

## Welcome to VRML Add-In

Microsoft VRML Add-In for Internet Explorer enables you to explore virtual (3-D) worlds that were created by using VRML (Virtual Reality Modeling Language). With VRML Add-In, you can enter and explore a virtual world just by going to a web page that contains one.

▶ To begin exploring a virtual scene, point to it, hold down the left mouse button, and then move the mouse in the direction you want to go.

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{button ,AL("a\_keyboard;a\_joystick;a\_toolbar")} [Related Topics](#)

### To maneuver by using the mouse

- 1 Click the Slide, Walk, or Tilt button on the VRML Add-In toolbar.
- 2 Point to the virtual scene.
- 3 Press and hold down the left mouse button, and then move the mouse in the direction you want.

#### Tips

- To move closer to an object, double-click it.
- To spin an object, press and hold down the right mouse button, and then move the mouse.
- For information about toolbar buttons, click Related Topics below.

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{button ,AL("a\_keyboard;a\_joystick;a\_examine;a\_toolbar")} [Related Topics](#)

**To maneuver by using the keyboard**

- To walk forward, backward, left, or right, press the arrow keys.
- To slide, press and hold down the CTRL key while pressing the arrow keys.
- To tilt, press and hold down the SHIFT key while pressing the arrow keys or the HOME key.

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{button ,AL("a\_mouse;a\_joystick;a\_toolbar")} [Related Topics](#)

### **To maneuver by using a joystick**

- 1 Use the mouse to click the virtual scene.
- 2 Move the joystick in the direction you want to go.

#### **Notes**

- To slide, press and hold down the CTRL key while moving the joystick in the direction you want to slide.
- To tilt, press and hold down the SHIFT key while moving the joystick in the direction you want to tilt.
- If your joystick has a POV hat, then the hat acts as a Slide control. Moving the hat forward or back slides your viewpoint up or down; moving it right or left slides your viewpoint to the right or to the left.

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{button ,AL("a\_mouse;a\_keyboard;a\_toolbar")} [Related Topics](#)

### **To spin an object**

- 1 Click the Spin button on the VRML Add-In toolbar.
- 2 Hold down the left mouse button, and move the mouse in the direction you want to turn the object.

### **Notes**

- The Spin button spins the entire virtual world as a single object. If your viewpoint is inside the object (the virtual world), the virtual scenery will seem to spin past you. If your viewpoint is outside the world or object, you can watch it spin in front of you.
- If you release the mouse button while an object is still spinning, the object will continue to spin. To stop spinning, click the object.
- You can also spin an object by holding down the right mouse button and moving the mouse.

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{button ,AL("a\_toolbar")} [Related Topic](#)

**To return to your starting position**

- ▶ Click the Reset button on the VRML Add-In toolbar.

**Tip**

- To straighten your viewpoint, click the Straighten button on the VRML Add-In toolbar.
- If you can't see the toolbar, right-click the virtual scene, and then click Show Toolbar.

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{button ,AL("a\_toolbar")} [Related Topic](#)

**To go to the location indicated by a link**

- 1 Find a link by moving the pointer over the virtual scene until the arrow becomes a hand pointer.
- 2 Click the link.

### **To stop displaying virtual worlds**

- 1 In Internet Explorer, click the View menu, and then click Options.
- 2 Click the Appearance tab.
- 3 Make sure that Show Animations is not checked.

#### **Notes**

- Disabling Show Animations also prevents Internet Explorer from displaying video clips.
- If Show Animations is not checked, you can still display a specific world or video clip by clicking the icon that represents it.
- If a virtual world is still visible after you make sure the Show Animations box is not checked, you can hide it by clicking the View menu and then clicking Refresh.



## Using the VRML Add-In toolbar

When you open a web page that contains a virtual world, VRML Add-In displays a toolbar with buttons that you can use to explore that world. You use the toolbar buttons as follows:

<b>Click this</b>	<b>To do this</b>
Menu button	Display the VRML Add-In menu. You can also display this menu by right-clicking anywhere in the virtual scene or VRML Add-In toolbar.
Slide button	Slide your viewpoint up, down, right, or left.
Walk button	Move through the scene.
Tilt button	Tilt your viewpoint up, down, right, or left.
Spin button	Spin the virtual world around its center. (If your viewpoint is inside the virtual world, the virtual scenery will seem to spin past you. If your viewpoint is outside the world or object, you can watch it spin in front of you.)
Reset button	Return to your starting location and orientation.
Straighten button	Straighten your viewpoint with respect to the scene.

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{button ,AL("a\_examine;a\_keyboard;a\_mouse;a\_joystick")} [Related Topics](#)

**To stop moving through walls and other objects**

- ▶ Click the right mouse button, and then make sure that Walk Through Walls is not checked.

**Notes**

- If Walk Through Walls is not checked, the virtual scene may respond more slowly when you move.
- Some worlds do not support collision detection. In those worlds, you cannot move if Walk Through Walls is not checked.

### **If your joystick doesn't work properly**

If your joystick doesn't work, or if your viewpoint spins or moves continuously when you load a world, your joystick probably needs to be calibrated for use with Windows.

### **To calibrate your joystick**

- 1 On the Start menu, point to Settings, and then click Control Panel.
- 2 Double-click the Joystick icon.
- 3 Make sure the Current Joystick and Joystick Configuration settings are correct for your joystick.
- 4 Click Calibrate to begin the calibration process, and then follow the instructions on your screen.

### **Tip**

- If you have calibrated your joystick and your viewpoint still moves or spins continuously, try adjusting your joystick controls. Most analog joysticks have adjustment wheels or sliders you can use to compensate for joystick "drift." Turn or slide these controls until your viewpoint stops moving.

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{button ,AL("a\_cantmove")}[Related Topics](#)

**If you can't move within a virtual world**

Some virtual worlds do not support collision detection (the ability to detect the surfaces of walls and other objects). If the Walk Through Walls option is disabled, you will not be able to move in such a world. To work around this problem, disable collision detection.

**To disable collision detection**

- ▶ Click the right mouse button, and then make sure that Walk Through Walls is checked.

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{button ,AL("a\_nojoystick")} [Related Topics](#)

**To display the VRML Add-In toolbar**

- Enlarge the Internet Explorer window until the toolbar appears.
- Right-click the virtual scene, and then make sure that Show Toolbar is checked.

**To improve the speed of a virtual world**

- 1 Click the right mouse button, and then point to Options.
- 2 Make sure that Load Textures and Load Inlines are not checked.

**Notes**

- Since texture bitmaps tend to be large, disabling Load Textures speeds up the time it takes some worlds to download, but at the expense of visual realism.
- You are always limited by the speed of your connection to the Internet.
- To improve speed more dramatically, you need either a faster computer or hardware support for 3-D rendering. (Support for hardware acceleration will be available in the next release of VRML Add-In.)

**To uninstall VRML Add-In**

- 1 Click the Start button, point to Settings, and then click Control Panel.
- 2 Double-click the Add/Remove Programs icon.
- 3 Click VRML Add-In Beta1, and then click Add/Remove.

Shifts your viewpoint horizontally or vertically, without moving forward, backward, turning, or spinning.



Moves your viewpoint forward or backward through the virtual scene. You can also turn your viewpoint to the left or to the right.

Tilts your viewpoint up, down, to the left or to the right, without changing your current location.

Turns an object so that you can examine it from all sides, without changing your current location. (The entire virtual world is treated as a single object. If your viewpoint is inside the virtual world, the virtual scenery will seem to spin past you. If your viewpoint is outside the world or object, you can watch it spin in front of you.)

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