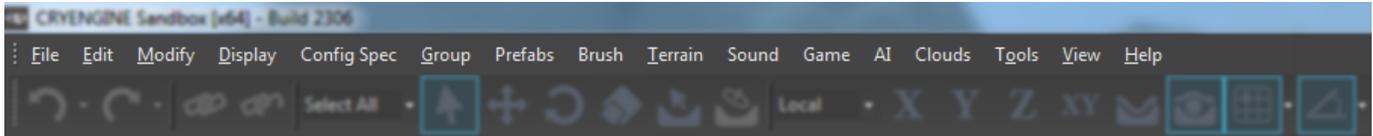


# Overview

The main menu is where you can access everything from basic file operations and display options, to more advanced features such as terrain and level editing tools and AI settings.

Many of these commands can also be executed the ToolBar and also by using keyboard shortcuts.



- Overview
- The File Menu
- The Edit Menu
- The Modify Menu
- The Display Menu
- The Config Spec Menu
- The Group Menu
- The Prefabs Menu
- The Terrain Menu
- The Audio Menu
- The Game Menu
- The AI Menu
- The Tools Menu
- The View Menu
- The Help Menu

## The File Menu

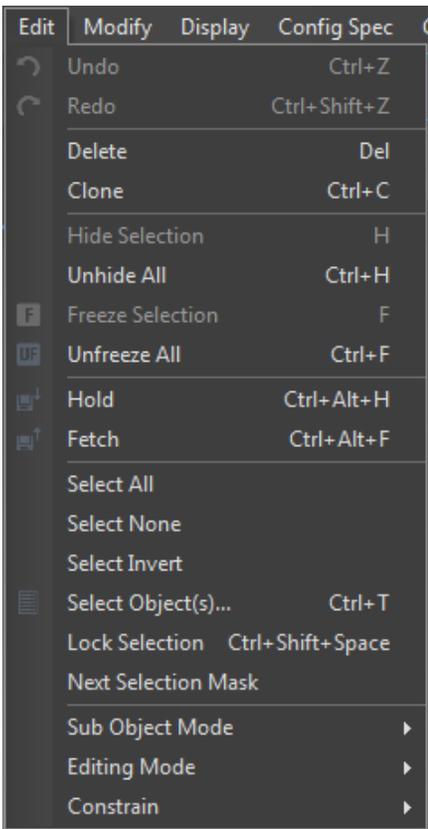
The File menu includes commands related to the handling of files such as open and save level file, show log file, and a list of recently loaded levels.

	Menu Item	Description	
	New	Please see <a href="#">Creating a New Level</a> for information on creating a new map.	
	Open...	Opens an existing level.	
	Save	Saves the level.	
	Save As...	Saves the level under a different name.	
	Save Modified External Layers	This option allows you to save just the external <b>layers</b> which have been modified since last save.	
	Export to Engine	Exports the level data to the level.pak file so the level can be played in <a href="#">Launcher</a> . See <a href="#">Preparing a Level for Playing</a> for more information.	
	Generate Terrain Texture	Generates the terrain surface texture in a compressed format to the <a href="#">terraintexture.pak</a> file. This is required so that changes done by the terrain painter will be visible in the <a href="#">Launcher</a> . See <a href="#">Creating a New Level</a> for more information.	
	Save Level Resources...	Saves all assets that are used in the level to a folder.	
	Export Selected Objects	Saves the selected geometry to an .obj or .fbx file.	

Export Terrain Area	See <a href="#">Terrain Import and Export</a> for more information.
Export Terrain Area with Objects	See <a href="#">Terrain Import and Export</a> for more information.
Export Occlusion Mesh	
Show Log File	Shows the log file containing all text that was printed in the console.
Recent Files List	Lists recently opened levels.
Exit	Closes the Editor, prompting the user to save before exiting, if changes are detected.

