http://www.koffice.org/kplato/

# **KChart– KOffice Charting Application**



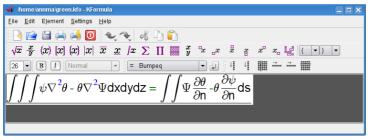
KChart is the KOffice chart drawing application. Use it to embed charts into your KOffice documents, e.g. a report written with KWord or a slideshow made with KPresenter.

Linux Unix

http://www.koffice.org/kchart/



### KFormula – KOffice Mathematical Formula Formatting



KFormula is a formula editor for KOffice. KFormula can be used to create and edit mathematical formulas that can be included in other KOffice documents. It provides simple input facilities and supports the functionality you expect from a KOffice application.

Linux Unix

http://www.koffice.org/kformula/

### Alexandria - Manages your Book Collection.



Retrieves and displays book information (sometimes with cover pictures) from several online libraries, such as <u>Amazon</u>, <u>Proxis</u>, <u>Barnes and Noble</u>, the <u>Spanish</u> <u>Ministry of Culture</u>, <u>Amadeus Buch</u>, <u>Internet Bookshop Italia</u>, the <u>US</u> <u>Library of Congress</u> and the <u>British Library</u>

Linux

Unix

http://alexandria.rubyforge.org/



# **Graphics**

### **GIMP – Photo Manipulation Program**



GIMP is a powerful, fully-featured graphics program which can perform all the actions images you could ever want. GIMP is an acronym for GNU Image Manipulation Program. It has many capabilities. It can be used as a simple paint program, an expert quality photo retouching program, an online batch processing system, a mass production image renderer, an image format converter, etc.

Windows

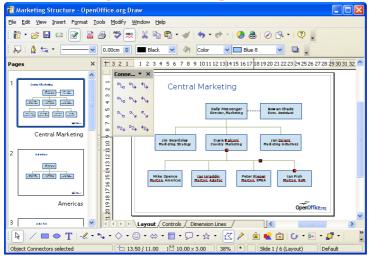
Mac OS

Linux

Unix

http://www.gimp.org

### **OpenOffice.org Draw – The Ultimate Graphics Bundle**



From a quick sketch to a complex plan, *Draw* provides you with the tools to communicate with graphics and diagrams.

Windows

Mac OS

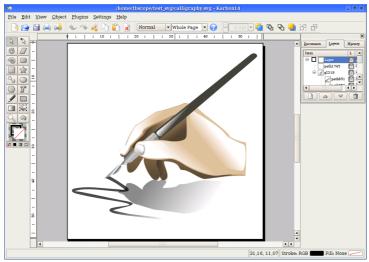
Linux

Unix

http://www.openoffice.org/



### Karbon14 - KOffice Vector Drawing



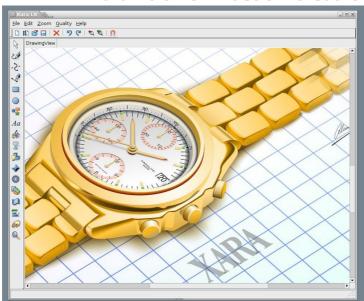
Karbon is a *vector-based* drawing application for KOffice. It allows artists to create complex drawings without losing image quality when zooming in on, or resizing the drawing. You can use Karbon to add finishing touches to diagrams created using Kivio or charts created using KChart. Graphic design ideas can be quickly and easily transformed into high quality illustrations with Karbon.

Linux

Unix

http://www.koffice.org/karbon/

### **Xara Xtreme – Fast & Versatile Vector Graphics**



Xara X is the world's fastest and we believe the most versatile graphics software. It's primarily a vector graphics (drawing and illustration) program but is one of the new generation of cross-over products that handles photos and drawings with equal ease. Xara X is also renowned for its slick, easy-to-use and easy-to-learn approach.

Windows

Mac OS

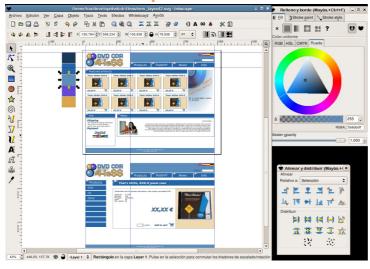
Linux

Umix

http://xaraxtreme.org/



### Inkscape - Scalable Vector Graphics



Inkscape is a vector graphics editor, with capabilities similar to Illustrator, Freehand, CorelDraw, or Xara X using the W3C standard Scalable Vector Graphics (SVG) file format. Supported SVG features include shapes, paths, text, markers, clones, alpha blending, transforms, gradients, patterns, and grouping. Inkscape also supports Creative Commons meta-data, node editing, layers, complex path operations, bitmap tracing, text-on-path, flowed text, direct XML editing, and more. http://www.inkscape.org/

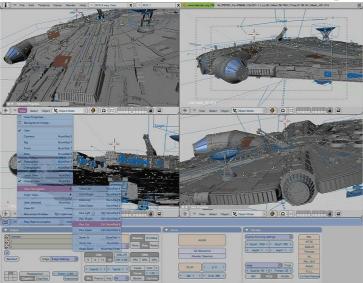
Windows

Mac OS

Linux

Unix

Blender 3D – Powerful Design & Rendering System



Blender is a fully integrated 3D graphics creation suite allowing modeling, animation, rendering, post-production, real-time interactive 3D, and game creation and playback with cross-platform compatibility.

Blender is a powerful, professionalgrade system which has to be seen to be believed.

Windows

Mac OS

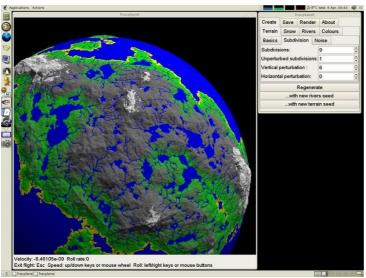
Linux

Umix

http://blender.org/



### FracPlanet - Make Your Own Planet!



Fracplanet is an interactive application to generate and view random fractal planets and terrain with oceans, mountains, icecaps, and rivers, then save them in POV-Ray format. It uses Qt and OpenGL.

Mac OS

Linux

http://www.bottlenose.demon.co.uk/s hare/fracplanet/index.htm

### **POV Ray – Ray Tracer Program**



The *Persistence of Vision Ray- Tracer* creates three-dimensional, photo-realistic images using a rendering technique called ray-tracing. It reads in a text file containing information describing the objects and lighting in a scene and generates an image of that scene from the view point of a camera also described in the text file.

Windows

Mac OS

Linux

Unix

http://www.povray.org



# Krita – KOffice Paint Application

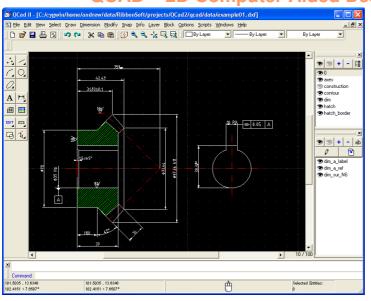


**Krita** is a painting and image editing application for KOffice. Krita is part of KOffice since 1.4. Krita contains both ease-of-use and fun features like guided painting (never before has it been so easy to airbrush a straight line!) and high-end features like support for 16 bit images, CMYK and even OpenEXR HDR images.

Linux Unix

http://www.koffice.org/krita/

### QCAD – 2D Computer Aided Design and Drafting



QCad is an application for computer aided drafting in two dimensions. With QCad you can create technical drawings such as plans for buildings, interiors or mechanical parts. QCad works under Linux, Unix Systems, Mac OS X and Windows.

Windows Mac OS Linux Unix <a href="http://www.ribbonsoft.com/qcad.html">http://www.ribbonsoft.com/qcad.html</a>



# **Desktop Publishing**

### Scribus - Desktop Publishing Suite



Scribus is an open source DTP application for Linux and other flavors of Unix and Unix-like systems, including Mac OS X and soon Windows.

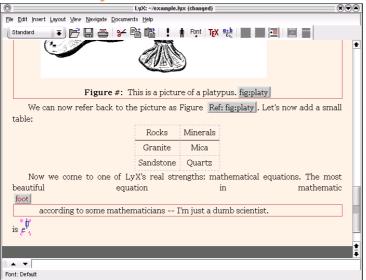
Mac OS

Linux

Unix

http://www.scribus.org.uk/

### **Lyx – Advanced Document Processor**



LyX is an advanced open source document processor that encourages an approach to writing based on the structure of your documents, not their appearance. LyX lets you concentrate on writing, leaving details of visual layout to the software.

Windows

Mac OS

Linux

Unix

http://www.lyx.org/



# **Multimedia**

### VLC – Networked Media Player



VLC (initially VideoLAN Client) is a highly portable multimedia player for various audio and video formats (MPEG-1, MPEG-2, MPEG-4, DivX, mp3, ogg etc.) as well as DVDs, VCDs, and various **streaming** protocols. It can also be used as a server to stream in unicast or multicast in IPv4 or **IPv6** on a high-bandwidth network.

Windows

Mac OS

Linux

http://www.videolan.org/vlc/

### **MPlayer – Versatile Media Player**



MPlayer is a movie player which runs on many systems. It plays most MPEG/VOB, AVI, Ogg/OGM, VIVO, ASF/WMA/WMV, QT/MOV/MP4, RealMedia, Matroska, NUT, NuppelVideo, FLI, YUV4MPEG, FILM, RoQ, PVA files, supported by many native, XAnim, and Win32 DLL codecs. You can watch VideoCD, SVCD, DVD, 3ivx, DivX 3/4/5 and even WMV movies.

