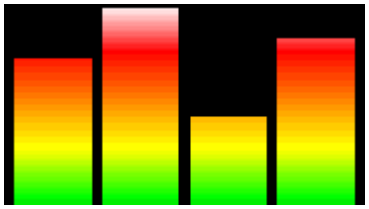
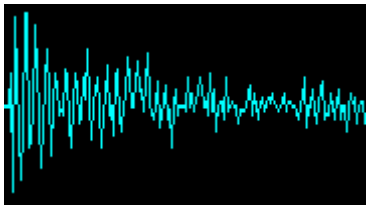
Tutorials Listed By Subject

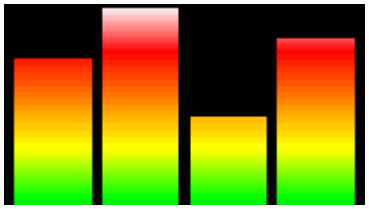
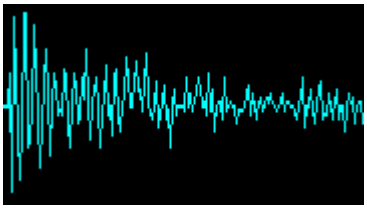
This section contains all tutorials indexed by subject for orx, an opensource, portable, lightweight, data-driven & 2D-oriented game engine.

Contributions are very welcome.

Search

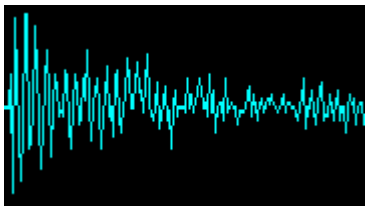
Audio


Sound & Music

Sound Recording


Sound Buses

Audio Filters



Audio filters, miniaudio & audio extensions Video


Sound Spatialization

Android

Working with Android (new users start here!)

Android Studio, NDK, and Orx library

Compiling Orx Library & Demo

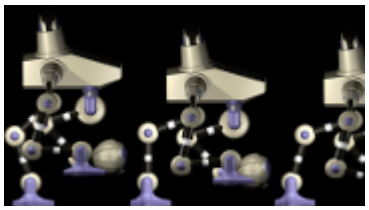
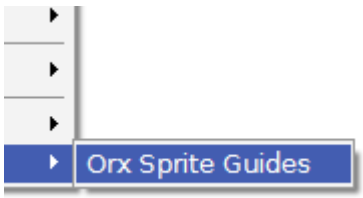
Project Android Demo as a template project

Using SWIG to talk to Java on Android Android Packaging Scripts for continued deployments

Animation

 New Animation System Walkthrough  Basic Animation  Animation and Clearing Targets 

Animation Inheritance with Prefixes  Text Animation

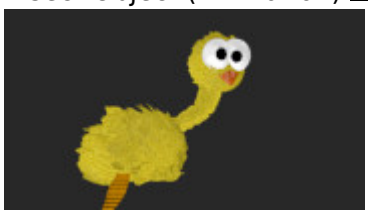
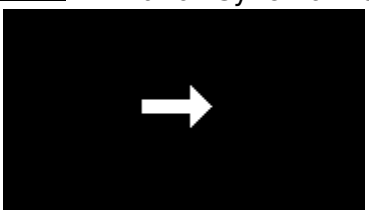
 Realistic Walk Movement  Creating Particle Explosions 

Addin for The Gimp to Extract Guides for Configuration



Mouse over effect for buttons  Creating an

Insect Object (Animation)  Animation Synchronization

 Zero Length Frames  See more Animation Examples

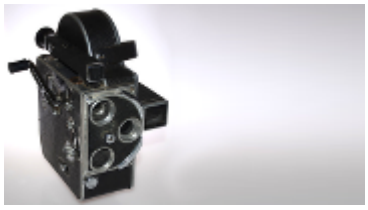
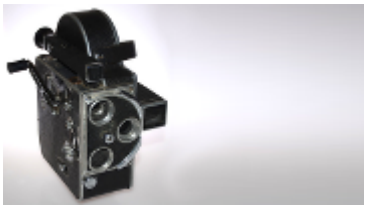
C++

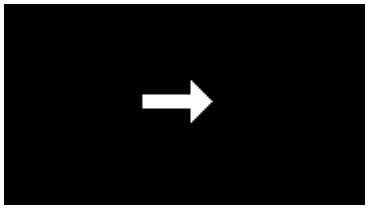
 Localization  Stand Alone Application

 Using orxObjects in Classes with an EventHandler

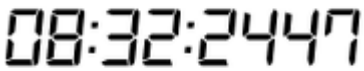
 An Introduction to orx/Scroll  Compiling hidapi in a game

