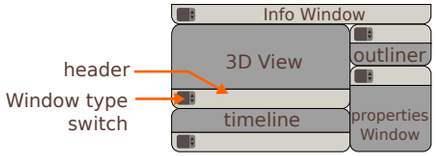
Blender 2.5/6 Series Quickstart

1. Blender's interface

Blender's interface consists of an arbitrary number of workpsaces with an arbitrary number of windows each. Each window displays a part of your scene's data. The type of data that a window displays is indicated in the window's header.



You can change the type of a window (so the type of data that is shown) at any time by clicking the leftmost button in the header.

To add or delete windows, click with **LMB** and drag from the upper right or bottom left corner of a window. If you drag right inside this window, you'll create another new one. If you drag outside to an adjacent window, you'll join both on a single one.

You can resize windows by grabbing a window edge. In the same way you can hide headers or optional panels.

User preferences are a particular type of window, but you can access them by *File* > *User preferences* or with **Ctrl Alt U**.

To set and save the current layout, along with some preferences, as your Blender start defaults, press **Ctrl U**. Take in account that any data added to the scene will be saved as your Blender start defaults. Even in this case, you can always restore *Factory defaults* by the corresponding option in the *File* menu.

Tools and actions relative to a window are always available in the window's header.

Hotkeys and actions are context sensitive meaning that they work based on the location of mouse cursor.

2. Navigating in the 3D View

You can rotate the *3D View* with **Middle Mouse Button**, (**MMB**).

Panning is accomplished with **Shift MMB**. To zoom, use the **Mousewheel** or **Ctrl MMB**.

The **numpad** allows to navigate in the *3D View* as well:

* **7**, **1**, **3** set the view to *Top*, *Front*, *Right*.
* use **Ctrl 7**, **Ctrl 1** i **Ctrl 3** to view *Bottom*, *Back*, *Left*
* **8**, **2** rotate *Up*, *Down*. **Shift 8** i **Shift 2** pan.
* **4**, **6** rotate *Left*, *Right*; **Shift 4** i **Shift 6** pan.
* **5** flips between *Orthogonal* and *Perspective* view. **0** sets the *Camera View*.

All those controls and more are also available in the *View* menu located in the *3D View* header.

3. The Properties window

The *Properties* window's header has several buttons corresponding to different contexts. Each context groups buttons, behaviours and values that share similar purposes.

Some contexts of the *Properties* window will change according to the object that is selected. Generally speaking, contexts are ordered left to right from generic to a more particular ones.

You can scroll panels using **Mousewheel**, pressing **MMB**, zoom with **Ctrl MMB**. You can organise panels as you like with drag & drop, too, and fold them using the small triangle.

4. Managing 3D Objects

The default scene is composed of a cube, a lamp and a camera. You can select any of these objects with **RMB**, select multiple objects with **Shift RMB** and select/deselect all with **A**.

To move these objects, click with **LMB** on this icon located at the header of the *3D View*, and a *Widget* will appear.

You can change the widget mode to **R**otate/**S**cale/**G**rab by activating the corresponding icons in the *3D View* header. Note that you can do the same thing with the bolded hotkeys.

If you click **LMB** at the colored parts of the widget, you'll transfrom only on this axis. If you do **Shift LMB** instead, you'll transform on the perpendicular plane of this axis.

The white circle at the widget's center transforms on the plane of the current view.

If you press **MMB** during transformation, or any of the corresponding keys of the axis letter (**X**, **Y**, **Z**), you'll be able to restrict transformation to a single axis without using the widget. Using **Shift X**/**Y**/**Z** you'll be able to restrict to a plane.

5. Editing 3D Objects

In Blender, editing the object position, and editing object shape and properties are two different and separated tasks. For each type of modification, there is an associated *Mode*. You are always in a certain mode. The current mode is indicated in the header.

The default mode is *Object Mode*. It allows to select different objects and to manipulate them.

The *Edit Mode* allows you to model the selected object. You can modify only one object at a time. If you want to select or modify other objects, you must escape *Edit Mode* and go back to *Object mode*. You cycle between *Object* and *Edit* modes with **Tab**.

Each object has a litlle dot that represents its center. You can change its position while in *Object Mode* by pressing the **Origin** button located at the panel shown in the *3D View* when pressing **T** key.

The object's *Center* is the (0, 0, 0) point of the *local coordinate system* of this object, and is also the reference point for this object to the *global coordinate system*.

While in a transformation (**G**, **R** or **S**), if you press twice the axis (**X**, **Y**, **Z**) or plane (**Shift X**/**Y**/**Z**) corresponding key, you'll restrict transformation to the *local coordinate system* instead of the *global* one.