Windows

Mac OS

Linux

Unix

http://www.mplayerhq.hu/



### **Audacity - The Free, Cross-Platform Sound Editor**



A fast multi-track audio editor and recorder for Linux, BSD, Mac OS, and Windows. Supports WAV, AIFF, Ogg, and MP3 formats. Features include envelope editing, mixing, built-in effects and plug-ins, all with unlimited undo.

Windows

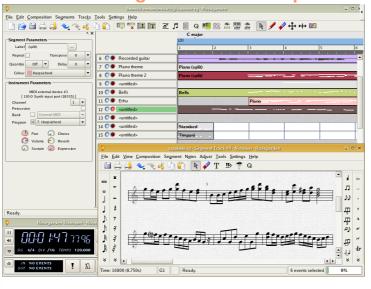
Mac OS

Linux

Unix

http://audacity.sourceforge.net/

Rosegarden - MIDI Sequencer



Rosegarden is an audio and MIDI sequencer, score editor, and general-purpose music composition and editing environment. It is an easy-to-learn, attractive application that runs on Linux. It is ideal for composers, musicians, music students, and small studio or home recording environments.

Windows

Mac OS

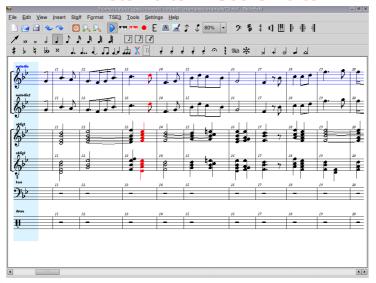
Linux

Unix

http://www.rosegardenmusic.com/



### Note Editor - Score Editor



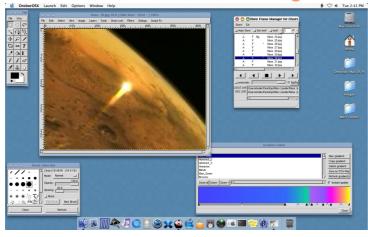
Note Editor is an editor for music notation that supports an unlimited number of staffs and up to 9 voices per staff. The import formats are MIDI files, recorded from MIDI keyboards and TSE3. The export formats are MIDI, MusiXTeX, LilyPond, PMX, MUP, and TSE3.

Linux

Unix

http://noteedit.berlios.de/

### **CinePaint – Movie Image Processing**



CinePaint is a collection of free open source software tools for deep paint manipulation and image processing. CinePaint is a collaborative project that spans the film industry, universities, and the open source community.

Windows

Mac OS

Linux

Unix

http://cinepaint.movieeditor.com/



# **Mixxx - Digital DJ System**



Mixxx is a digital DJ system, where wave, Ogg, and MP3 files can be mixed on a computer for use in live performances. Filters, a crossfader, and speed controls are provided. It is controlled by mouse and/or MIDI events.

Mac OS Windows Linux Umix

http://mixxx.sourceforge.net

### **MythTV – Versatile Media Center**



Home or School media center solution which provides the ability to pause, fast-forward and rewind live television, DVDs, images, music and capture analog capture card, MPEG-2, MJPEG, DVB or HDTV.

Linux

http://www.mythtv.org/



# **Jahshaka - Realtime Editing and Effects System**



Edit with flexibility and speed Create Effects in real time. Animate with unlimited features. Paint and design on moving video. Create music with all the tools the pros use. Work in any format at any resolution

Windows

Mac OS

Linux

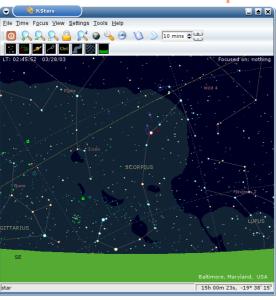
Unix

http://www.jahshaka.org/



# **Scientific Applications**

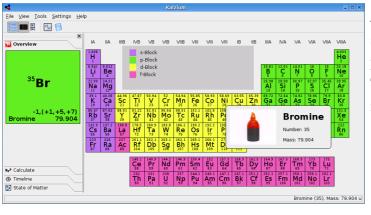
# **KStars – The Desktop Planetarium**



KStars provides an accurate graphical simulation of the night sky, from any location on Earth, at any date and time. The display includes 40,000 stars, 13,000 deep-sky objects, all 8 planets, the Sun and Moon, and thousands of comets and asteroids.

Linux Unix <a href="http://edu.kde.org/kstars/">http://edu.kde.org/kstars/</a>

### Kalzium - Periodic Table



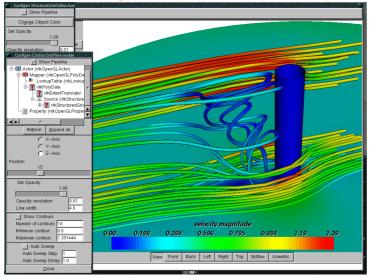
*Kalzium* is an application which will show you some information about the periodic system of the elements.

Therefore you could use it as an information data bank.

Linux Unix <a href="http://edu.kde.org/kalzium">http://edu.kde.org/kalzium</a>



### MayaVi - Scientific Data Visualiser



*MayaVi* is a scientific data visualiser which is written in Python and uses the Visualisation Toolkit (VTK) for the visualization. An easy to use GUI using Tkinter is provided.

Windows

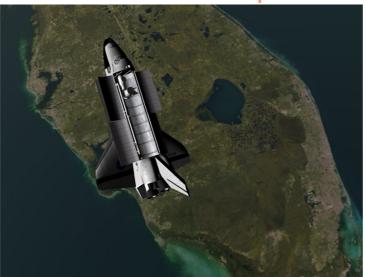
Mac OS

Linux

Unix

http://mayavi.sourceforge.net/

### **Celestia – A True Space Simulator**



Celestia doesn't confine you to the surface of the Earth. You can travel throughout the solar system, to any of over 100,000 stars, or even beyond the galaxy. Celestia comes with a large catalog of stars, planets, moons, asteroids, comets, and spacecraft. If that's not enough, you can download dozens of easy to install add-ons with more objects.

Windows

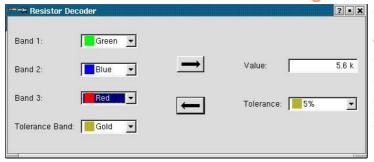
Mac OS

Linux

http://celestia.sourceforge.net/



### Resistor – For Converting Resistor Color Codes to Values

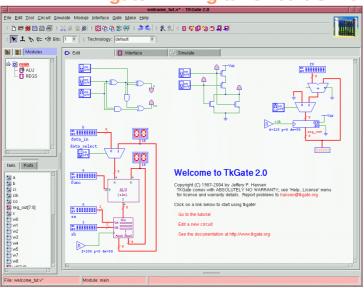


Use this for converting resistor color codes to values and vice-versa. Enter the color bands on a resistor and it will tell you the value; enter a value you're looking for and it will tell you the color bands.

Windows Mac OS Linux Unix

http://resistor.sourceforge.net/

### **Tkgate - A Digital Circuit Simulator**

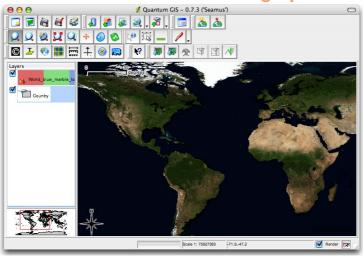


This is an event-driven digital circuit simulator with a TCL/TK-based graphical editor. It supports a range of primitive circuit elements and user-defined modules for hierarchical design. The program comes with a number of tutorial and example circuits. The example circuits include a simple CPU, programmed to run the Animals game.

Windows Mac OS Linux Unix http://www.tkgate.org/



### **Quantum GIS - Geographic Information System**



Support for spatially enabled PostGIS tables Support for shapefiles, ArcInfo coverages, Mapinfo, and other formats supported by OGR Raster support for a large number of formats Identify features Display attribute tables Select features GRASS Digitizing Feature labeling

Windows

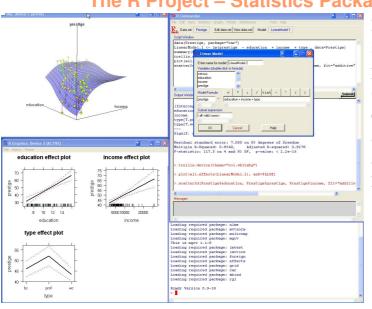
Mac OS

Linux

Unix

http://www.qgis.org/

### The R Project – Statistics Package



R is a language and environment for statistical computing and graphics. R provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, ...) and graphical techniques, and is highly extensible.

Windows

Mac OS

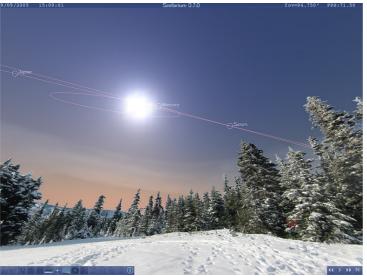
Linux

Unix

http://www.r-project.org/



### Stellarium - A Planetarium for the Classroom



Stellarium is free GPL software which renders realistic skies in real time with openGL. It is available for Linux/Unix, Windows and MacOSX.