Cameras

 Viewport and Camera  Cameras and Frustums

 orxScroll, Cameras and Viewports  See more Camera Examples

Clocks

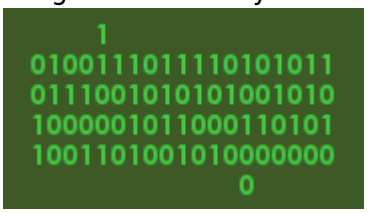


Clock

Code::Blocks

 Getting Code::Blocks for Windows  Building the Orx Library with Code::Blocks on Mac OS X  Building the Orx Library with Code::Blocks on Linux

Codelite

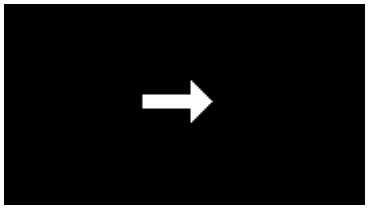
 Getting Codelite for Windows  Building the Orx Library with Codelite on Mac OS X  Building the Orx library on Linux with Codelite  Setting up Codelite on Linux  Stand Alone Application 

Codelite & Environment Variables Video

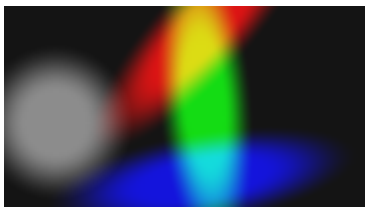
Color / Colour

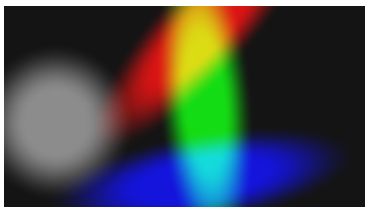
 orxCOLOR and how to colour an object 

Converting a percentage to a color  Web Color Literals

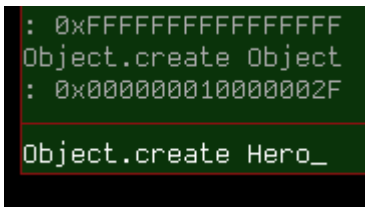
 A natural-looking glowing ball effect  See more Color Examples

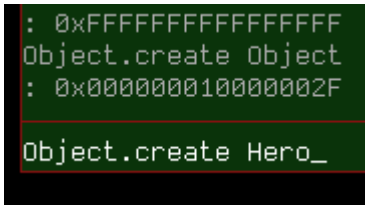
Compositing

 Compositing (2D lighting with offscreen rendering)