## The Edit Menu

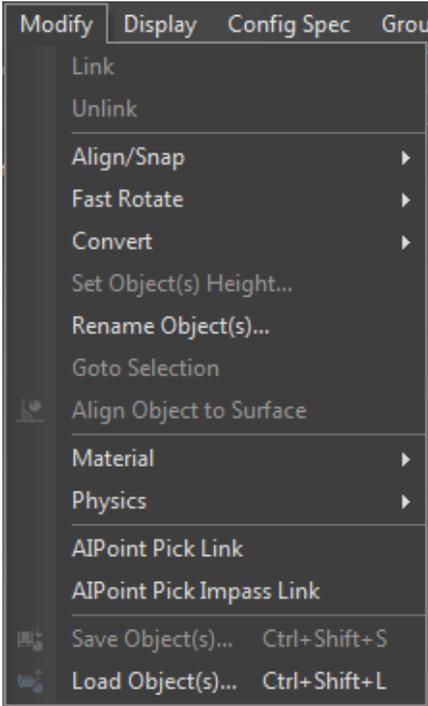
The Edit menu contains commands related to object manipulation and selection.

	Menu Item	Description
	Undo	Undoes the users last action (Ctrl+Z).
	Redo	Redoes the users last action (Ctrl+Shift+Z).
	Delete	Deletes the selected object(s), when you press the Yes button on the confirmation window.
	Clone	Duplicates the selected object (Ctrl+C).
	Hide Selection	Hides the selected object (H).
	Unhide All	Unhides all hidden objects (Ctrl+H), when you press the Yes button on the confirmation window.
	Freeze Selection	Freezes the selected objects (F) so they can no longer be moved or selected.
	Unfreeze All	Unfreezes all frozen objects (Ctrl+F), when you press the yes button on the confirmation window.
	Hold	Hold (save) the current state (Ctrl+Alt+H).
	Fetch	Fetch (restore) the saved state (Ctrl+Alt+F).
	Select All	Selects all visible, non-frozen objects.
	Select None	Deselects objects currently selected.
	Select Invert	Inverts the selection, so object currently not selected be come selected and objects currently selected become deselected.
	Select Objects	This will brings up the <a href="#">Select Objects Window</a> .
	Lock Selection	Having an object in lock mode prevents you from selecting other objects (Ctrl+Shift+Space), until you press Escape.
	Next Selection Mask	Selects the next selection mask (masks can be specified in the field with the pull down icon in the editing toolbar - Named Selections).

Sub Object Mode	When an object is selected and using the edit mesh function, you have the option to select and edit various components of the geometry.
Editing Mode	Select the various object editing modes.
Constrain	Limits the movement to the X, Y, Z, or XY axes, to the surface of the terrain, or to the surface of the terrain and objects.

## The Modify Menu

The Modify menu is where you will find commands used to modify and change attributes and properties such as height and alignment and material of objects and entities.

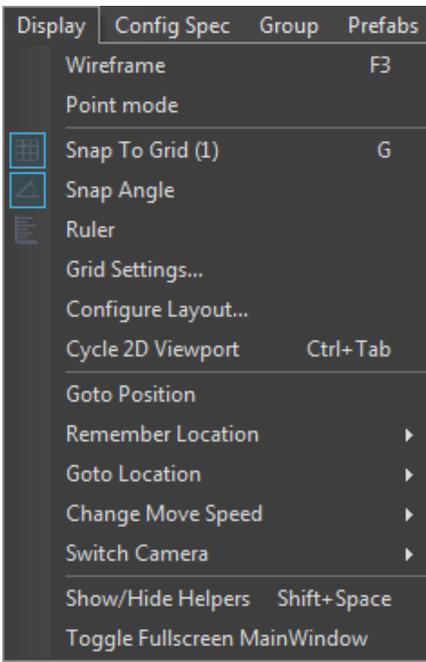
	Menu Item	Description	
	Link	Linking is used to create hierarchies between objects. If you have one object (child) linked to another and then move the parent object, the child object will move the same way. To link one object to another you have to select one entity, then use the link feature and then clicking on another entity to link them together.	
	Unlink	This function will break the link between the objects currently selected.	
	Align/Snap	Align an object to the grid or to another object will move the pivot point and rotation parameters of the object currently selected to the one that you click on after you press the align to button.	
	Fast Rotate	Quickly rotates the current selected object on the selected axis with the degree value specified in the Rotate Angles Window.	
	Convert	Converts the selected object to a <a href="#">Brush</a> , <a href="#">Geo m Entity</a> or <a href="#">Designer Object</a> . This can be a great option if you find you have existing assets which need more or less functionality.	
	Set Object(s) Height	Moves the object to a certain level (in meters) above the terrain.	
	Rename Object(s)	Renames the currently selected object.	
	Goto Selection	Moves the camera to the selected object (Z).	
	Align Object to Surface	Moves the selected object to the surface that you next click on.	
	Material	<ul style="list-style-type: none"> <li>• Assign Current assigns the selected material to the current selected object.</li> <li>• Reset To Default resets the material on the object to the default one assigned on object creation.</li> <li>• Get From Selected gets the material from the selected object to the material editor.</li> <li>• Pick Material lets you pick any surfaces and then display the surface material in the editor.</li> </ul>	