With Stellarium, you really see what you can see with your eyes, binoculars or a small telescope.

Stellarium is also used in planetariums

Windows

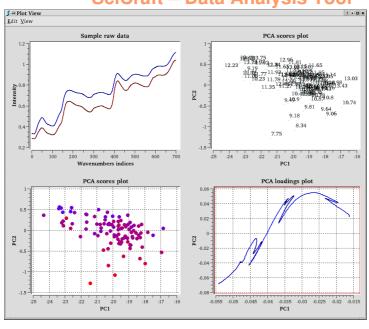
Mac OS

Linux

Unix

http://stellarium.sourceforge.net/

### SciCraft - Data Analysis Tool



SciCraft is a data analysis software which allows the user to access advanced methods in statistics, chemometrics and artificial intelligence through an easy-to-use graphical user interface (GUI)

Windows

Linux

Unix

http://www.scicraft.org/



### **Virtual Terrain Project – 3D Real World Simulations**



The goal of VTP is to foster the creation of tools for easily constructing any part of the real world in interactive, 3D digital form.

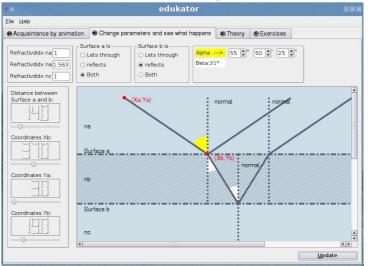
Windows

Linux

Unix

http://vterrain.org/

### **Edukator - Physics & Maths**



Windows

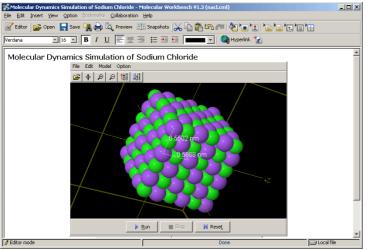
Linux

Unix

EduKator is a KDE-based education program for learning about physics and mathematics in a way that it is fun. The program explains the theory being taught, and provides exercises for practicing the concepts. It includes programs for teaching the basic rules of optics, representing dubblerates graphically, teaching the basics of Archimedes' principles, and teaching about extrema problems (finding the minimum and maximum values of mathematical functions). http://users.pandora.be/muylkens/edukator/html/middle edukator.html



### **MOLO - Molecular Workbench**



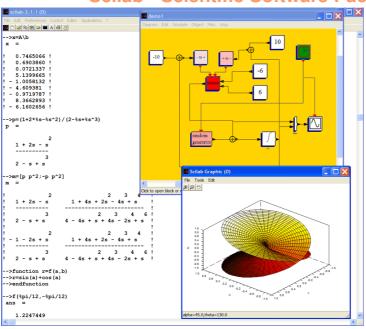
The goal of the Molecular Logic project is to improve the ability of all students to understand fundamental biological phenomena in terms of the interactions of atoms and molecules. The Molecular Logic project aims to do this by enhancing biology courses with guided explorations of powerful atomic and molecular computational models. These models are embedded in an easily implemented database linked to both typical textbooks and standards.

http://molo.concord.org/

Windows

Linux Unix

### Scilab - Scientific Software Package



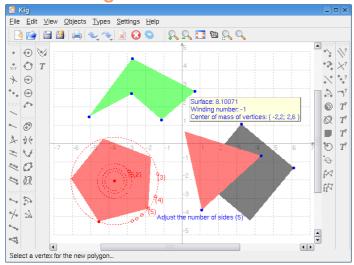
Scilab is a scientific software package for numerical computations providing a powerful open computing environment for engineering and scientific applications.

Windows Mac OS Linux Unix <a href="http://www.scilab.org/">http://www.scilab.org/</a>



# **Mathematical Applications**

### **Kig – Geometric Construction Program**



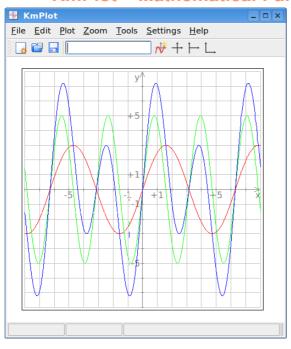
*Kig* is an interactive program for exploring geometric constructions. It allows you to create various geometric shapes as well as explore mathematical figures and concepts on the computer. *Kig* is used as a replacement for similar programs such as *KSeg* and *KGeo*.

Linux

http://edu.kde.org/kig/

### **KmPlot – Mathematical Function Plotter**

Unix



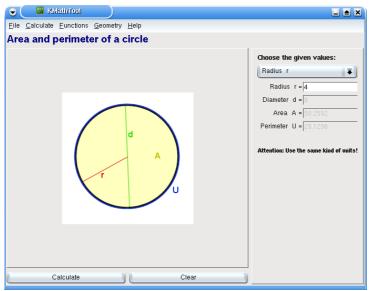
It has a built in powerful parser. You can plot different functions simultaneously and combine their function terms to build new functions. *KmPlot* supports functions with parameters and functions in polar coordinates. Several grid modes are possible. Plots may be printed with high precision in correct scale.

Linux Unix

http://edu.kde.org/kmplot/



#### KMathTool - A Resourceful Maths Tool



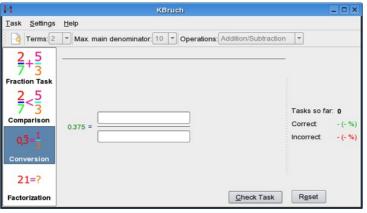
*KMathTool* will be a collection of little maths-tools. There are already some topics what kind are realized:

- Lines: find equations, find sectionpoints.
- Factors: factorize a given number, find factors, find HCF.
- Geometry: area and perimeter of square, rectangle and circle.

Linux Unix

http://edu.kde.org/kmathtool/

#### **KBruch – Fractional Exercises**

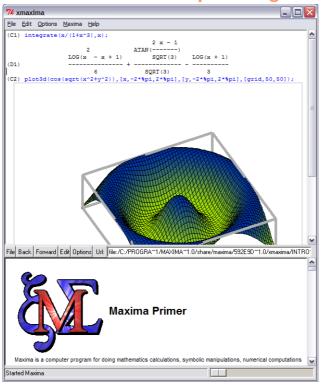


*KBruch* is a small program to practice calculating with fractions. Therefore 4 different exercises are offered: Fraction Task, Comparison, Conversion and Factorisation. In all exercises *KBruch* will generate a task and the user has to solve it. The program checks the input and provides feedback about it.

Linux Unix http://edu.kde.org/kbruch/



#### Maxima - Computer Algebra System



Maxima is a system for the manipulation of symbolic and numerical expressions, including differentiation, integration, Taylor series, Laplace transforms, ordinary differential equations, systems of linear equations, and vectors, matrices, and tensors. Maxima produces high precision results by using exact fractions and arbitrarily long floating point representations, and can plot functions and data in two and three dimensions.

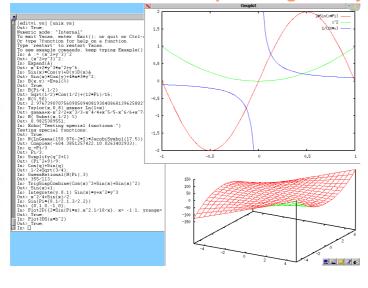
Windows

Mac OS

Linux

http://maxima.sourceforge.net/

# **YACAS - Computer Algebra System**



YACAS is an easy to use, general purpose Computer Algebra System, a program for symbolic manipulation of mathematical expressions. It uses its own programming language designed for symbolic as well as arbitrary-precision numerical computations. The system has a library of scripts that implement many of the symbolic algebra operations; new algorithms can be easily added to the library.

Windows

Mac OS

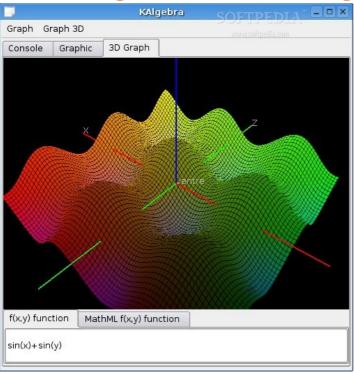
Linux

Unix

http://yacas.sourceforge.net/

open source victoria

### KAlgebra – A MathML-based graphic calculator

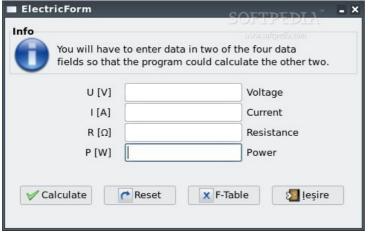


KAlgebra is a MathML-based graphic calculator, thought to bring to the user its power by solving expressions written in MathML or calculating converted common equations to MathML.

Linux

http://kalgebra.berlios.de/

## ElectricForm – A program to calculate electronic values



This is a program that will help you at your electronic based projects or at school. For it to calculate you will have to enter data in two of the four data fields. The four data fields are: electric power, resistance, current and voltage. As an example if you want to calculate the resistance you will have to supply the value for the electric power and current or you can supply the value of the power and voltage.