 Viewport Render to Texture

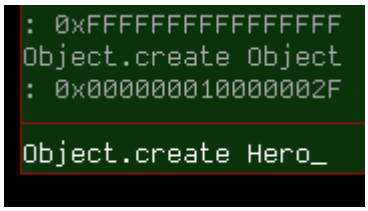
Console

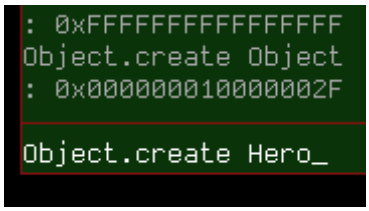


Guide to the Orx Console and Commands  The Bounce Demo 

Custom Console Colors

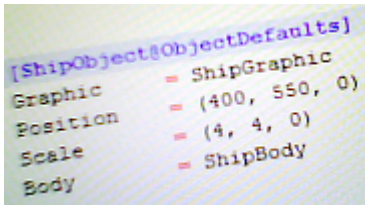
Command Module

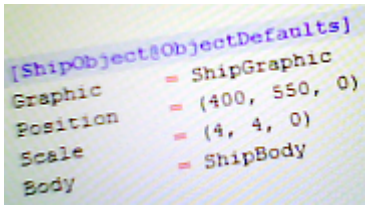


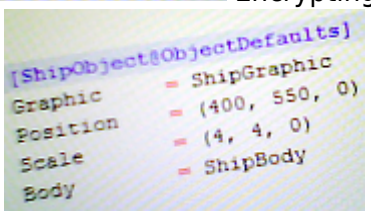
Command Module Syntax 

Command and Timeline Notes

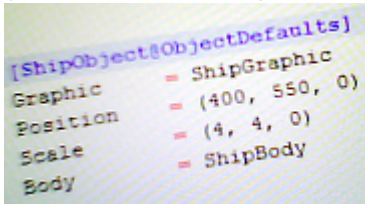
Config

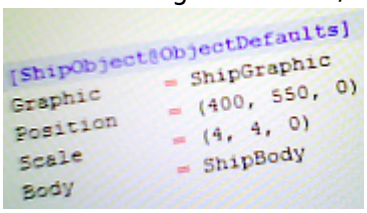


Encrypting Config Files 

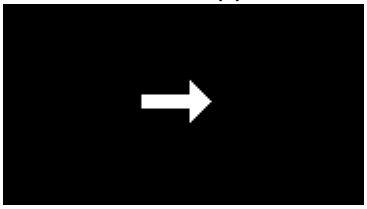
Saving information to a config file 

Changing the Default Config File 

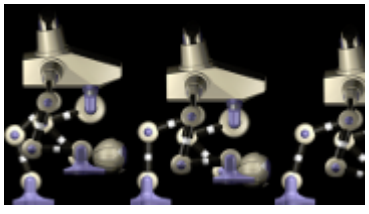
Changing the Default Config File for orx/Scroll 

Retrieving and Updating Config Values 

Stepped Random Values 

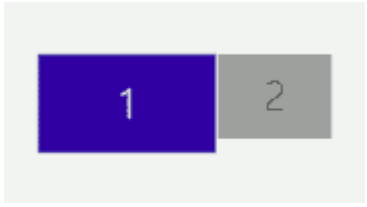
Local-only Config Overriding Video 
See more Config Examples

Controls

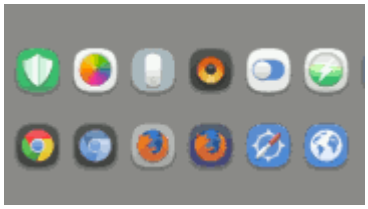
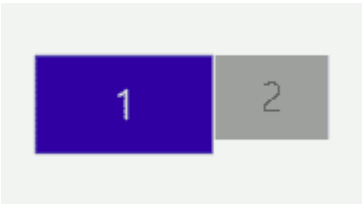

Interaction, Control and Physics 
Realistic Walk

Movement  Creating Particle Explosions

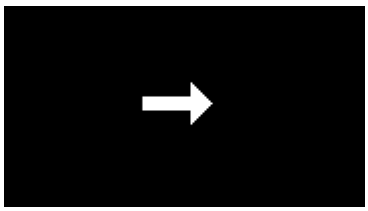
Display



Multiple Monitors  Custom Mouse Cursors

 Application Icons 

Borderless Window Mode

 See more Display Examples

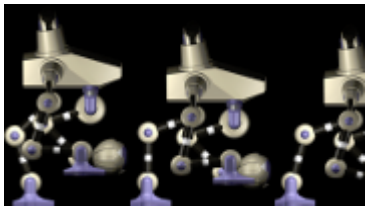
Downloads

 Getting Started with Orx

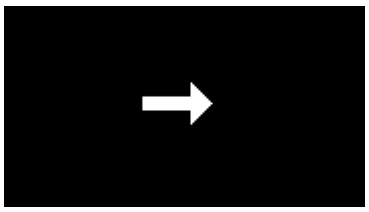
Engine

 Embedding parts of Orx in other engines

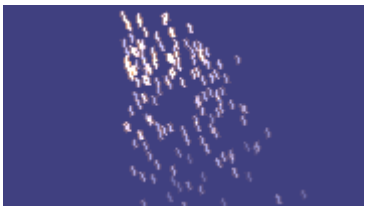
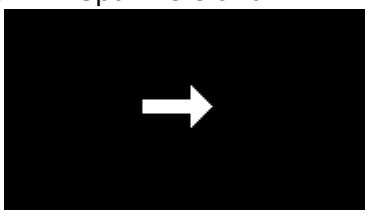
Events

 Realistic Walk Movement  Using orxObjects in Classes with an EventHandler  Creating Particle Explosions

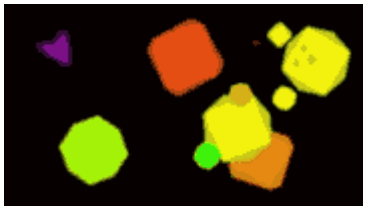
Fonts

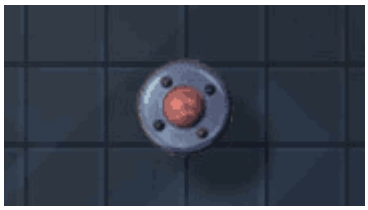
 Fun with Text and Shaders  orxFontGen  Font tool for unicode, including Chinese  See more Font Examples

FX

 FX  Sparks with Spawners and FX  Creating an Insect Object (Speed FX)  See more FX Examples

Game Writing Guides

 Learning Orx with Asteroids  Beginner's Guide - Platform Game  Beginner's Guide - 2D UFO Game

