

Getting started

- 1. How KO works and what benefits it brings
- 2. Downloading and installing

Observables

- 1. Creating *view models* with *observables*
- 2. Working with *observable arrays*

Computed observables

- 1. Using *computed observables*
- 2. *Writable* computed observables
- 3. How dependency tracking works
- 4. *Pure* computed observables
- 5. Reference

Bindings

Controlling text and appearance

- 1. The **visible** binding
- 2. The **text** binding
- 3. The **html** binding
- 4. The **css** binding
- 5. The **style** binding
- 6. The **attr** binding

Control flow

- 1. The **foreach** binding
- 2. The **if** binding
- 3. The **ifnot** binding
- 4. The **with** binding
- 5. The **component** binding

Working with form fields

- 1. The **click** binding
- 2. The **event** binding
- 3. The **submit** binding
- 4. The **enable** binding
- 5. The **disable** binding
- 6. The **value** binding
- 7. The **textInput** binding
- 8. The **hasFocus** binding
- 9. The **checked** binding
- 10. The **options** binding
- 11. The **selectedOptions** binding
- 12. The **uniqueName** binding

Rendering templates

- 1. The **template** binding

Binding syntax

- 1. The **data-bind** syntax
- 2. The binding context

Creating custom bindings

- 1. Creating custom bindings
- 2. Controlling descendant bindings
- 3. Supporting virtual elements
- 4. Custom disposal logic

Downloads

Get the latest stable production build of Knockout.js:

Download

v3.4.2 - 25kb min+gz

release notes

Also available: [debug build](#). **Note:** This is only intended to help you understand how Knockout works. Don't use it for normal application development, because it exposes additional unsupported private APIs.

Bower

Knockout is available through the [Bower](#) package manager. Learn more about using and installing Bower at <http://bower.io>. To add Knockout to your application, you can run:

```
bower install knockout
```

Additionally, you can include the `--save` option to add knockout to your `bower.json` file.

Installation

Simply reference the JavaScript file using a `<script>` tag somewhere on your HTML pages. For example,

```
<script type='text/javascript' src='knockout-3.4.2.js'></script>
```

Of course, update the `src` attribute to match the location where you put the downloaded file. Next, if you're new to Knockout, get started with [interactive tutorials](#), see some [live examples](#), or dig into documentation about [observables](#).

Content Delivery Networks (CDNs)

To give your users the fastest download speeds, you might instead prefer to reference `knockout.js` on one of the following third-party CDNs:

- **CDNJS** ([about](#))
  - [Knockout version 3.4.2](#)
- **Microsoft Ajax CDN** ([about](#))
  - [Knockout version 3.4.2](#)

Archive of all versions

- [v3.4.2](#) ([debug](#)) — March 6, 2017
- [v3.4.1](#) ([debug](#)) — November 7, 2016
- [v3.4.0](#) ([debug](#)) — November 16, 2015
- [v3.4.0 Release Candidate](#) ([debug](#)) — October 12th, 2015
- [v3.3.0](#) ([debug](#)) — February 18th, 2015
- [v3.2.0](#) ([debug](#)) — August 12th, 2014
- [v3.2.0 Beta](#) ([debug](#)) — June 19th, 2014
- [v3.1.0](#) ([debug](#)) — March 4th, 2014
- [v3.1.0 Beta](#) ([debug](#)) — February 12th, 2014
- [v3.0.0](#) ([debug](#)) ([Upgrade notes](#)) — October 25th, 2013
- [v3.0.0 Release Candidate](#) ([debug](#)) — September 30th, 2013
- [v3.0.0 Beta](#) ([debug](#)) — July 9th, 2013
- [v2.3.0](#) ([debug](#)) — July 9th, 2013
- [v2.3.0 Release Candidate](#) ([debug](#)) — June 20th, 2013
- [v2.2.1](#) ([debug](#)) — January 15th, 2013
- [v2.2.0](#) ([debug](#)) — October 28th, 2012
- [v2.2.0 Release Candidate](#) ([debug](#)) — October 1st, 2012
- [v2.1.0](#) ([debug](#)) — May 7th, 2012

- 5. Preprocessing: Extending the binding syntax

Components

- 1. Overview: What *components* and *custom elements* offer
- 2. Defining and registering components
- 3. The **component** binding
- 4. Using custom elements
- 5. Advanced: Custom component loaders

Further techniques

- 1. Loading and saving JSON data
- 2. Extending observables
- 3. Deferred updates
- 4. Rate-limiting observables
- 5. Unobtrusive event handling
- 6. Using **fn** to add custom functions
- 7. Microtasks
- 8. Asynchronous error handling

Plugins

- 1. The **mapping** plugin

More information

- 1. Browser support
- 2. Getting help
- 3. Links to tutorials & examples
- 4. Usage with AMD using RequireJs (Asynchronous Module Definition)

Home

- [v2.1.0 Release Candidate 2 \(debug\)](#) — April 25th, 2012
- [v2.1.0 Release Candidate \(debug\)](#) — April 18th, 2012
- [v2.1.0 Beta \(debug\)](#) — March 23rd, 2012
- [v2.0.0 \(debug\)](#) — December 21st, 2011
- [v2.0.0 Release Candidate \(debug\)](#) — December 14th, 2011
- [v1.3.0 Beta \(debug\)](#) — August 30th, 2011
- [v1.2.1 \(debug\)](#) — May 22nd, 2011
- [v1.2.0 \(debug\)](#) — April 27th, 2011
- [v1.1.2 \(debug\)](#) — January 1st, 2011
- [v1.1.1 \(debug\)](#) — November 5th, 2010
- [v1.1.0 \(debug\)](#) — October 19th, 2010
- [v1.0.5 \(debug\)](#) — August 24st, 2010
- [v1.0.4 \(debug\)](#) — August 12th, 2010
- [v1.0.3 \(debug\)](#) — July 30th, 2010
- [v1.0.2 \(debug\)](#) — July 22nd, 2010
- [v1.0.1 \(debug\)](#) — July 9th, 2010
- [v1.0.0 \(debug\)](#) — July 5th, 2010

Related files

- [jquery.tmpl \(debug\)](#) — the old jQuery Templates plugin sometimes used with older versions of Knockout.js. This approach to templating has been deprecated since Knockout v2.0.0.

Download / Install

Tutorials

Live examples

Documentation

Forum

Source