



Full documentation available at <http://doc.openlayers.org>, this cheatsheet is released under the same license

## Hello-World

```

<html>
  <head>
    <title>OpenLayers Example</title>
    <script src="http://openlayers.org/api/OpenLayers.js">
    </script>
  </head>
  <body>
    <div style="width:100%; height:100%" id="map"></div>
    <script defer="defer" type="text/javascript">
      var map = new OpenLayers.Map('map');
      var wms = new OpenLayers.Layer.WMS(
        "OpenLayers WMS",
        "http://labs.metacarta.com/wms/vmap0",
        { layers: 'basic' }
      );
      map.addLayer(wms);
      map.zoomToMaxExtent();
    </script>
  </body>
</html>

```

## OpenLayers.Map

### Constructor

```

var map = new OpenLayers.Map(div, options);
// div: id of html element that should contain the map
// options: object with non-default properties

```

### Properties

events	{OpenLayers.Events}
div	{DOMElement}
layers	{Array(OpenLayers.Layer)}
baseLayer	{OpenLayers.Layer}
tileSize	{OpenLayers.Size}
projection	{String}
units	{String}
resolutions	{Array(Float)}
maxResolution	{Float}
minResolution	{Float}
maxScale	{Float}
minScale	{Float}
maxExtent	{OpenLayers.Bounds}
minExtent	{OpenLayers.Bounds}
restrictedExtent	{OpenLayers.Bounds}
numZoomLevels	{Integer}
theme	{String}
displayProjection	{OpenLayers.Projection}
fallThrough	{Boolean}
eventListeners	{Object}

### Methods

```

setOptions( {object} )
{Array} getBy( map_prop, prop, match )
// EXAMPLES:
// map.getBy('layers', 'CLASS_NAME', 'OpenLayers.Layer.WFS');
// map.getBy('controls', 'CLASS_NAME', /zoom/gi);
addLayer( OpenLayers.Layer )
addLayers( [OpenLayers.Layer] )
removeLayer( OpenLayers.Layer, setNewBaseLayer=true )
setBaseLayer( OpenLayers.Layer )
addControl( OpenLayers.Control, OpenLayers.Pixel )
{OpenLayers.LonLat} getCenter( )
{Integer} getZoom( )
pan( dx, dy, opt )
panTo( OpenLayers.LonLat )
setCenter( OpenLayers.LonLat, zoom, drag, forceZoomChange )
{OpenLayers.Projection} getProjection( )
{OpenLayers.Bounds} getExtent( )
{Float} getScale( )
zoomTo( zoomLevel )
zoomIn( )
zoomOut( )
zoomToExtent( OpenLayers.Bounds, closest=false )
zoomToMaxExtent( options )
zoomToScale( scale , closest=false )

```

## OpenLayers.Layer

### Constructor

```

var lyr = new OpenLayers.Layer.XYZ(...);
// XYZ is e.g. WMS, WFS, Google, Yahoo, VirtualEarth, GML, ...

```

### Properties

events	{OpenLayers.Events}
map	{OpenLayers.Map}
isBaseLayer	{Boolean}
displayInLayerSwitcher	{Boolean}
visibility	{Boolean}
attribution	{String}
eventListeners	{Object}
projection	{OpenLayers.Projection String}
units	{String}
scales	{Array}
resolutions	{Array}
maxExtent minExtent	{OpenLayers.Bounds}
maxResolution minResolution	{Float}
maxScale minScale	{Float}
numZoomLevels	{Integer}
wrapDateLine	{Boolean}
transitionEffect	{String}

### Methods

```

setName( name )
addOptions( options )
Boolean redraw( )
removeMap( OpenLayers.Map )
{OpenLayers.Size} getImageSize( )
setTileSize( OpenLayers.Size )
{Boolean} getVisibility( )
setVisibility( isVisible )
display( isDisplayed )
setIsBaseLayer( isBase )
{Float} getResolution( )
{OpenLayers.Bounds} getExtent( )
{Integer} getZoomForExtent( OpenLayers.Bounds, closest=false )
{Float} getResolutionForZoom( zoom )
{Integer} getZoomForResolution( resolution, closest = false )
{OpenLayers.LonLat} getLonLatFromViewPortPx( OpenLayers.Pixel )
{OpenLayers.Pixel} getViewPortPxFromLonLat( OpenLayers.LonLat )
setOpacity( opacity )

```

## OpenLayers.Control

### Constructor

```

var control = new OpenLayers.Control.ABC(...);
// ABC is one of ArgParser, Attribution, Button, DragFeature,
// DragPan, DrawFeature, EditingToolbar, KeyboardDefaults,
// LayerSwitcher, Measure, ModifyFeature, MouseDefaults,
// MousePosition, MouseToolbar, Navigation, NavigationHistory,
// NavToolbar, OverviewMap, Pan, Panel, PanPanel, PanZoom,
// PanZoomBar, Permalink, Scale, ScaleLine, SelectFeature,
// ZoomBox, ZoomIn, ZoomOut, ZoomPanel, ZoomToMaxExtent

```

### Properties (not always available)

eventListeners	{Object}
active	{Boolean}
div	{DOMElement}
events	{Array}
handlers	{Array}
map	{OpenLayers.Map}

### Methods (not always available)

```

{Boolean} activate( )
{Boolean} deactivate( )
initialize( options )
moveTo( OpenLayers.Pixel )
maximizeControl( )
destroy( )

```