 Beginner's Guide - UFO Game Video Version

iPad / iOS / iPhone

 Using compressed textures on the iPad  Porting a game to the iPad

Input

  8 Way Joystick / Gamepad Control  Analog Joystick / Gamepad Control  Analog Stick Threshold

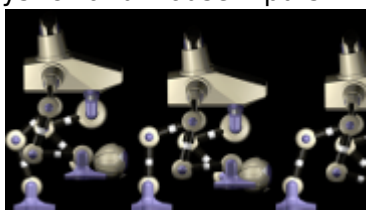
 Overriding a Controller Mapping  Remapping



Controller Inputs Testing Key, Joystick and Mouse Inputs



Interaction, Control and Physics



Realistic Walk



Movement Creating Particle Explosions



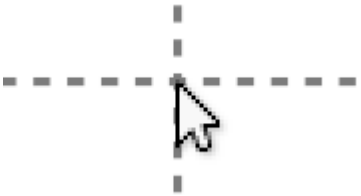
Mouse over effect for buttons



Notes on input



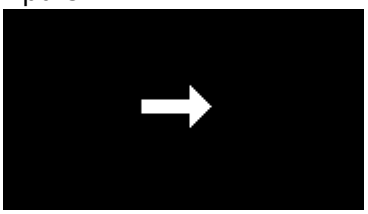
Keyboard Inputs



Mouse Grab



Compiling hidapi in a game

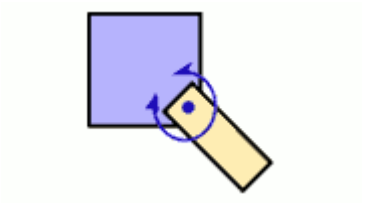


See more Input Examples

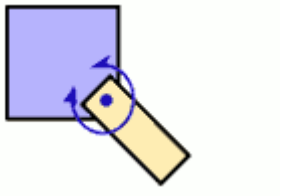
Joints



Creating an Insect Object (Revolute Joint)

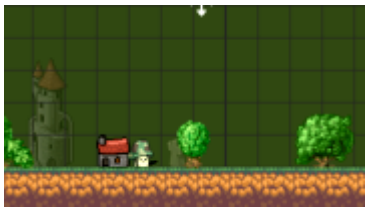
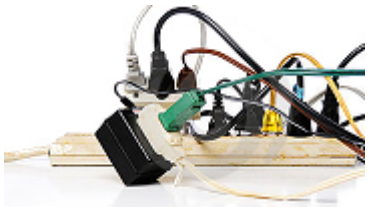
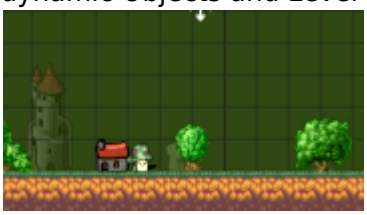


Weld Joint on parent/child Objects with Bodies



Z-order of Objects with Joints

Level Mapping


Semi-dynamic Objects and Level Mapping

Using the Tiled to ORX Converter

Hexagon Grid Tutorial

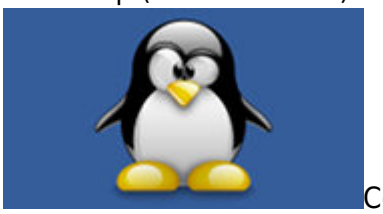
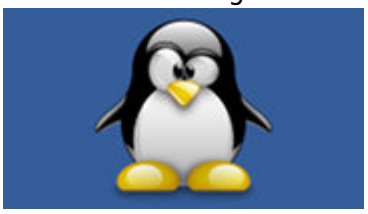
Creating Maps in ScrollEd

Pathfinding

Linux


Setting up a Development Environment on Linux

Linux Setup (brief overview)

Building the Orx library on Linux with Codelite

Codelite in Linux

Building the Orx Library with Code::Blocks on Linux

Localisation


Localization

Localization and Multiple Languages

Mac OS X

 Setting up a Development Environment for Mac OS X

 Cloning and building the Orx library on Mac OS X

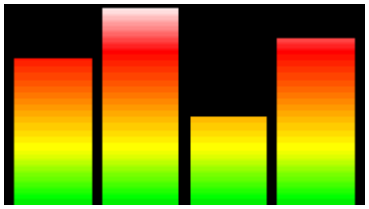
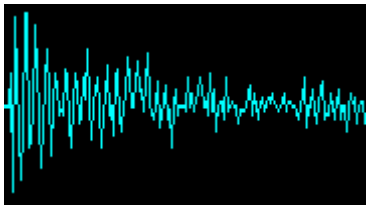
 Building the Orx Library with Xcode on Mac OS X

