



FS WEB FONT USER GUIDE

Version: 3.0



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WEB FONT FORMATS

Fontsmith web fonts are delivered in WOFF and WOFF2 formats.

WOFF

Our Web Open Font Format (.woff) font files are compressed and optimised TrueType font files specifically for use in web browsers. Generally the size of our WOFF files range from 40–60KB.

WOFF2

Our Web Open Font Format 2.0 (.woff2) font files are further optimised for use in the latest versions of modern browsers. Generally the size of our WOFF files range from 20–40KB.

Collectively WOFF and WOFF2 font files are supported by all modern browsers from IE 9, Edge, Firefox, Chrome, Safari, iOS Safari, Opera, Android Browser and BlackBerry Browser.

EOT

Embedded OpenType (.eot) font files are only supported by Internet Explorer versions 6–8. These versions of IE have a global user base of 0.16% as of January 2019 and are no longer supported by Microsoft. The WOFF format covers Internet Explorer versions 9–11 and Microsoft Edge supports the optimised WOFF2 format. The EOT font format user base is incredibly small.

However, we do recognise that some font users or developers may prefer EOT files and as such we can supply them on request via email to info@fontsmith.com. Please send us your licence information (organisation name and order reference number) and we can supply the format for the font weights that you have licensed.

BROWSER SUPPORT

Our WOFF and WOFF2 font files are supported by all modern browsers. Different browsers or browser versions can support a different format.

WOFF Browser Support

- Internet Explorer 9+
- Edge 12+
- Firefox 3.6+
- Chrome 5+
- Safari 5.1+
- Opera 11.5+
- iOS Safari 5+
- Android 4.4+
- Blackberry 7+
- Opera Mobile 12+
- Chrome Android 70+
- Firefox Android 63+
- Internet Explorer Mobile 10+
- UC for Android 11.8+
- Samsung Internet 4+
- QQ 1.2+
- Baidu 7.12+

WOFF2 Browser Support

- Edge 14+
- Firefox 39+
- Chrome 36+
- Safari 12+
- Opera 23+
- iOS Safari 10+
- Android 67+
- Opera Mobile 46+
- Chrome Android 70+
- Firefox Android 63+
- Samsung Internet 4+
- QQ 1.2+
- Baidu 7.12+

METHOD

CSS @font-face

1. Upload WOFF and WOFF2 web fonts to your web server.
2. Copy the code snippet example below into your CSS file to address your web fonts. Replace the example file URL with the appropriate path to the font files on your server.

```
@font-face {  
    font-family: 'SampleName';  
    src: url('PATH/SampleName-Regular.woff2') format('woff2'),  
         url('PATH/SampleName-Regular.woff') format('woff');  
}
```

It is important to declare WOFF2 before WOFF (because WOFF2 is better at compression, but will not get chosen by browsers that also support WOFF if it is listed second).

The value of the ‘font-family’ property (‘SampleName’ in this example) is only used internally in your style definitions, you could set it to any name you like. Make sure it is shorter than 31 characters or Internet Explorer will not display your fonts.

If you are using different type styles (bold, italic, etcetera), you will need to add additional ‘font-face’ declarations pointing to different font files — with the ‘font-style’ and ‘font-weight’ descriptors.

```
@font-face {  
    font-family: 'SampleName';  
    font-style: 'italic';  
    font-weight: 'bold';  
    src: url('PATH/SampleName-Bold-It.woff2') format('woff2'),  
         url('PATH/SampleName-Bold-It.woff') format('woff');  
}
```

Try to keep the number of fonts declared to a minimum, because they can really affect the loading time of your website.

METHOD

HTML Embed

You can reference your font family in CSS font stacks by the name you gave it, in the same way you would for a system font.

```
html-element {  
    font-family: 'SampleName', sans-serif;  
    line-height: 1.5em;  
}
```

It is good practice to set the 'line-height' property, otherwise the baseline positions and line spacing will be set by and differ between browsers. Use 'em' as the measurement unit.

If you have declared additional styles and want to use them:

```
html-element {  
    font-family: 'SampleName', sans-serif;  
    font-style: italic;  
    font-weight: bold;  
    line-height: 1.5em;  
}
```

METHOD

Font File Hosting

Our web fonts are licensed for self-hosting. The WOFF and WOFF2 font files should be hosted on your server, in the same way that any supporting images are served to your website. No additional tracking code or JavaScript modules are required to load Fontsmith font files.

Font File Security

Fontsmith actively encourages the protection of font software. Below are some methods that can be implemented to protect the web font files hosted on your servers.

HTTP Referrer Checking

Only authorized domains are allowed to link to the fonts if you set up an .htaccess file on your webserver. You can implement HTTP referrer checking via a Content Delivery Network. This protects against hotlinking of font files to unlicensed websites. However, it cannot prevent anyone from downloading the fonts if they are able to navigate to the server fonts folder directly. Contact your developer or web space provider to help you set an .htaccess file easily.

Obfuscation

Obfuscation through file names are not security. But files listed as strings of random characters can appear intimidating to those who are not familiar with developer conventions. You can serve the WOFF and WOFF2 fonts as Base64 encoded strings. However, this does mean bigger CSS files. Base64 encoded fonts are difficult to decode to working desktop fonts.

