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1 Introduction

This document describes the level of support provided by Microsoft web browsers for the CSS Fonts Module Level 3 W3C Recommendation [CSS3Fonts:2018], published September 2018. The [CSS3Fonts:2018] CSS3 module describes how font properties are specified and how font resources are loaded dynamically. The contents of this module consolidate content previously divided into the CSS3 Fonts and CSS3 Web Fonts modules. The description of font load events was moved into the CSS Font Loading module.

1.1 Glossary

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the Errata.

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.


1.2.2 Informative References

None.

1.3 Microsoft Implementations

The following Microsoft web browser versions implement some portion of the [CSS3Fonts:2018] specification:

- Microsoft Edge

Each browser version may implement multiple document rendering modes. The modes vary from one to another in support of the standard. The following table lists the document modes supported by each browser version.

<table>
<thead>
<tr>
<th>Browser Version</th>
<th>Document Modes Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Edge</td>
<td>EdgeHTML Mode</td>
</tr>
</tbody>
</table>

For each variation presented in this document there is a list of the document modes and browser versions that exhibit the behavior described by the variation. All combinations of modes and versions
that are not listed conform to the specification. For example, the following list for a variation indicates that the variation exists in three document modes in all browser versions that support these modes:

*Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)*

### 1.4 Standards Support Requirements

To conform to [CSS3Fonts:2018], a user agent must implement all required portions of the specification. Any optional portions that have been implemented must also be implemented as described by the specification. Normative language is usually used to define both required and optional portions. (For more information, see [RFC2119].)

The following table lists the sections of [CSS3Fonts:2018] and whether they are considered normative or informative.

<table>
<thead>
<tr>
<th>Sections</th>
<th>Normative/Informative</th>
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<tbody>
<tr>
<td>1</td>
<td>Normative</td>
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<tr>
<td>2</td>
<td>Informative</td>
</tr>
<tr>
<td>3-8</td>
<td>Normative</td>
</tr>
</tbody>
</table>

### 1.5 Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and points of extensibility.

<table>
<thead>
<tr>
<th>Notation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>C####</td>
<td>This identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications.</td>
</tr>
<tr>
<td>V####</td>
<td>This identifies an intended point of variability in the target specification such as the use of MAY, SHOULD, or RECOMMENDED. (See [RFC2119].) This does not include extensibility points.</td>
</tr>
<tr>
<td>E####</td>
<td>Because the use of extensibility points (such as optional implementation-specific data) can impair interoperability, this profile identifies such points in the target specification.</td>
</tr>
</tbody>
</table>

For document mode and browser version notation, see also section 1.3.
2 Standards Support Statements

This section contains all variations, clarifications, and extensions for the Microsoft implementation of [CSS3Fonts:2018].

- Section 2.1 describes normative variations from the MUST requirements of the specification.
- Section 2.2 describes clarifications of the MAY and SHOULD requirements.
- Section 2.3 describes extensions to the requirements.
- Section 2.4 considers error handling aspects of the implementation.
- Section 2.5 considers security aspects of the implementation.

2.1 Normative Variations

The following subsections describe normative variations from the MUST requirements of [CSS3Fonts:2018].


V0002: Number values not supported

The specification states:

3.6. Relative sizing: the font-size-adjust property
   Name:               font-size-adjust
   Value:              none | <number>
   ...
   none
   Do not preserve the font's x-height.
   <number>
   Specifies the aspect value used in the calculation below to calculate the adjusted font size:

   EdgeHTML Mode

   Number values not supported.

2.1.2 [CSS3Fonts:2018] Section 3.7. Shorthand font property: the font property

V0011: The inherit value can be mixed with other sub-values

The specification states:

3.7. Shorthand font property: the font property
   Name:               font
   Value:              [[<font-style>] || <font-variant-css21> || <'font-weight'> || <'font-stretch'> ]?<font-size> [ / <'line-height'> ]?
                       <'font-family'> | | caption | icon | menu | message-box | small-caption | status-bar
**EdgeHTML Mode**

The *inherit* value can be mixed with other sub-values, for example:

```css
font: 40px inherit;
```

### 2.1.3 [CSS3Fonts:2018] Section 3.8. Controlling synthetic faces: the font-synthesis property

V0003: The font-synthesis property is not supported

The specification states:

```
3.8. Controlling synthetic faces: the font-synthesis property

Name:                font-synthesis
...
```

This property controls whether user agents are allowed to synthesize bold or oblique font faces when a font family lacks bold or italic faces.