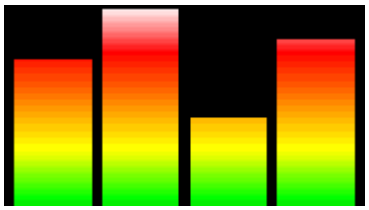
 Building the Orx Library with Codelite on Mac OS X

 Building the Orx Library with Code::Blocks on Mac OS X

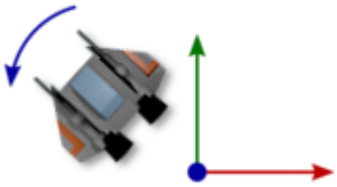
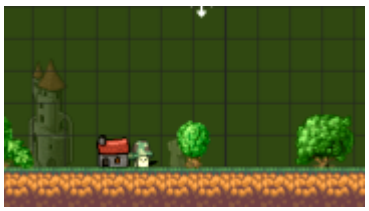
 Setting up a game project on Mac OS X

Music

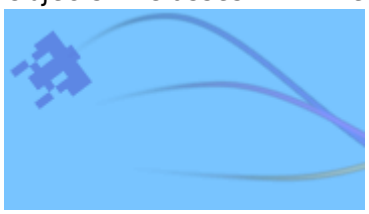
 Sound & Music  Sound Recording

 Sound Buses

Objects


Basic Object

Object Transformation

Semi-dynamic Objects and Level Mapping

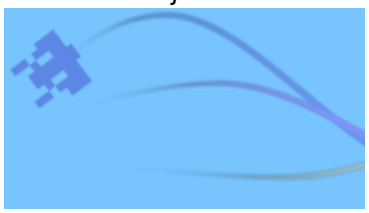
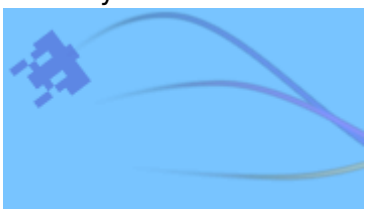
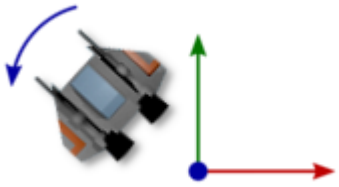
Objects in Classes with EventHandlers

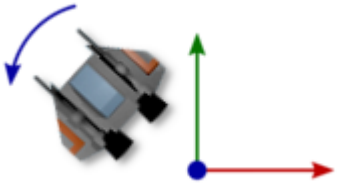
The Binding of Objects

Object Traversing

Notes on Rotation

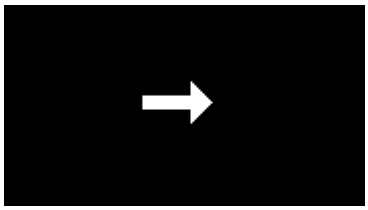
A natural-looking glowing ball effect

Creating an Insect Object

Creating an Object made of many Parts

Passing items from one Object to another

Object Lifetime

Relative Object Positioning and Scaling

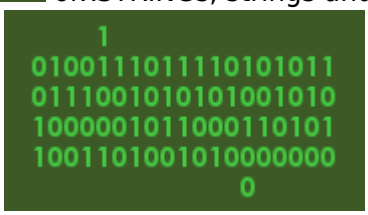
Teleporting on Screen Edges

Literals for

Objects  Command Hooks for Object Events 

Aged Objects  See more Object Examples

Orx Code (General)



orxSTRINGs, strings and chars  orxCOLOR and how to colour an object 

Lists, HashTables and Trees

Orx (Setting up)

 Cloning Orx from Github  Using Premake to create a Build Project to compile ORX from scratch  Compiling Orx with mingw32/gmake  Download a pre-built Orx for your environment


The Bounce Demo


Getting & setting up Orx Video

Orx/Scroll (C++ Abstraction layer for Orx)

An Introduction to Orx/Scroll

The Binding of Objects

Creating an orx/Scroll project using 'init'