METHOD

Git

Our fonts are licensed directly to the named organisation and licensee at licence purchase. The distribution of our font software to unlicensed users is strictly prohibited and therefore our fonts cannot be shared or distributed via open-source Git sharing platforms. As the font licence holder, it is your responsibility to ensure that Fontsmith fonts are not distributed via a public Git repository.

Best Practice

Use a .gitignore file in all commits to ensure assets/fonts are not pushed to the repository and ask any additional users of the repository to acquire their own licence to use the fonts. Example of .gitignore file:

```
assets/fonts/*
```

If you are currently working with our fonts and they are on a Git repository please follow these steps to remove them:

1. Remove the files and commit the change:

```
$ git rm assets/fonts/<fontfilename>
```

2. Check all commits before the above deletion. If font files still exist in previous commits use the tool BFG Repo Cleaner:

<https://rtyley.github.io/bfg-repo-cleaner>

```
$ bfg --delete-files assets/fonts/<fontfilename>
```

This will remove the fonts from your entire repository history.

FEATURES

Kerning and Ligatures

All modern browsers support font kerning, but for continuity across all browser platforms you have to turn it on in your CSS.

```
html-element {  
    font-feature-settings: "kern" 1;  
    font-kerning: normal;  
}
```

Tracking and Leading

You can control the tracking (space between letters) and line-heights (space between lines) using CSS properties.

Adjusting tracking

Use the ‘letter-spacing’ property to increase/decrease the space between all letters uniformly.

```
.loose-tracking {  
    letter-spacing: 0.01em;  
}  
.tight-tracking {  
    letter-spacing: -0.01em;  
}
```

If you want to adjust only the space between words, use the ‘word-spacing’ property.

```
html-element {  
    word-spacing: 0.01em;  
}
```

FEATURES

Adjusting leading

Use the 'line-height' property to increase/decrease the space between all lines uniformly.

```
html-element {  
    line-height: 1.5em;  
}
```

As previously mentioned, it is a good practice to define the 'line-height' as different browsers use different default values, which may lead to an inconsistent display of the web site's design. Also you are advised to use 'em' as measurement unit when setting 'line-height'.

OpenType

A quick overview of how to turn OpenType features on and off in browsers. Place this piece of code into your CSS file.

```
html-element {  
    font-feature-settings: "liga", "dlig", "kern", "onum";  
}
```

To reduce the load time to your website our web fonts have an optimised and subsetting character set which cover all of the standard alphabetical glyphs found in the desktop fonts including the standard features such as ligatures and figure sets. However, more advanced and print specific features such as Small Capitals, Mathematical Figures and Fractions are omitted in the interest of all round file performance.

RENDERING

Fonts can be interpreted in several different ways depending on the rendering device, screen resolution, operative system, browser and even colour scheme.

Hinting

Font hinting translates vectors into pixels to render clear and legible text. Font hinting instructions are embedded in the font. We use a software hinting algorithm as a starting point and manual adjustments after various tests on different platforms and devices. Some rendering engines ignore hinting instructions.

Font Smoothing

Some browsers allow a subtle control over the font rendering through the 'font-smooth' CSS property. However, at the time of writing, this feature is a non-standard. What does work is a couple of similar properties for specific browsers (only working on macOS). Ask to your developer for further information.

```
html-element {  
    /* WebKit-based browsers like Safari and Chrome */  
    -webkit-font-smoothing: antialiased;  
    /* Firefox */  
    -moz-osx-font-smoothing: grayscale;  
}
```

As we mentioned before, these settings will affect text-rendering in only Safari, Chrome and Firefox browsers on macOS. To know more and see the different values, visit:

<https://developer.mozilla.org/en-US/docs/Web/CSS/font-smooth>

TROUBLESHOOT

Sometimes things just will not work. Here are a few tips to help. First of all, please ensure you are using the web font files provided by Fontsmith.

No webfonts at all

Most certainly there is a broken or miss-spelled link in your CSS code. Check all the links and all the referenced files are correctly in place.

No webfonts in Firefox or IE

Firefox and IE (9+) intentionally blocks files from different domains (or sub-domains). You can host the fonts on your server or it is possible to add WOFF to your list of MIME types. Another reason would be that you may be using a Firefox version older than version 3.6. You will need to update.

No webfonts in IE

If you use a virtual machine for rendering different browser preview (using services like Browser Stack or Sauce Labs) it may not render the @font-face rule for Internet Explorer. Try testing the fonts in a real browser environment.

No WOFF/WOFF2 loading

It could be that you are using IIS as a webserver that does not have a MIME type configured for WOFF and WOFF2 files, so IIS will not serve font file types. Set the MIME type for WOFF to 'application/font-woff' (or/and 'application/font-woff2') in the server settings.

HELP?

Whilst we have endeavoured to make this guide as comprehensive as possible, you may still have a specific question regarding our web fonts. If you do, please contact us at:

Fontsmith Contact Form

<https://www.fontsmith.com/contact>

Telephone

+44 (0) 20 7490 9380

We will try our best to help! If you would like to obtain a quotation or discuss our self-hosting licences, please e-mail to info@fontsmith.com.

Thank you,
Team Fontsmith.