Physics	This feature is mainly used to make a physical simulation. For example, you could simulate wooden planks or dead bodies falling down, and then to cache the position of the moved objects as they would do in real life. <ul style="list-style-type: none"> <li>• Get Physics State gets the current physics state.</li> <li>• Reset Physics State resets the physical state (to the position where it has been placed originally).</li> <li>• Simulate Objects simulate Objects makes them behave like real gravity is on.</li> </ul>
AIPoint Pick Link	Used to combine AI navigation modifier points.
AIPoint Pick Impass Link	Used to restrict AI navigation modifier points (so AI can not walk on these lines).
Save Objects	Save an object(s) to the game folder (Ctrl+Shift+S) as a .grp (group) file.
Load Objects	Load an object(s) from the game folder (Ctrl+Shift+L).

## The Display Menu

The Display menu enables the user to toggle display features which will aid in level design, entity placement and object manipulation.

Other commands such as Remember/Goto Location and viewport navigation speed, can also be accessed from the Display menu.

	Menu Item	Description	
	Wireframe	Enables the Wireframe rendering mode (F3).	
	Point Mode	This option turns on the point mode rendering. It turns off almost all rendering features so editing particles can be done quicker, for example.	
	Snap to Grid (value)	This locks an objects movement or rotation to a predefined grid (G). The current set value is displayed also.	
	Snap Angle	Restricts the rotation of an object to predefined angle steps, i.e. 15, 30, 45, 60... degrees.	
	Ruler	Activates the Ruler tool which can be used to measure distances.	
	Grid Settings...	See below for more information.	
	Configure Layout...	Select one of the pre-configured layout settings to help keep arrange the Sandbox Editor. For more information, please see the information on <a href="#">Docking Windows and Tools</a> .	
	Cycle 2D Viewport	This function will change the current view port to the next type (from perspective to top, to front) (Ctrl+Tab).	
	Goto Position	In this window you can specify a camera position in XYZ coordinates, and then hit "Go to" button to move the current camera to this position.	

Remember Location	Using this function allows you to save 10 locations that you later recall using the Goto Location Feature. This is useful to quickly jump to different predefined places in Sandbox and in Game (Ctrl+F1,2,3,4 etc).
Goto Location	With this function you can quickly jump to the predefined camera positions (Shift+F1,2,3,4 etc).
Change Move Speed	Increasing the speed will make the navigation in the editor faster. Decreasing the speed will make the navigation in the editor slower. Step Size changes the Step Size to higher values to quickly change between fast and slow movement.
Switch Camera	<ul style="list-style-type: none"> <li>• Default Camera is the default camera.</li> <li>• Sequence Camera is used when you want to see through the Camera used in a Track View sequence.</li> <li>• Selected Camera Object is the camera entity that you have currently selected.</li> </ul>
Show/Hide Helpers	Allows you to hide all helper objects or turn them back on (Shift+Space).
Toggle Fullscreen MainWindow	From here you can toggle the perspective viewport to & from full screen mode. This only works when the perspective viewport is not docked in the main editor window.

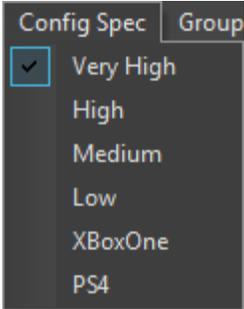
## Grid Settings

Use the Grid/Snap settings dialog box to define Grid settings, Angle Snapping values, the sizes of the construction plane and snap markers.