Creating Maps in ScrollEd

Colliding ScrollObjects with Orx Objects

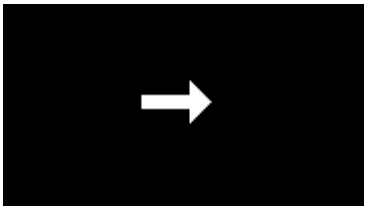
Access Scroll class from ScrollObject

ScrollObject to ScrollObject Communication

Changing the Default Config File for orx/Scroll

Moving a ScrollObject along a curve

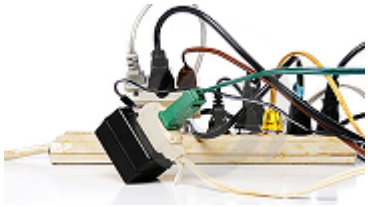
orxScroll, Cameras and Viewports


ProgressBars in orxScroll 
Pathfinding See more orx/Scroll Examples

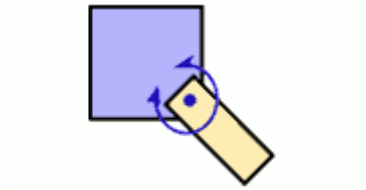
Physics

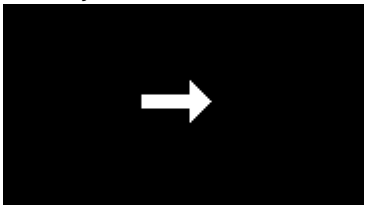

Basic Physics and Collisions 
Physics


Raycasting 
Interaction, Control and Physics


Using the Inkscape SVG to ORX Converter 

Creating an Object made of many Parts 
Creating an Insect Object


(Animation) Weld Joint on parent/child Objects with Bodies


Applying a force at a position point 
See more Physics Examples

Premake (deprecated)

Using Premake to create a Build Project to compile ORX from scratch

Projects

Creating your own project using 'init' 

The 'init' command & available extensions Video

Creating an orx/Scroll project using 'init'

How to use Premake to create a build configuration for your own project in any IDE/OS

XCode 3 Tutorial

Working with Android

~~Native Tutorial~~ (deprecated)

Using the Android Demo as a template for your own projects

~~Using orxhub~~ (deprecated)

Publishing



Preparing for a release under Windows



Preparing for a release under MacOSX



Console-less Applications



Android Packaging Scripts for continued deployments



Common Release Checklist

Scrolling

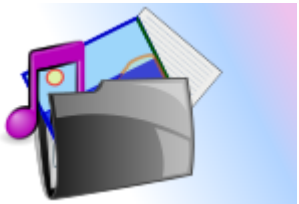


Scrolling

Resources



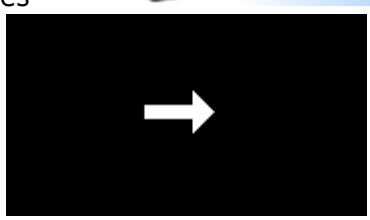
Zip Archive Resources



Resources over HTTP



Resource Reloading

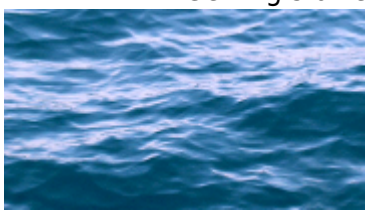
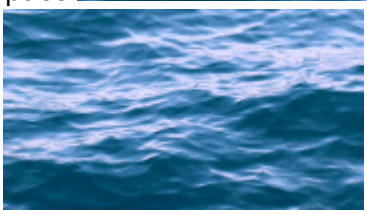
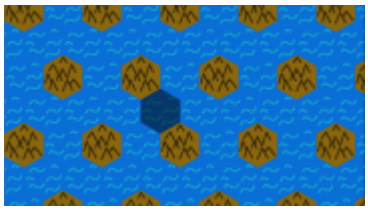
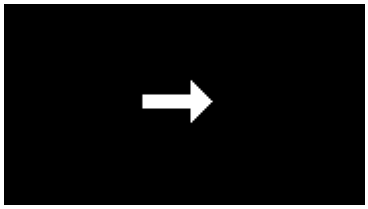


See more Resource Examples

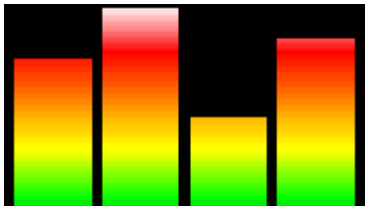
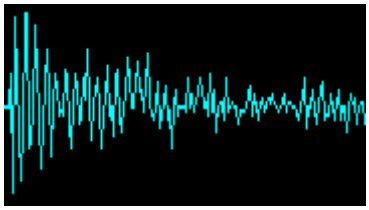
Scenes

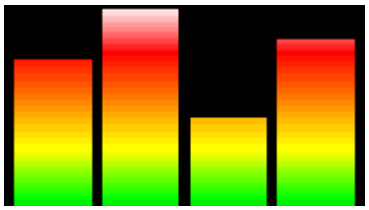
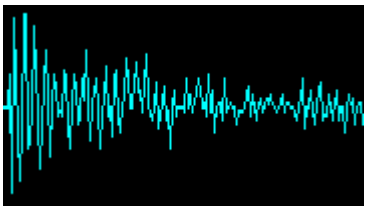
 Data-Driven Scene Transitions