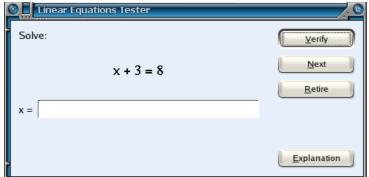
Linux Unix

http://minipop.org/



### **KMathsTest – Random Mathmatical Equation Generator**

Umix



KMathsTest is a program who randomly generates maths questions for you to answer.

This program randomly generates maths questions for you to answer. It keeps a basic log of your scores and allows you to change the minimum and maximum values for the numbers. Explanations are also provided on how to solve individual linear equations.

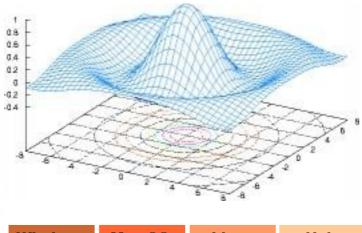
http://www.corfizz.plus.com/Home42/KM <u>T.tar.gz</u> (Note, ZIP file of software)

Mac OS

Windows

#### **Octave – Numerical Computations**

Linux



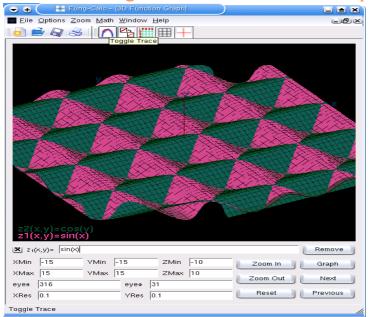
Octave is a high-level language, primarily intended for numerical computations. It provides a convenient command line interface for solving linear and nonlinear problems numerically, and for performing other numerical experiments. It may also be used as a batch-oriented language.

Windows Mac OS Linux Unix

http://www.octave.org/



#### Fung-Calc – An Advanced Graphing Calculator

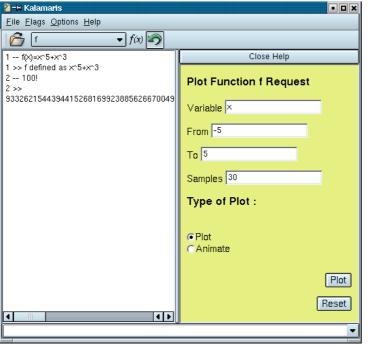


This is an advanced graphing calculator that supports graphing in both 2D and 3D. Several different plot types are available, and graphs can be animated.

Linux Umix

http://fung-calc.sourceforge.net/

#### **Kalamaris – Mathematics Framework**



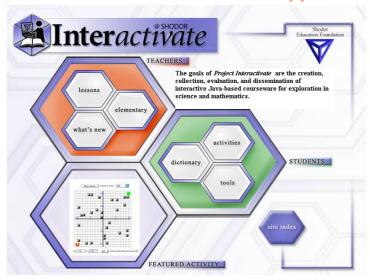
Mac OS

Kalamaris is the next generation on scientific applications. While similar to Mathematica® in some aspects, it offers a new approach to solve mathematical problems in an easy and intuitive way.

http://developer.kde.org/~larrosa/kala Linux Umix maris.html en source victoria

Windows

#### **Shodor – 60+ Maths Applets**

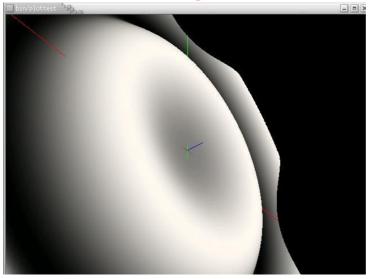


This is a collection of over 60 Java applets for all levels of math, with student activities. These tools are designed such that they can be used as stand-alone applications in analyzing or organizing numbers and data.

Windows Mac OS Linux Unix

http://www.shodor.org/interactivate/activities/tools.html

#### **XPlot – Gorgeous Maths Plotting Tool**



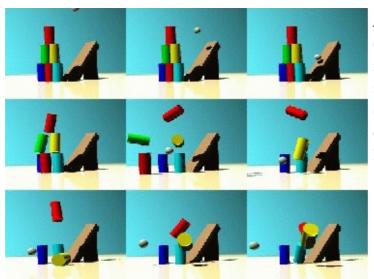
XPlot is a Mathematics function plotting program based on OpenGL. It can be used to plot functions in 2 and 3 dimension. Graphs plotted are interactive. Users can change the point of view, zoom in and zoom out, adjust the plot range, and colorize the graph. It should accommodate many of the needs of high school students for graphic data representation.

Windows Mac OS Linux Unix <a href="http://mathdev.sourceforge.net/">http://mathdev.sourceforge.net/</a>



Build: 273

# **AERO – A Physically Based Simulation System**



AERO is a simulation program based on rigid body systems. With the built-in 3D editor you can create a virtual scene consisting of spheres, boxes (cuboids), cylinders and plains. These objects may be connected with links like spring, damper, rod and joint.

Linux

Unix

http://robotics.ee.uwa.edu.au/aero/



# **Human Languages**

#### KMessedWords - Jumbled Words

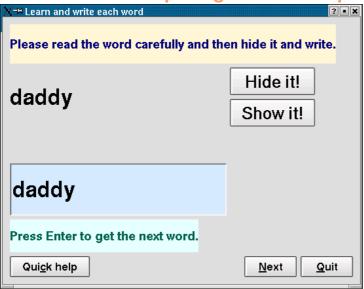


KMessedWords is a simple mindtraining game, in which you have to "figure out" the word that has been supplied by the program. This program is ideal of ages 10 and up as the game is harder to solve than it looks.

Linux Unix

http://edu.kde.org/kmessedwords/

#### KLearnSpelling - Learn to Spell



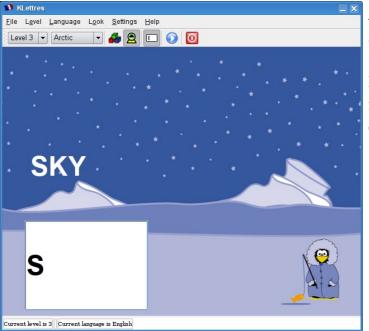
*KLearnSpelling* aims to help pupils from all around the world to learn their own spelling words. This program has 2 goals:

- to allow the parent or the teacher to type in the list of words
- to help the pupil learn the words and have a test as he will have at school.

Linux Unix <a href="http://edu.kde.org/klearnspelling/">http://edu.kde.org/klearnspelling/</a>



#### **KLettres – Helps Begin Learning Different Languages**



*KLettres* aims to help learn the alphabet and then to read some syllables in different languages. It is meant to help learning the very first sounds of a new language, for children or for adults.

Linux Unix <a href="http://edu.kde.org/klettres">http://edu.kde.org/klettres</a>

## Kiten - Helps With Japanese



*Kiten* is a Japanese reference/learning tool.

Linux Unix http://edu.kde.org/kiten



#### **KVerbos – Helps With Spanish**



With *KVerbos* you can practice the Spanish verb conjugation. The program comes with a large set of Spanish verbs. You can select from a list of over 9 000 verbs the ones you want to train and you can select the tenses, too.

Linux Unix http:/

http://edu.kde.org/kverbos

#### KTranslator - Language Translator



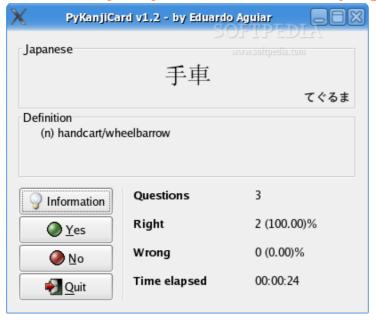
KTranslator is a program to translate words from one language to another. KTranslator should support any language. The main idea behind KTranslator is to translate a word without disturbing the application in use. So, when the user selects a word, KTranslator will try to translate the word and show the result in a pop-up window.

Linux Unix

http://ktranslator.sourceforge.net/



### PyKanjiCard – A flash card program to help with Japanese



PyKanjiCard is a flash card program to aid learning japanese written words, in hiragana, katakana and kanji. You can select words composed only by characters you already known.

Linux Unix

http://sourceforge.net/projects/pykanjicard/

# Accha – A program to help learn the Hindi alphabet



Accha is a program intended to help people learn the Hindi alphabet (Devanagari).

Here are some key features of:

- · Unicode display of Devanagari
- · Audio of correct pronunciation
- · Choose which letters to study
- · Phonetic textual input
- · Display of previous right answer



http://sourceforge.net/projects/accha/



## Nihongo Benkyo – A Japanese Dictionary



Nihongo Benkyo is a Japanese dictionary and learning tool for Linux and Windows. Its goal is to provide a comprehensive application that will help you learn Japanese.

Windows

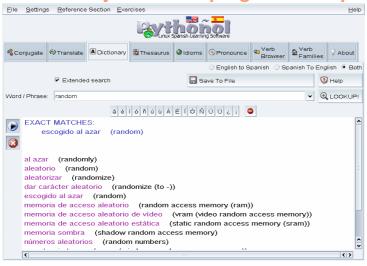
Mac OS

Linux

Unix

http://www.nihongobenkyo.org/

## Pythoñol – A program to help learn Spanish



Pythoñol is an all-in-one program that helps English speakers learn Spanish. It features pronunciation, verb conjugation, a dictionary with over 70,000 words, a thesaurus, quizzes, full-text translation, idioms, a verb browser, and a large reference section.