The red and white cross is the *3D cursor*. Its position can be set with a simple **LMB** click in the viewport. This cursor is used as a reference point in the 3D space.

You can add new objects by pressing **Shift A** and choosing one among the existing categories. Objects can be duplicated with **Shift D** or link-duplicated with **Alt D**

6. Mesh modelling

To model a mesh object, you need to enter *Edit Mode*. In *Edit Mode*, you can select three kind of items: *Vertices*, *Edges* and *Faces*. To switch between different selection modes, use the buttons placed in the *3D View* header or with **Ctrl Tab**.

Once you have selected different elements, you can:

* **G**rab, **R**otate, **S**cale;
* **E**xtrude any selection; **K**nife any selection
* Delete the selection with **X** or **Delete**;
* Apply various tools from the **W** and **Ctrl E** menus;
* Subdivide loops with **Ctrl R**;
* Se**P**arate selection; Duplicate selections with **Shift D**.

Note that if you duplicate your object in the *Edit Mode*, the result will still count as one object, even if it looks like two duplicated objects. In the *Edit Mode* you can modify the object geometry as you like and it will still remain a unique object. If you want to duplicate your object and have two different objects as a result, do so in the *Object Mode*. (See 4)

Note too that everything about what you're able to do when transforming objects (widgets, **G**, **R**, **S**, etc.) it's still OK in *Edit Mode*, but related not to the *Object* but to the *geometry* instead.

7. Lamps and Materials

To tweak lamps settings, select a lamp, go to the *Properties* window and press the *Object data* button, drawn in this case as a pointlight at the center of four arrows.

To change the color and look of an object, select it and go to the Material context in the *Properties* window.

8. Layers

Layers are used to easily show, hide and group different objects, in addition to more specific functions. Each object belongs to a layer or layers. To change the layer of an object, select it and press **M**ove.

To manage which layers you want to be hidden or visible, use the corresponding buttons placed at the header of the *3D View*. To show multiple layers at the same time, use **Shift LMB** on these layers. You can too use the numbers at the alphanumeric keyboard, **1**,**2**,**3**...**0** to switch between layers from 1 to 10, and **Alt 1**,**2**,**3**...**0** to switch from 11 to 20, with optional use of **Shift** too.

9. Rendering

To render the view of a camera, you must first check that the desired camera is activated. To activate a camera, select it and press **Ctrl Numpad-0**.

To change camera settings, select it and go to the *object data* context for the camera at the *Properties* window, represented in this case with a button that shows a movie camera.

If you want to change the background of your scene, go to the *World* context at the *Properties* window, pressing a button with a small planet Earth on it.

To change the render settings, go to the *Render* context at the *Properties* window, represented with a button that shows a photo camera. You can then select the size of your render, the Antialiasing settings and the output format.

To render your scene, press the **Image** button at the *Render* panel of the *Render* context, or press **F12**.

If your scene renders as black, check that there is light in your scene and all needed layers are activated.

You can save the resulting image with **F3**, or through the **Save as** option in the *Image* menu at the render result window itself.

10. Final words

The QuickStart covers only the most basic features. To find out more information about modifier stack, fluid simulator, particle engine, animation features, video sequencer, node editor, game engine etc. we very strongly recommend that you read the complete documentation. You can find it on:

http://wiki.blender.org/

As you may have noticed, Blender is mostly hotkey oriented. Once you get the hang of these, you will find your experience on Blender much more enjoyable and productive.

If you have difficulties to find the hotkey of a specific function, you can ckeck if it is listed in the Search tool shown by pressing **Spacebar**, or in the menus at the headers of the windows. You can look at the Help menu, too. Note that since 2.5 versions of Blender, hotkeys are customisables.

At the Blender wiki and several other places over Internet there are several Hotkey maps. They will be completed and updated accordingly to the more stable releases of Blender in the future.

If you have further questions, ask them on the forum at **http://www.blenderartists.org**, or on the **#blenderchat** channel at the freenode IRC network.

Check **http://www.blendernation.com** for daily Blender news and **http://blenderart.org** to find a free Blender magazine.

Goog luck and Blend on! -The Blender Team

This Quickstart guide was done by **Raimon Guarro i Nogués**, as an update / adaptation from the one created by **The Blender Team** for 2.4 series of Blender, and translated to Spanish by **Pablo Lizardo**. Original version of this adaptation work is catalan. English translation done with goodwill and not so much more ;-), feel free to improve it.
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