Grid	
Snap to Grid	Snap the selected object to the grid.
Grid Lines Every x units	The placement of grid lines measured by units.
Units Per Meter	Defines the size of a unit.
Get Angles & Translation from Selected	Rotates the grid lines & translation at angles equal to the selected object.
Rotation & Translation by X/Y/Z	Rotate the required grid line axis by the specified number of degrees.
Angle Snapping	
Angle Snap	Activates/deactivates Angle Snap.
Angle Snap degrees	Sets the angle snapping steps in degrees.
Construction Plane	The Construction Plane is useful when editing Solids, or moving objects around.
Display	Switches Construction Plane on/off.
Size	Defines the size in meters in all directions from the pivot.
Snap Marker	The Snap Marker is used for modeling Solids.
Display	Turns Snap Marker on and off.
Size	Changes the size of the Snap Marker.

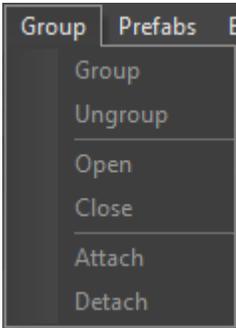
## The Config Spec Menu

This menu allows to quickly switch between predefined quality settings, to check memory footprints, visual quality differences and features available in the different modes.

	Menu Item	Description
	Very High	Turns on the Very High display settings.
	High	Turns on the High display settings.
	Medium	Turns on the Medium display settings.
	Low	Turns on the Low display settings.
	XBoxOne	Emulates Xbox One display settings.
	PS4	Emulates Playstation 4 display settings.

## The Group Menu

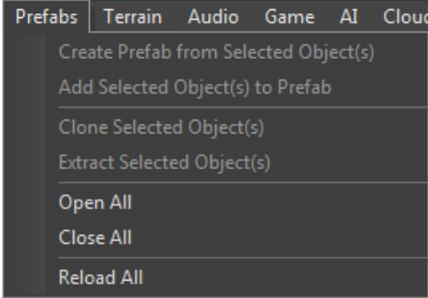
The Group menu contains commands that are concerned with the grouping of individual objects.

	Menu Item	Description
	Group	When having multiple objects selected the grouping function will group them together and draw a green box around them.
	Ungroup	Having a group selected this function will ungroup all group object.
	Open	This function will open the group so individual objects within the group can be modified.
	Close	This function will close the group so individual object modification is no longer possible until the group is opened again.
	Attach	Having a group selected and choosing this function and then clicking on a object that is not already within the group will add this new object to the group.
	Detach	When the group is open and one of the group objects is selected this detach function will removed the specific objects from the group.

## The Prefabs Menu

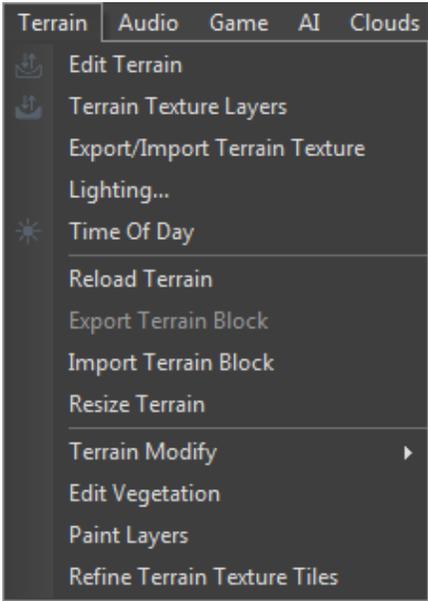
The Prefab menu contains commands to make prefabs from selection, reload prefabs and add selected objects to the prefab library.

	Menu Item	Description
	Create Prefab from Selected Object(s)	Makes a new prefab from the selected objects.
	Add Selected Object(s) to Prefab	Adds currently selected objects to the prefab.
	Clone Selected Object(s)	Clones the selected object outside of its prefab. Unlike "Extract", keeps original inside prefab.

	Extract Selected Object(s)	Extracts the selected object from its prefab. Unlike "Clone", removes original inside prefab.
	Open All	Opens all prefabs inside the level.
	Close All	Closes all prefabs inside the level.
	Reload All	Reload all prefabs inside the level with the "on-disk" version. Only useful if prefabs are set to not automatically update.