Windows

Mac OS

Linux

Umix

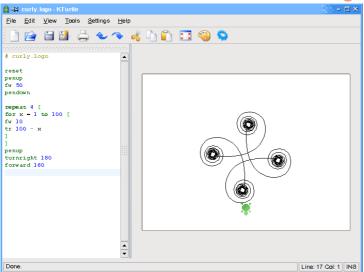
http://www.phrozensmoke.com/projects/pythonol/pythonol.php



Build: 273

# **Computer Programming**

#### **KTurtle – Introduction to Programming**

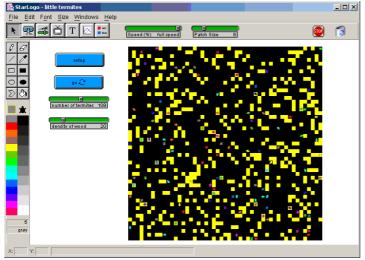


KTurtle is a Logo programming language interpreter. The Logo programming language is very easy and thus it can be used by young children. A unique quality of Logo is that the commands or instructions can be translated, so the 'programmer' can program in his or her native language. This makes Logo ideal for teaching kids the basics of programming, mathematics and geometry. One of the reasons many children like Logo is because of the turtle, a programmable icon which can be moved around the screen with simple commands and can be programmed to draw objects.

Linux Unix

http://edu.kde.org/kturtle/

## StarLogo - Modelling Complex Systems



StarLogo is a program used to control "turtles" on the screen, much like Logo. However, unlike Logo, StarLogo enables you to program hundreds or even thousands of turtles and program the "patches" underneath the turtles too!

StarLogo is used primarily for modeling systems that have no leaders. Some examples of these "leaderless" systems in our everyday world are bird flocks, traffic jams, and termite and ant colonies.

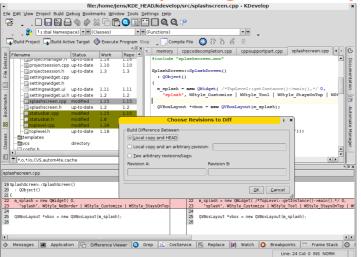
open source victoria http://education.mit.edu/starlogo/

Windows Mac OS

Linux

Unix

### **KDevelop – Integrated Development Environment**



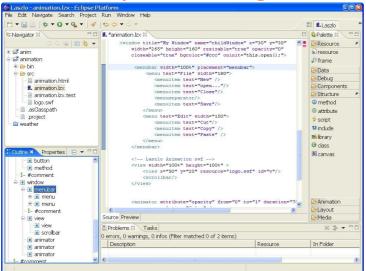
KDevelop is a complete development environment which can be used to program software in most programming languages.

Linux Unix

X

http://www.kdevelop.org/

### **Eclipse – Java Integrated Development Environment**



Eclipse is an open source community whose projects are focused on providing an extensible development platform and application frameworks for building software. Eclipse provides extensible tools and frameworks that span the software development lifecycle, including support for modeling, language development environments for Java, C/C++ and others, testing and performance, business intelligence, rich client applications and embedded development.

Windows

Mac OS

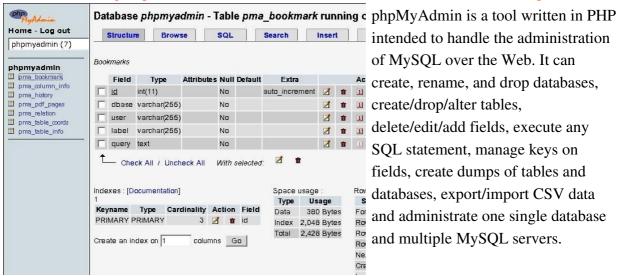
Linux

Umix

http://www.eclipse.org/



## PhpMyAdmin – To Handle the Administration of MySQL



sql Search Insert intended to handle the administration of MySQL over the Web. It can create, rename, and drop databases, create/drop/alter tables, delete/edit/add fields, execute any SQL statement, manage keys on fields, create dumps of tables and Roy databases, export/import CSV data and administrate one single database and multiple MySQL servers.

Windows

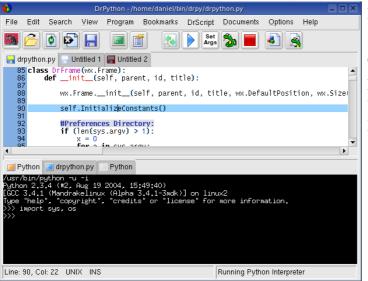
Mac OS

Linux

Umix

http://www.phpmyadmin.net/

#### For Developing Python Programs



DrPython is a highly customizable, simple, and clean editing environment for developing Python programs. It is intended primarily for use in schools, and is a tribute to DrScheme.

Windows

Mac OS

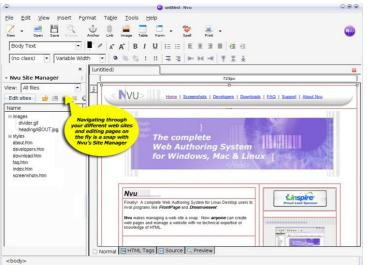
Linux

Unix

http://drpython.sourceforge.net/



#### NVU - A Web content editor



A complete Web Authoring System for Linux Desktop users as well as Microsoft Windows and Macintosh users to rival programs like FrontPage and Dreamweaver.

Nvu makes managing a web site a snap. Now anyone can create web pages and manage a website with no technical expertise or knowledge of HTML.

Windows

Mac OS

Linux

Unix

http://www.nvu.com/

### **Squeak – An Object-oriented Programming Environment**



Squeak is an open source and superportable implementation of a multimedia capable Smalltalk-80 based object-oriented programming environment. It is written entirely in Smalltalk and has a high-performance VM, created by compiling the Smalltalk VM code into efficient and portable C code. It now uses the Self language's Morphic User Interface but still provides the original MVC GUI as well.

Windows

Mac OS

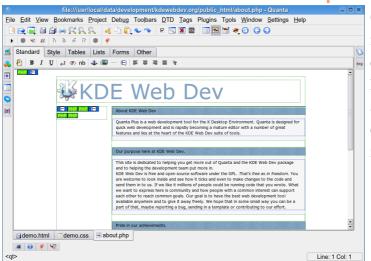
Linux

Unix

http://www.squeak.org/



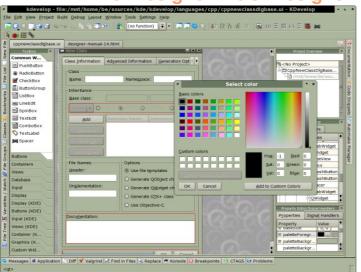
#### **Quanta Plus – Web Development IDE**



Quanta Plus is a highly stable and feature rich web development environment. The vision with Quanta has always been to start with the best architectural foundations, design for efficient and natural use and enable maximal user extensibility.

Linux Unix http://quanta.kdewebdev.org/

**KDevDesigner – GUI Designer** 



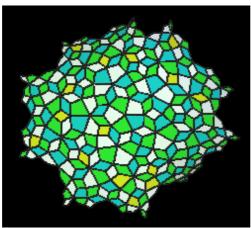
Works with KDevelop to perform screen and forms design.

Linux <u>Unix</u> <u>http://www.kdevelop.org/</u>



## **Educational Games**

#### XiStrat – Geometric Recreation



XiStrat (aka 'Extended Strategy') is in particular about turn-based, networked multiplayer, non-cooperative, zero-sum, abstract strategy board games (e.g., Chess, Go, Reversi variants, etc.) on 3D-visualized polyhedra and contains a server, client GUI, autoplayer engine, utilities, and documentation. Related recreational modern mathematics (single agent, cellular automata, graph/group/complexity/knot theory, discrete geometry, algebra, combinatorics, and mathematical physics) is also dealt with.

Windows Mac OS Linux Unix <a href="http://xistrat.sourceforge.net">http://xistrat.sourceforge.net</a>

# FreeCiv – Competitive Resource Planning Game



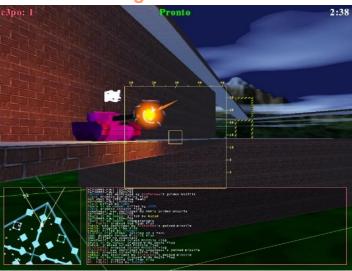
Freeciv is a multiuser reimplementation Civilization.

Multiuser gameplay is real-time: in each turn, all human players move concurrently. The game is designed to remain fairly playable even on poor network connections. Freeciv can also be played on standalone machines, and its AI players are a good challenge for beginners.

Build: 273

Windows Mac OS Linux Unix http://www.freeciv.org/
open source victoria

#### BZFlag – 3D Team Battle Tank Strategy Game



BZFlag is a 3D, multiplayer, tank battle zone, capture the flag game that pits players against each other in a networked environment.

Windows

Mac OS

Linux

Unix

http://BZFlag.org/

## **Vega Strike - A 3D Action Space Simulator.**



Vega Strike is a Linux action space simulator designed to bring 3D space combat to a whole new level of graphics, gameplay, and customizability.

