

# Object.prototype.hasOwnProperty()

The `hasOwnProperty()` method returns a boolean indicating whether the object has the specified property as its own property (as opposed to inheriting it).

**Note:** `Object.hasOwn()` is recommended over `hasOwnProperty()`, in browsers where it is supported.

# Syntax

`hasOwnProperty(prop)`

## Parameters

*prop*

The `String` name or `Symbol` of the property to test.

## Return value

Returns `true` if the object has the specified property as own property; `false` otherwise.

## Description

The `hasOwnProperty()` method returns `true` if the specified property is a direct property of the object — even if the value is `null` or `undefined`. The method returns `false` if the property is inherited, or has not been declared at all. Unlike the `in` operator, this method does not check for the specified property in the object's prototype chain.

The method can be called on *most* JavaScript objects, because most objects descend from `Object`, and hence inherit its methods. For example `Array` is an `Object`, so you can use `hasOwnProperty()` method to check whether an index exists:

```
let fruits = ['Apple', 'Banana', 'Watermelon', 'Orange'];
fruits.hasOwnProperty(3);    // true ('Orange')
fruits.hasOwnProperty(4);    // false - not defined
```

The method will not be available in objects where it is reimplemented, or on objects created using `Object.create(null)` (as these don't inherit from `Object.prototype`). Examples for these cases are given below.

## Examples

# Using hasOwnProperty to test for an own property's existence

The following code shows how to determine whether the `example` object contains a property named `prop`.

```
let example = {};  
example.hasOwnProperty('prop');    // false  
  
example.prop = 'exists';  
example.hasOwnProperty('prop');    // true - 'prop' has been defined  
  
example.prop = null;  
example.hasOwnProperty('prop');    // true - own property exists with value of null  
  
example.prop = undefined;  
example.hasOwnProperty('prop');    // true - own property exists with value of undefined
```

## Direct vs. inherited properties

The following example differentiates between direct properties and properties inherited through the prototype chain:

```
let example = {};  
example.prop = 'exists';  
  
// `hasOwnProperty` will only return true for direct properties:  
example.hasOwnProperty('prop');           // returns true  
example.hasOwnProperty('toString');       // returns false  
example.hasOwnProperty('hasOwnProperty'); // returns false  
  
// The `in` operator will return true for direct or inherited properties:  
'prop' in example;                       // returns true  
'toString' in example;                   // returns true  
'hasOwnProperty' in example;             // returns true
```

## Iterating over the properties of an object

The following example shows how to iterate over the enumerable properties of an object without executing on inherited properties.

```
let buz = {  
  fog: 'stack'
```

```
};

for (let name in buz) {
  if (buz.hasOwnProperty(name)) {
    console.log('this is fog (' +
      name + ') for sure. Value: ' + buz[name]);
  }
  else {
    console.log(name); // toString or something else
  }
}
```

Note that the `for...in` loop only iterates enumerable items: the absence of non-enumerable properties emitted from the loop does not imply that `hasOwnProperty` itself is confined strictly to enumerable items (as with `Object.getOwnPropertyNames()`).

## Using `hasOwnProperty` as a property name

JavaScript does not protect the property name `hasOwnProperty`; an object that has a property with this name may return incorrect results:

```
let foo = {
  hasOwnProperty: function() {
    return false;
  },
  bar: 'Here be dragons'
};
```

```
foo.hasOwnProperty('bar'); // reimplementation always returns false
```

The recommended way to overcome this problem is to instead use `Object.hasOwn()` (in browsers that support it). Other alternatives include using an *external* `hasOwnProperty`:

```
let foo = { bar: 'Here be dragons' };
```

```
// Use Object.hasOwn() method - recommended
Object.hasOwn(foo, "bar"); // true
```

```
// Use the hasOwnProperty property from the Object prototype
Object.prototype.hasOwnProperty.call(foo, 'bar'); // true
```

```
// Use another Object's hasOwnProperty
```

```
// and call it with 'this' set to foo
({}).hasOwnProperty.call(foo, 'bar'); // true
```

---

## Objects created with `Object.create(null)`

Objects created using `Object.create(null)` do not inherit from `Object.prototype`, making `hasOwnProperty()` inaccessible.

```
let foo = Object.create(null);
foo.prop = 'exists';
foo.hasOwnProperty("prop"); // Uncaught TypeError: foo.hasOwnProperty is not a function
```

The solutions in this case are the same as for the previous section: use `Object.hasOwn()` by preference, otherwise use an external object's `hasOwnProperty()`.

## Specifications

Specification
<a href="#">ECMAScript Language Specification</a> # <a href="#">sec-object.prototype.hasownproperty</a>

## Browser compatibility

[Report problems with this compatibility data on GitHub](#)

hasOwnProperty
Chrome
Edge
Firefox
Internet Explorer
Opera
Safari

WebView Android

Chrome Android

Firefox for Android

Opera Android

Safari on iOS

Samsung Internet

Deno

Node.js

Full support

## See also

- [Object.hasOwn\(\)](#)
- [Enumerability and ownership of properties](#)
- [Object.getOwnPropertyNames\(\)](#)
- [for...in](#)
- [in](#)
- [JavaScript Guide: Inheritance revisited](#)

**Last modified:** Sep 7, 2021, by [MDN contributors](#)