Shaders

 Getting started with Shaders in Orx  Shaders in Screen Space  Spawner & Shader  Shader & Lighting  Shader coordinates tutorial  Hexagon Grid Tutorial  Hexagon Grid Tutorial (Axial/Cubial Coordinates)  A natural-looking glowing ball effect  Fun with Text and Shaders  Maps in a Shader  See more Shader Examples

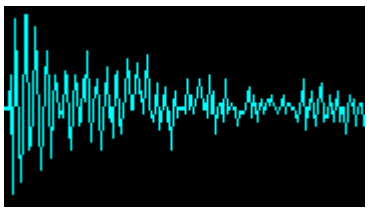
Sound


Sound & Music

Sound Recording

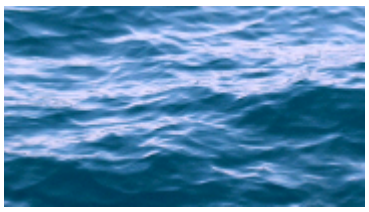

Sound Buses

Audio Filters



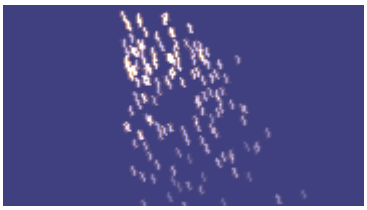
Audio filters, miniaudio & audio extensions Video


Sound Spatialization

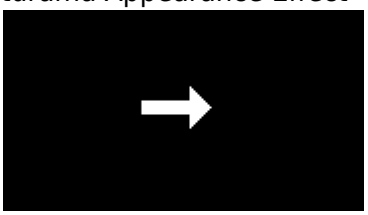
Spawners


Spawner & Shader

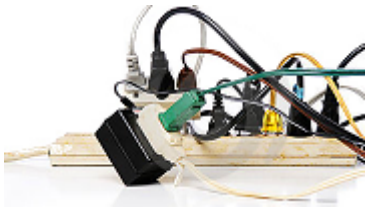
Creating Particle Explosions

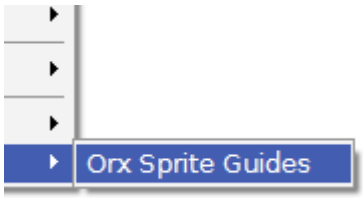

Spawning Bullets

Sparks with Spawners and FX

Futurama Appearance Effect

Spawners using Relative Position and Scale

See more Spawner Examples

Sprites


Using the darkFunction to ORX Converter Addin for The Gimp to Extract Guides for Configuration