Windows

Mac OS

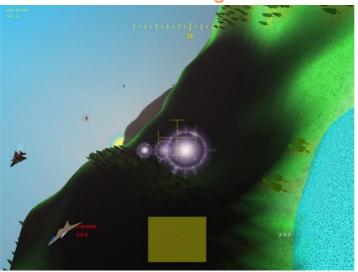
Linux

Unix

http://vegastrike.sourceforge.net/



#### **GL-117 – 3D Fighter Simulation**



GL-117 is an action flight simulator for Linux/Unix and MSWindows. Enter the Eagle Squadron and succeed in several challanging missions leading though different landscapes. Five predefined levels of video quality and an amount of viewing ranges let you perfectly adjust the game to the performance of your system. Joystick, mouse, sound effects, music.

Windows

Linux

Unix

http://www.heptargon.de/gl-117/gl-117.html

## **XshipWars – Space Combat & Trading Game**



XShipWars is a highly customizable multiplayer space gaming system designed for play over the Internet.

Linux

Unix

http://wolfpack.twu.net/ShipWars/XShipWars/



#### **Mars Simulation Project – Human Settlement Simulation**



The Mars Simulation Project is a free software Java project to create a simulation of future human settlement of Mars.

The simulation is a multi-agent artificial society set in a detailed virtual world.

Windows

Mac OS

Linux

Unix

http://mars-sim.sourceforge.net/

#### **GalaxyHack – Programmable Starship Battles**



GalaxyHack allows you to design a fleet of spaceships which can then be tested in AI script based battles against fleets designed by other players. Though battles take place in real time, the strategy comes beforehand, both in writing short AI scripts in an easy-to-use proprietary scripting language, and also in the set up and selection of your forces.

Windows

Linux

Unix

http://galaxyhack.sourceforge.net/



### LinCity NG - Build and Run Your Own City



LinCity-NG is a city simulation game. It is a polished and improved version of the classic LinCity game. In the game, you are required to build and maintain a city. You can win the game either by building a sustainable economy or by evacuating all citizens with spaceships.

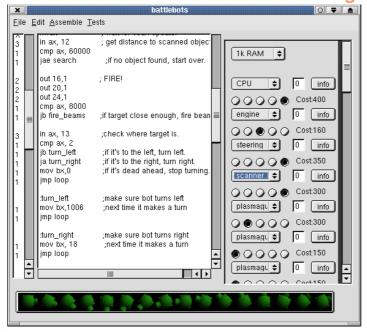
Windows

Linux

Unix

http://lincity-ng.berlios.de/

#### **DroidBattles - Build and Program Your own Battle Droids**



In DroidBattles you design the bots by choosing which hardware they should contain. Each bot can have up to 32 hardware devices that you can choose freely from a list of available types. Examples include weapons, armor, CPU:s, engines... etc.

When you have chosen the hardware it's time to program it. You make a program that is loaded into a virtual RAM of the bot and then executed by the CPU device(s) you've included with the bot. You communicate with your devices through simple in/out instructions.

Linux

http://www.bluefire.nu/droidbattles/



# Thunder&Lightning – Futuristic Combat Simulator



Thunder&Lightning is a futuristic action flight simulator game that lets you fly around in your airplane and fight against tanks and other aircraft in a 3D environment.

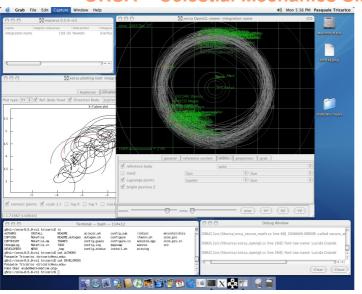
Windows

Linux

Unix

http://tnlgame.net/

#### **ORSA – Celestial Mechanics Simulation**



ORSA is an interactive tool for scientific grade Celestial Mechanics computations. Asteroids, comets, artificial satellites, Solar, and extra-Solar planetary systems can be accurately reproduced, simulated, and analyzed.

Windows

Mac OS

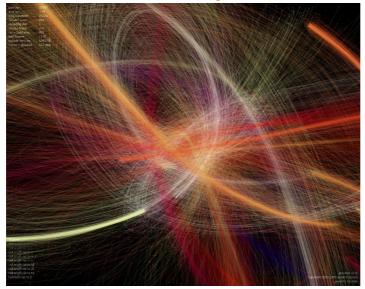
Linux

Unix

http://orsa.sourceforge.net/



#### **Gravit - Gravity Simulator**



Gravit is a gravity simulator. It uses Newtonian physics using the Barnes-Hut N-body algorithm. Although the main goal of Gravit is to be as accurate as possible, it also creates beautiful looking gravity patterns. It records the history of each particle so that it can animate and display a path of its travels. At any stage you can rotate your view in 3D and zoom in and out.

Windows

Mac OS

Linux

Unix

http://gravit.slowchop.com/

#### Flightgear - High Quality Open Flight Sim



The Flight Gear Flight Simulator project is a free, open-source, multiplatform, cooperative flight sim development project. Source code for the entire project is available and licensed under the GPL. The Flight Gear project is working to create a sophisticated flight simulator framework for the development and pursuit of interesting flight simulator ideas.

Windows

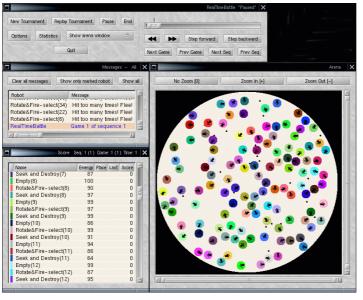
Linux

Unix

http://www.flightgear.org/



#### RealTimeBattle - Fun Software Development



RealTimeBattle is a programming game, in which robots controlled by programs are fighting each other. The goal is to destroy the enemies, using the radar to examine the environment and the cannon to shoot.

Robots can be constructed in almost any programming language. Any number of robots can compete simultaneously if allowed by your operating system. A simple messaging language is used for communication, which makes it easy to start constructing robots.

Linux

Unix

http://realtimebattle.sourceforge.net/

#### NASA World Wind – Earth Discover Tool



World Wind lets you zoom from satellite altitude into any place on Earth. Leveraging Landsat satellite imagery and Shuttle Radar Topography Mission data, World Wind lets you experience Earth terrain in visually rich 3D, just as if you were really there.

Virtually visit any place in the world. Look across the Andes, into the Grand Canyon, over the Alps, or along the African Sahara.

Windows

http://worldwind.arc.nasa.gov/



### Battle for Wesnoth – Real Time Strategy Team Game



The Battle for Wesnoth is a free, turnbased strategy game with a fantasy theme. Fight to regain the throne of Wesnoth, of which you are the legitimate heir, or use your dread power over the Undead to dominate the land of mortals, or lead your glorious Orcish tribe to victory against the humans who dared despoil your lands ... We noth has many different sagas waiting to be played out. You can create your own custom units, and write your own scenarios – or even full-blown campaigns.

Windows

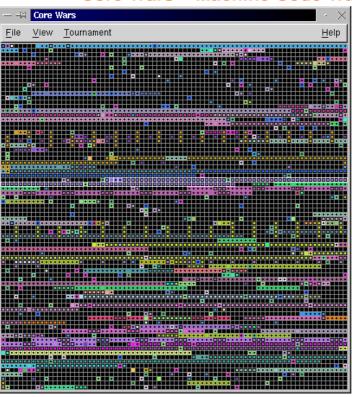
Mac OS

Linux

Unix

http://www.wesnoth.org/

#### **Core Wars – Machine Code Warriors**



Core Wars is a programming game wherein players write Warriors that fight it out to the death in a virtual 'ring'. These warriors are written in a special assembly language called "Redcode" and played in a simulated environment known as "MARS"

Windows

Mac OS

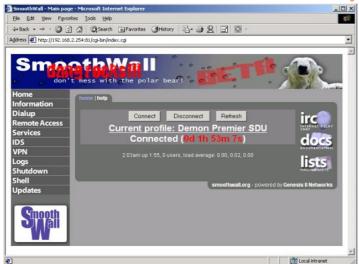
Linux

Unix

http://www.corewars.org

# **Computer Infrastructure for Schools**

#### **SmoothWall - Internet Security Software Package**

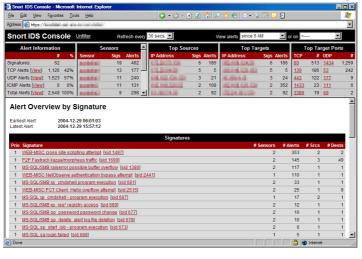


SmoothWall is a popular Internet
Security software package (based on
Linux) offering automated
modem/advanced ISDN autoprobing,
ethernet ADSL/cable, USB ADSL,
and multiple ethernet card support
within 5 minutes of install. Web
managed and with full facilities
normally only seen in expensive
commercial offerings, it also offers
SSH, DHCP, and full firewall logging
and auditing functionality.

Windows Mac OS Linux Unix

http://www.smoothwall.org/

#### Snort – Intrusion Detection System



Snort is an open source network intrusion prevention and detection system utilizing a rule-driven language, which combines the benefits of signature, protocol and anomaly based inspection methods. With millions of downloads to date, Snort is the most widely deployed intrusion detection and prevention technology worldwide and has become the de facto standard for the industry.

Windows Mac OS Linux Unix <a href="http://www.snort.org/">http://www.snort.org/</a>



## **Squid - High Performance Web Proxy Cache**



Squid is a high performance Web proxy cache that can be arranged hierarchically for an improvement in response times and a reduction in bandwith usage. Squid runs on all popular Unix and Windows platforms.