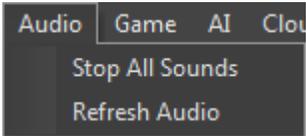
## The Terrain Menu

The Terrain menu serves as a hub to access many view panes and tools that affect the game world and terrain appearance in particular ways.

	Menu Item	Description
	Edit Terrain	Opens the <a href="#">Terrain Editor</a> window.
	Terrain Texture Layers	Opens the <a href="#">Terrain Texture Layers</a> window.
	Export/Import Terrain Texture	Used to Import and Export terrain texture tiles. Terrain tile texture resolution can also be set here. See <a href="#">this article</a> for example usage.
	Lighting...	Opens the <a href="#">Terrain Lighting</a> window.
	Time Of Day	Opens the <a href="#">Time Of Day</a> window.
	Reload Terrain	Reloads the terrain.
	Export Terrain Block	Exports a section of the terrain as a terrain block (.trb) file.
	Import Terrain Block	Imports terrain from a previously saved terrain block file.
	Resize Terrain	Opens a dialog which can set the Heightmap Resolution setting and Meters Per Unit setting.
	Terrain Modify	Opens the <a href="#">Modify Terrain</a> panel with the specified tool selected.
	Edit Vegetation	Opens the <a href="#">Vegetation Creation</a> .
	Paint Layers	Opens the <a href="#">Layer Painter Tool</a> .
	Refine Terrain Texture Tiles	Divides the terrain tiles into more smaller sections.

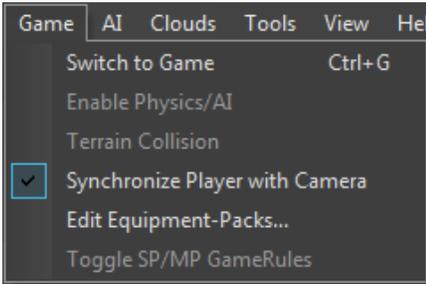
## The Audio Menu

The Audio menu contains functions to stop and refresh the audio middleware system.

	Menu Item	Description
	Stop All Sounds	Sends a signal to the audio middleware to stop all playing sounds.
	Refresh Audio	Reloads all of the audio data and sends a signal to the audio middleware that the entire audio system is refreshing.

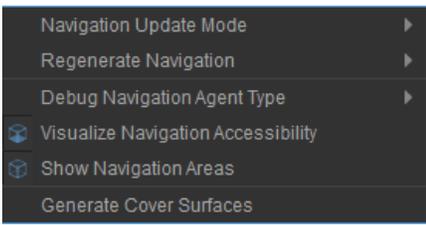
## The Game Menu

The Game menu provides commands to enable the game mode and test newly created features.

	Menu Item	Description
	Switch to Game	Switches to game mode so you can play the level within the editor (Ctrl+G). To exit game mode press Esc.
	Enable Physics/AI	Enables the physics and AI within the editor ( Ctrl+P).
	Terrain Collision	Makes the editing camera collide with the terrain so you can't fly under the terrain surface (Q).
	Synchronize Player with Camera	Sets the player to the position where the current editing camera is. This can be used to prevent the camera triggering logic such as AreaTriggers while in Editing mode.
	Edit Equipment-Packs	Opens the Equipment-Packs window. See the <a href="#">Setting Up Equipment Packs</a> tutorial for more information.
	Toggle SP/MP GameRules	Switches between "SinglePlayer" and "TeamInstantAction" game rules.

## The AI Menu

The AI Triangulation menu contains commands used to generate AI navigation and update the AI system within a level.

	Menu Item	Description
	Navigation Update Mode	<ul style="list-style-type: none"> <li>Continues: Regenerates NavMesh while dragging geometry on the according part of the NavMesh.</li> <li>After Change: Regenerates NavMesh after finished dragging geometry on the according part of the NavMesh.</li> <li>Disabled: Does not regenerate the NavMesh that would be affected by geometrical changes in the world.</li> </ul>
	Regenerate Navigation	Performs a full rebuild of the NavMesh. Either all or specific layers of the NavMesh can be selected for the rebuild.
	Debug Navigation Agent Type	Selects which NavMesh layers should be displayed, based on their agent type.
	Visualize Navigation Accessibility	Displays inaccessible areas as Red and accessible areas as Blue.
	Show Navigation Areas	Displays NavMesh shapes.
	Generate Cover Surfaces	Requests generation of Cover Surfaces data.