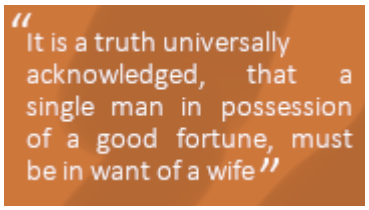
System


The Clipboard


Drag and Drop


Commandline Parameters

Text



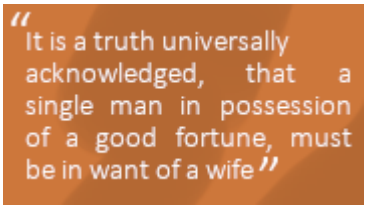
Text Boundaries



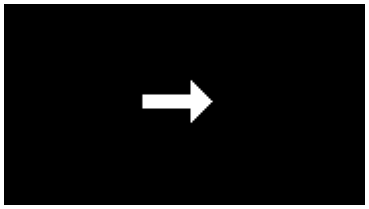
Fun with Text and Shaders



orxFontGen



Text Background

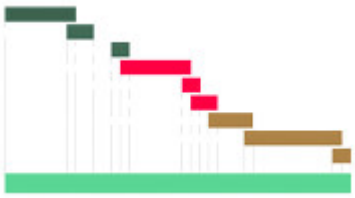

See more Text Examples

Textures

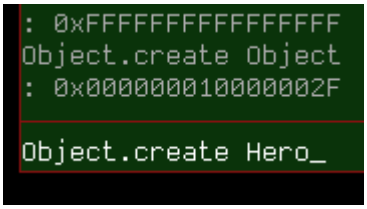


Using compressed textures on the iPad

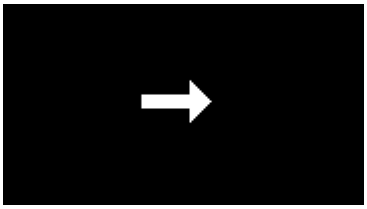
Timelines / Tracks



Timelines / Tracks



Command and Timeline Notes



See more Track and Command Examples

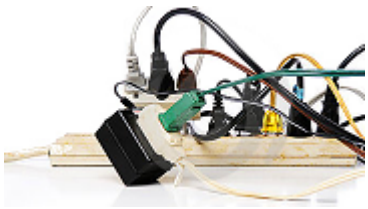
Tools



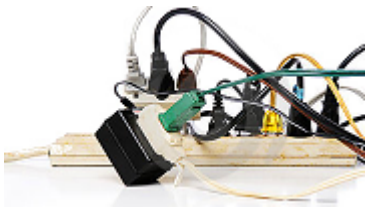
The Orx Profiler



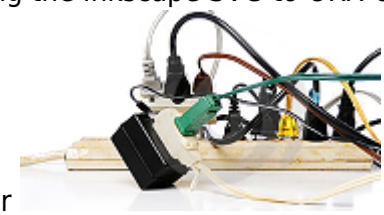
orxFontGen



Using the Inkscape SVG to ORX Converter



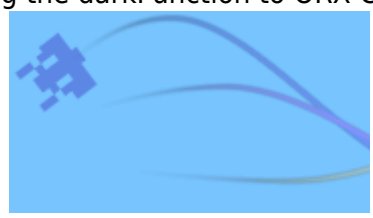
Using the TMX to ORX Converter



Using the darkFunction to ORX Converter

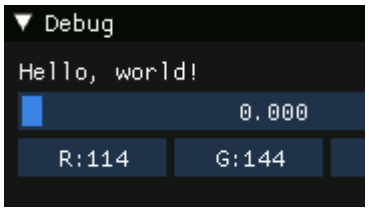


Using SWIG to talk to Java on Android

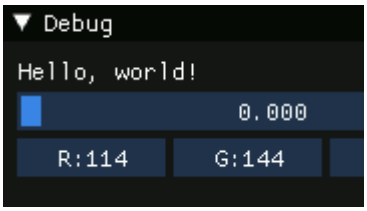


Logging all Structures to a Tree

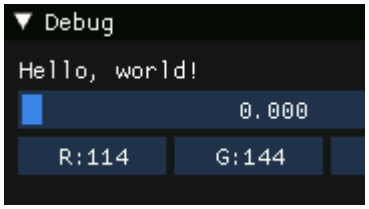
UI / User Interface



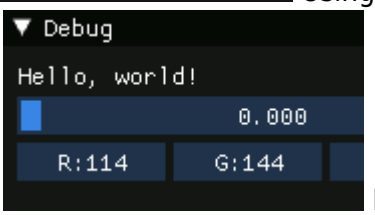
Using ImGui with Orx



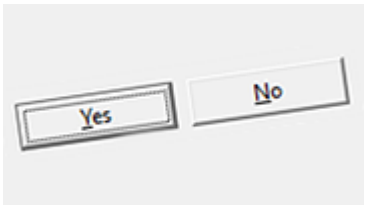
Using Nuklear with Orx



Nuklear Font Management



Notes on Nuklear with Orx

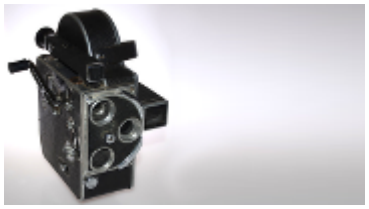


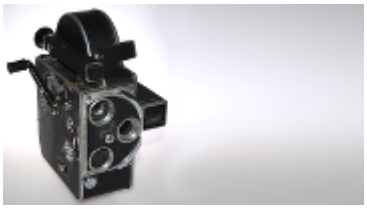
File Dialogs and Messageboxes



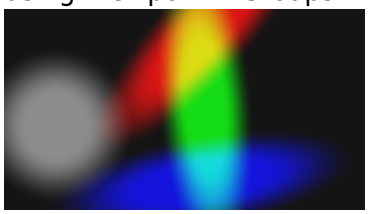
Mouser over effect for buttons

Viewports


Viewport & Camera


Heads Up Display (HUD)


using Viewport + Groups Teleporting on Screen Edges


Viewport Render to Texture

Visual Studio


Building the Orx library with Visual Studio



Stand Alone Application

Windows

 Compiling Orx with mingw32/gmake  Building the Orx library with Visual Studio

XCode

 Xcode4 Scroll, Console-less, Resources 
Building the Orx Library with Xcode on Mac OS X

From:
https://www.orx-project.org/wiki/ - **Orx Learning**

Permanent link:
https://www.orx-project.org/wiki/en/tutorials/main?rev=1732795444

Last update: **2025/09/30 17:26 (14 months ago)**