Windows

Mac OS

Linux

Unix

http://www.squid-cache.org/

#### Apache – World's Best Web Server Server

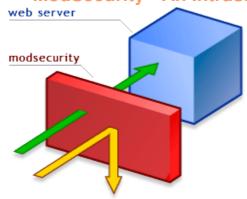


Apache is the world's most popular HTTP server, being quite possibly the best around in terms of functionality, efficiency, security and speed.

Windows Mac OS Linux Unix <a href="http://www.apache">http://www.apache</a>
---



#### **ModSecurity - An Intrusion Detection and Prevention**



ModSecurity is an intrusion detection and prevention engine for Web applications (sometimes called a Web application firewall). Operating embedded or as part of an Apache reverse proxy, it increases Web application security, protecting Web applications from known and unknown attacks. It is flexible and easy to configure. It monitors HTTP traffic, detects or prevents attacks, enhances logging, performs antievasion, and allows administrators to create custom rules to suit their specific needs.

Windows

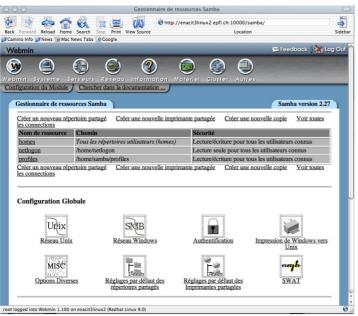
Mac OS

Linux

Umix

http://www.modsecurity.org/

#### Samba - Windows Network File Sharing Server



The Samba software suite is a collection of programs that implements the SMB protocol for unix systems, allowing you to serve files and printers to Windows, NT, OS/2 and DOS clients. This protocol is sometimes also referred to as the LanManager or Netbios protocol.

Windows

Mac OS

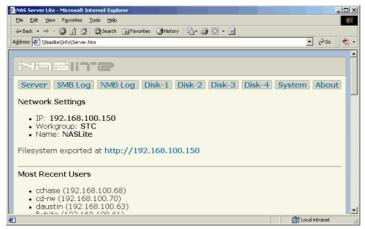
Linux

Unix

http://www.samba.org/

open source victoria.

#### **NASLite - Network Attached Storage**



NASLite is a Network Attached Storage (NAS) server operating system designed to transform a basic computer into a dedicated file server. Utilizing highly optimized versions of Samba, uCLibc, BusyBox, and various other Linux tools, it provides SMB/CIFS, FTP, or NFS filesystem support. It accommodates multiple client OSes: Windows, Mac OS X, and Linux. NASLite offers SMART disk monitoring and large file support, and is incredibly easy to install and administer.

Windows

Mac OS

Linux

Unix

http://www.serverelements.com/naslite.php

#### **Securepoint Security Suite – A Complete Firewall**



Securepoint Security Suite is a complete firewall, content filter, spam filter, authentication and VPN software system with an OS based on a secure Linux. VPN functions support PPTP/IPSec. You can use the firewall on a standard PC with 2 to 16 network cards (Ethernet/ADSL). It supports journaling filesystems/RAID.

Linux

Unix

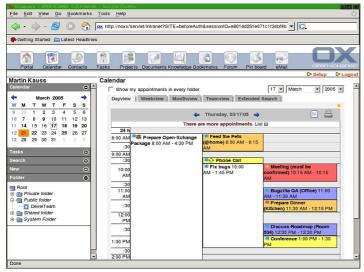
http://www.securepoint.cc/



# **Information System Solutions**

#### **OPEN-XCHANGE – Collaboration & Integration Server**

Unix



Mac OS

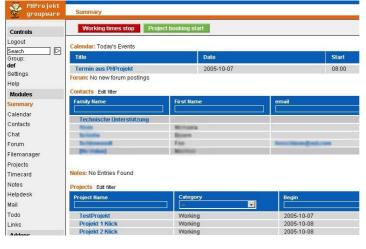
Windows

The OPEN-XCHANGE
Collaboration and Integration Server
Environment allows you to store
appointments, contacts, tasks, email
messages, bookmarks, documents,
and many more elements, and share
them with other users. It can be
accessed via any modern Web
browser and multiple fat clients like
MS Outlook, Palm devices, KDE
Kontact, Apple's iCAL, Konqueror,
Mozilla Calendar, and many more,
based on open standards and
interfaces.

http://mirror.openxchange.org/ox/EN/community/

#### PHProjekt - Project Management

Linux

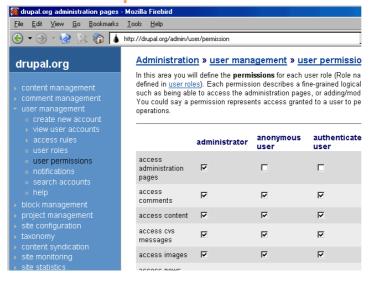


PHProjekt is a groupware suite which supports communication and management of teams and companies via an Intranet and the Internet. It consists of multiple components, including a group calendar with resource booking, a time card system, project management, a request tracker, a mutual filesystem, a contact manager, a mail client, a forum, chat, notes, shared bookmarks, todo lists, a voting system, and reminders.

Windows Mac OS Linux Unix http://www.phprojekt.com/

open source victoria

#### **Drupal - A Modular Content Management System**



Drupal is a modular content management system, forum, blogging and community engine. It is database driven and can be used with MySQL, MySQLi and PostgreSQL. Its features include discussion forums, Webbased administration, theme support, a submission queue, content rating, content versioning, taxonomy support, user management with a fine-grained permission system based on user roles (groups), error logging, support for content syndication, locale support, and much more. http://drupal.org/

Windows

Mac OS

Linux

Unix

CaMail – A Modular Webmail System



CaMail is a free modular Webmail system that uses mod\_perl and Template Toolkit. It supports multiple IMAP/SMTP servers across multiple domains, and addressbooks via LDAP. In addition, LDAP is used to store sessions, contacts, groups, mail filters, and user preferences.

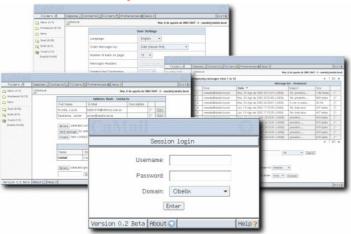
Linux

Unix

http://www.camail.com.ar/



#### **GroupOffice – Web-based Groupware**



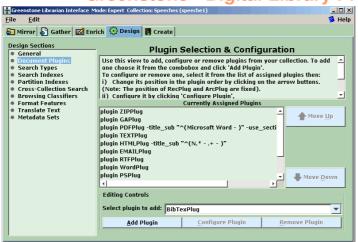
Group-Office is a powerfull modular Internet/Intranet application framework. It features calendaring, project management, e-mail, tasks, addressbook, file management.

Linux

Unix

http://sourceforge.net/projects/group-office/

#### **Greenstone - Digital Library Project**



Greenstone is a suite of software for building and distributing digital library collections. It provides a new way of organizing information and publishing it on the Internet or on CD-ROM.

Windows

Mac OS

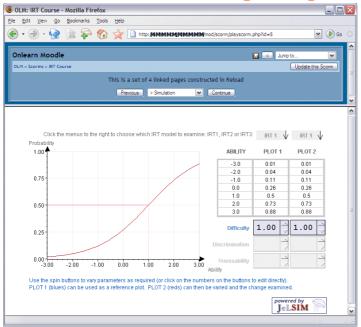
Linux

Unix

http://www.greenstone.org/



### Moodle - Learning Management System



Moodle is a course management system (CMS) - a free, open source software package designed using sound pedagogical principles, to help educators create effective online learning communities. You can download and use it on any computer you have handy (including webhosts), yet it can scale from a single-teacher site to a 40,000-student University.

Windows Mac OS Linux Unix <a href="http://moodle.org/">http://moodle.org/</a>

#### **HyperJournal – Information Manager**

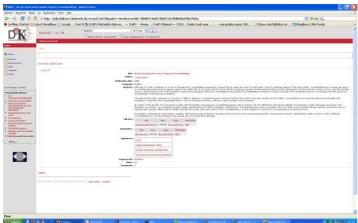


The HyperJournal is a free web application which enables on-line as well as printed publishing in an innovative and significantly cost-cutting way. The HyperJournal can be easily installed and managed without any out-of-the-ordinary IT-competence.

Windows Mac OS Linux Unix <a href="http://www.hjournal.org/">http://www.hjournal.org/</a>



## **DoKS - Document and Knowledge Sharing**



DoKS (Document and Knowledge Sharing application) is a digital library tool that makes it easy to publish, store, share and find documents online.

Windows

Mac OS

Linux

Umix

http://www.doks.be/index\_en.htm

Wikipedia on DVD -



We aim to create all the necessary software for a Wikipedia optical media distribution that will rival all commercial encyclopedia software, just like Wikipedia's content already does so.