## The Tools Menu

The Tools menu is where you reload scripts, textures, geometry and terrain. Other commands include user command configuration and check level for errors.

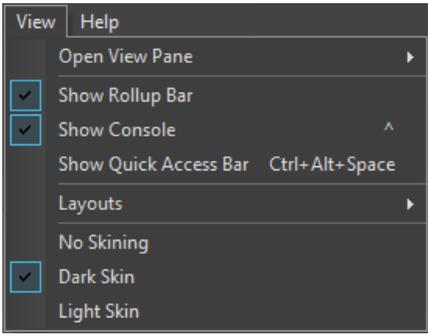
	Menu Item	Description
--	-----------	-------------

	Reload Scripts	Provides functions to reload specific (or all) game scripts.
	Reload Textures/Shaders	Reloads all textures and shaders used in the level.
	Reload Geometry	Reloads geometries used in the level.
	Reload Terrain	Initiates the Terrain (can be used instead of reloading the editor).
	Resolve Missing Objects/Materials	This will run a check through the level and try to resolve all objects / materials that have problems.
	Enable file change monitoring	
	Clear Registry Data	Resets the Sandbox data stored in the <a href="#">Windows Registry</a> .
	Check Level for Errors	Checks the level for errors (duplicate objects, missing assets) and displays a list in the console.
	Check Object Positions	
	Save Level Statistics	Saves level statistics to the "YOURLEVELNAME.xml" file in the folder: <root>\TestResults folder.
	(Advanced) Compile Script	Compiles an entity script.
	(Advanced) Reduce Working Set	Reduces Memory consumption.
	(Advanced) Update Procedural Vegetation	Updates the Procedural Vegetation.
	Customize Keyboard...	The Customize Keyboard window enables you configure toolbars, menus and shortcuts.
	Export Keyboard Settings...	
	Import Keyboard Settings...	
	Preferences...	Editor Preferences can be set here. See <a href="#">Edit or Preferences</a> .
	Configure Toolbox Macros...	Function to create shortcuts to console commands. So common commands like display AI parameters can be accessed with just one mouse-click, for example.
	Toolbox Macros	Displays the shortcuts to console and editor commands as specified in the Configure User Commands window.
	Script Help	

## The View Menu

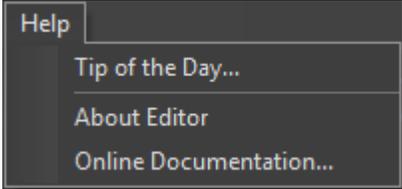
The View Menu helps users to be able to customize the Sandbox Editor, and provides access to the various Sandbox Editors, user layouts, and skins.

Menu Item	Description
-----------	-------------

	Open View Pane	Here you can open the various Sandbox Editor windows (i.e Flowgraph, Trackview), as well as different view functions that aid in object setup.
	Show Rollup Bar	Shows and hides the Rollup Bar.
	Show Console	Shows and hides the Console.
	Show Quick Access Bar	
	Layouts	
	Save Layout...	Save the current layout. If a layout has been previously saved, a list will appear above this menu option. This will allow you to load, re-save, rename or delete the user layout.
	Restore Default Layout...	Restores the default layout.
	Skinning	
	No Skinning	Set to standard Windows-style theme.
	Dark Skin	Apply the "Dark Skin" theme. This is used by default.
	Light Skin	Apply the "Light Skin" theme.

## The Help Menu

The Help Menu contains version information as well as access to the Tip of the Day dialog box.

	Menu Item	Description
	Tip of the Day	Opens the Tip of the Day dialog box, and allows users to turn "Show tips on startup" on and off.
	About Editor	Displays CryENGINE Sandbox Editor version information.
	Online Documentation	Opens the <a href="http://docs.cryengine.com">http://docs.cryengine.com</a> website in your default browser.