**EdgeHTML Mode**

The *font-synthesis* property is not supported.

### 2.1.4 [CSS3Fonts:2018] Section 4.7. Font features: the font-feature-settings descriptor

V0001: The font-feature-settings descriptor is not supported

The specification states:

```
4.7. Font features: the font-feature-settings descriptor

Name:                font-feature-settings
...
```

This descriptor defines initial settings that apply when the font defined by an @font-face rule is rendered. ...

**EdgeHTML Mode**

The *font-feature-settings* descriptor is not supported.

### 2.1.5 [CSS3Fonts:2018] Section 6.3. Kerning: the font-kerning property

V0007: The font-kerning property is not supported

The specification states:

```
6.3. Kerning: the font-kerning property
```
Kerning is the contextual adjustment of inter-glyph spacing. This property controls metric kerning, kerning that utilizes adjustment data contained in the font.

**EdgeHTML Mode**
The `font-kerning` property is not supported.

### 2.1.6 [CSS3Fonts:2018] Section 6.4. Ligatures: the `font-variant-ligatures` property

V0008: The `font-variant-ligatures` property is not supported

The specification states:

#### 6.4. Ligatures: the `font-variant-ligatures` property

Name: `font-variant-ligatures` ...

Ligatures and contextual forms are ways of combining glyphs to produce more harmonized forms.

**EdgeHTML Mode**
The `font-variant-ligatures` property is not supported.

### 2.1.7 [CSS3Fonts:2018] Section 6.5. Subscript and superscript forms: the `font-variant-position` property

V0005: The `font-variant-position` property is not supported

The specification states:

#### 6.5. Subscript and superscript forms: the `font-variant-position` property

Name: `font-variant-position` ...

This property is used to enable typographic subscript and superscript glyphs. These are alternate glyphs designed within the same em-box as default glyphs and are intended to be laid out on the same baseline as the default glyphs, with no resizing or repositioning of the baseline. ...

**EdgeHTML Mode**
The `font-variant-position` property is not supported.
2.1.8 [CSS3Fonts:2018] Section 6.6. Capitalization: the font-variant-caps property

V0006: The font-variant-caps property is not supported

The specification states:

6.6. Capitalization: the font-variant-caps property

Name: font-variant-caps
...

This property allows the selection of alternate glyphs used for small or petite capitals or for titling. These glyphs are specifically designed to blend well with the surrounding normal glyphs, to maintain the weight and readability which suffers when text is simply resized to fit this purpose.

**EdgeHTML Mode**

The font-variant-caps property is not supported.


V0009: The font-variant-numeric property is not supported

The specification states:

6.7. Numerical formatting: the font-variant-numeric property

Name: font-variant-numeric
...

Specifies control over numerical forms. The example below shows how some of these values can be combined to influence the rendering of tabular data with fonts that support these features. ...

**EdgeHTML Mode**

The font-variant-numeric property is not supported.


V0010: The font-variant-east-asian property is not supported

The specification states:

6.8. East Asian text rendering: the font-variant-east-asian property

Name: font-variant-east-Asian
...

Allows control of glyph substitution and sizing in East Asian text.
**EdgeHTML Mode**

The `font-variant-east-asian` property is not supported.


V0004: The `font-feature-settings` property is not supported

The specification states:

6.10. Low-level font feature settings control: the `font-feature-settings` property

Name: `font-feature-settings`
...

This property provides low-level control over OpenType font features. It is intended as a way of providing access to font features that are not widely used but are needed for a particular use case.

**EdgeHTML Mode**

The `font-feature-settings` property is not supported.

### 2.2 Clarifications

There are no clarifications of the MAY and SHOULD requirements of [CSS3Fonts:2018].

### 2.3 Extensions

The following subsections describe extensions to the requirements of [CSS3Fonts:2018].

#### 2.3.1 [CSS3Fonts:2018] Section 3.6. Relative sizing: the `font-size-adjust` property

E0001: Percentage values are supported

The specification states:

3.6. Relative sizing: the `font-size-adjust` property

Name: `font-size-adjust`
...
Percentages: N/A

**EdgeHTML Mode**

Percentage values are supported.

### 2.4 Error Handling

There are no additional error handling considerations.
2.5 Security

There are no additional security considerations.
3 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.
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