Windows

Mac OS

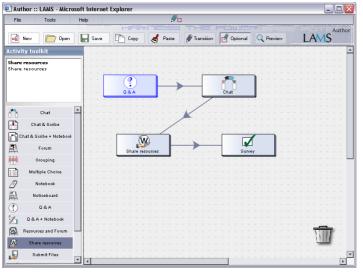
Linux

Unix

http://sourceforge.net/projects/wikidisc/



## **LAMS – Learning Activity Management System**

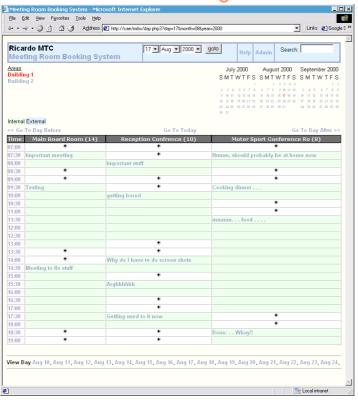


LAMS is a revolutionary new tool for designing, managing and delivering online collaborative learning activities. It provides teachers with a highly intuitive visual authoring environment for creating sequences of learning activities. These activities can include a range of individual tasks, small group work and whole class activities based on both content and collaboration.

Windows Mac OS Linux Unix

http://www.lamsfoundation.org/

#### MRBS – Meeting Room Booking System

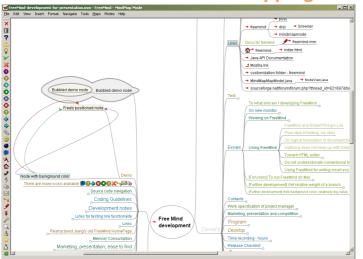


A simple web-based booking system for meeting rooms. Simple to follow, Web based options and intuitive presentation. Flexible Repeating Bookings. Authentication with your existing user database (eg Netware, NT Domain, NIS etc.). Ensures that conflicting entries cannot be entered

Windows Mac OS Linux Unix

http://mrbs.sourceforge.net/

## FreeMind - Mind Mapping Software



FreeMind is a premier free mindmapping software written in Java. The recent development has hopefully turned it into high productivity tool. We are proud that the operation and navigation of FreeMind is faster than that of MindManager because of one-click "fold / unfold" and "follow link" operations.

Windows

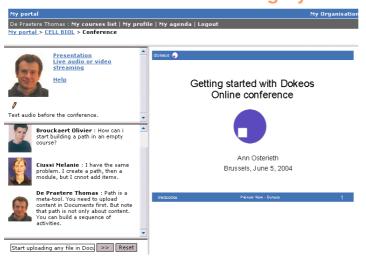
Mac OS

Linux

Unix

http://freemind.sourceforge.net/

#### **DOKEOS – eLearning System**



Dokeos is an Open Source elearning and course management web application translated in 34 languages and helping more than 1.000 organisations worldwide to manage learning and collaboration activities.

Windows

Mac OS

Linux

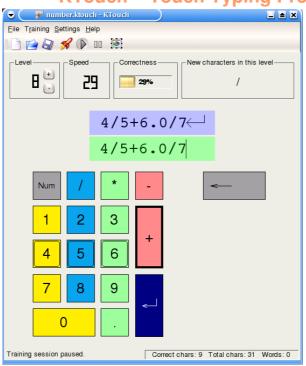
Unix

http://www.dokeos.com/



# **Primary School Children**

#### **KTouch – Touch Typing Program**



*KTouch* is a program for learning how to touch-type. *KTouch* is FREE and offers you an easy way to learn to type on a keyboard quickly and correctly. Every finger has its place on the keyboard with associated keys to press. Starting with only a few keys to remember you will advance through the levels of the training lecture while more and more keys are introduced.

Linux Unix http://edu.kde.org/ktouch/

# TuxPaint – Fun Paint Program for Kids



Tux Paint is a free drawing program designed for young children (kids ages 3 and up). It has a simple, easy-to-use interface, fun sound effects, and an encouraging cartoon mascot who helps guide children as they use the program. It provides a blank canvas and a variety of drawing tools to help your child be creative.

http://www.newbreedsoftware.com/tuxpaint/

## Pysycache – Application for teaching to move the mouse



PySyCache is an educational application for young children (4-6 years old) with a target to teach them to manipulate the mouse to uncover a picture. Pictures (more than 130) are available by theme (ABC's, animals, food, plants, sports, world).

Windows

Mac OS

Linux

Unix

http://www.icewalkers.com/Linux/So ftware/524930/pysycache.html

## blinKen - The Linux version of Simon Says



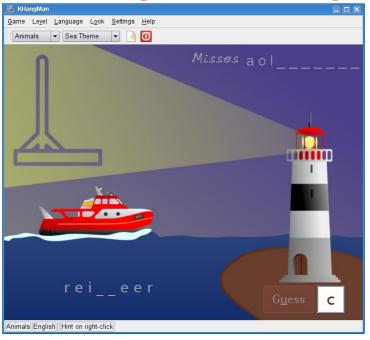
Follow the pattern of sounds and lights as long as you can! Press the start game button to begin. Watch the computer and copy the pattern it makes. Complete the sequence in the right order to win.

Linux

Unix

http://edu.kde.org/blinken/index.php

### KHangMan - The classical game of Hang Man



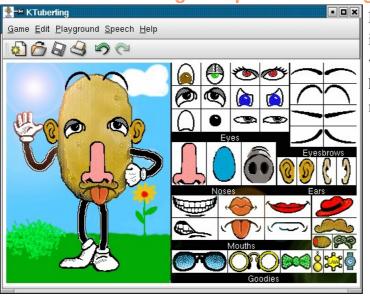
KHangman is the classical hangman game. The child should guess a word letter by letter. At each miss, the picture of a hangman appears. After 10 tries, if the word is not guessed, the game is over and the answer is displayed.

Linux

Unix

http://edu.kde.org/khangman/index.p hp

### KTuberling – A "potato editor" game for kids



KTuberling is a "potato editor" game intended for small children and adults who remain young at heart. The game has no winner; the only purpose is to make the funniest faces you can.

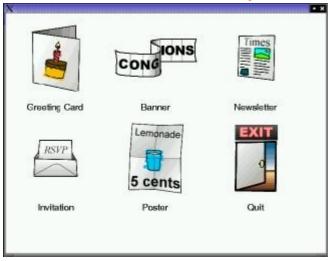
Linux

Unix

http://opensource.bureaucornavin.com/ktuberling/

open source victoria

# Tux Print – Used to print a number of different documents



Tux Print is a 'publishing' program oriented towards children. It will let them easily compose and print a number of kinds of documents, such as Card, Banners, Posters and Newsletters.

Windows

Mac OS

Linux

Unix

http://www.newbreedsoftware.com/tu
xprint/

## TuxMath - An educational "Missile Command" style game



"Tux, of Math Command"
("TuxMath," for short) is an
educational arcade game starring Tux,
the Linux mascot! Based on the
classic arcade game "Missile
Command," Tux must defend his
cities. In this case, though, he must do
it by solving math problems.

Linux

Umix

http://www.newbreedsoftware.com/tuxmath/



### Keyano – Use a PC keyboard as a Musical Instrument



Keyano has the ability to turn your PC into a Musical Keyboard, or you can select Alphabet mode and it becomes fun and educational for the Kids. Type "A B C" and it says them out loud while it shows letters on screen.

Linux Umix

http://sourceforge.net/projects/keyano

### Tux Typing – A fun typing program



The player guides Tux to eat fish, which are falling from the top of the screen. Each fish has a letter or a word written on it. When the player presses the corresponding key, or types the appropriate word, Tux will position himself to eat the fish. The game is intended for children who are learning to type and spell, but it does have higher difficulty levels that even experienced typists may find challenging.

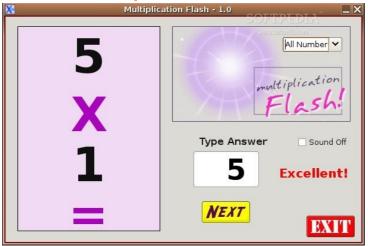
Linux

Unix

http://tuxtype.sourceforge.net/



## **Multiplication Flash – A Flash Card program**



Linux

Multiplication Flash is just a way to save the mess, bother, and expense of paper flashcards. And the kids will enjoy the feedback and noises. You can turn of the sound ("good job" or "shucks" sort of sounds -- a few dozen different ones). You can choose to work on a particular number; for instance, pick "Number 7" if you are having trouble with your sevens. Or just leave the dropdown box on "All Numbers" if you would rather have random problems. <a href="http://linux.softpedia.com/get/Educati">http://linux.softpedia.com/get/Educati</a>

http://linux.softpedia.com/get/Education/Multiplication-Flash-6923.shtml

## ChildsPlay – A suite of fun educational games for kids

Unix



Childsplay is a 'suite' of educational games for young children. The use of the SDL libraries makes smooth animation and the playing of sound very easy.

Linux

Unix

http://childsplay.sourceforge.net/



#### **GCompris – An Educational Software Suite**



GCompris is an educational software which propose different activities to kids from 2 to 10. Some activities are game oriented, but always educational. All in all, gcompris proposes more than 60 activities and it continues to evolves. Includes software for computer discovery: keyboard, mouse, different mouse gesture, algebra: table memory, enumeration, double entry table, mirror image, science: the canal lock, the water cycle, the submarine, geography: place the country on the map games: chess, memory, reading: reading practice: learn to tell time, puzzle of famous paintings, vector drawing.

Windows Mac OS Linux Unix <a href="http://gcompris.net/-en-">http://gcompris.net/-en-</a>



Build: 273