

# How are Windows Runtime GUIDs represented in JavaScript?

[devblogs.microsoft.com/oldnewthing/20220404-00](https://devblogs.microsoft.com/oldnewthing/20220404-00)

April 4, 2022



Raymond Chen

One of the fundamental data types in the Windows Runtime is the `Guid`. In most languages, it is represented as a binary-formatted data type like `System.Guid` or `winrt::guid`. But JavaScript doesn't have a corresponding data type. So how are Windows Runtime `Guid`s represented in JavaScript?

As strings.

But strings in a special format.

If a Windows Runtime function accepts a `Guid`, the JavaScript projection accepts a string in one of the following formats:

Format	Description
<code>aaaaaaaaabbbbccccddeeffgghhiijkk</code>	Raw hex
<code>aaaaaaaa-bbbb-cccc-ddee-ffgghhiijkk</code>	Hex with dashes
<code>(aaaaaaaa-bbbb-cccc-ddee-ffgghhiijkk)</code>	Hex with dashes enclosed in parentheses
<code>{aaaaaaaa-bbbb-cccc-ddee-ffgghhiijkk}</code>	Hex with dashes enclosed in braces
<code>{ 0xaaaaaaaa, 0xbbbb, 0xcccc,  0xdd, 0xee, 0xff, 0xgg, 0xhh, 0xii, 0xjj,  0xkk } }</code>	C initializer

Letters `a` through `k` represent any hexadecimal digit. All parsing is case-insensitive. (That includes the `x` in the `0x` of the C initializer format.)

In all cases, leading and trailing whitespace are ignored. A whitespace character is one which is classified as whitespace in Unicode version 6.2, which was the latest version of Unicode at the time JavaScript support was implemented.

<b>Character</b>	<b>Code point</b>
CHARACTER TABULATION	U+0009
LINE FEED	U+000A
LINE TABULATION	U+000B
FORM FEED	U+000C
CARRIAGE RETURN	U+000D
SPACE	U+0020
NEXT LINE	U+0085
NO-BREAK SPACE	U+00A0
OGHAM SPACE MARK	U+1680
MONGOLIAN VOWEL SEPARATOR	U+180E
EN QUAD	U+2000
EM QUAD	U+2001
EN SPACE	U+2002
EM SPACE	U+2003
THREE-PER-EM SPACE	U+2004
FOUR-PER-EM SPACE	U+2005
IX-PER-EM SPACE	U+2006
FIGURE SPACE	U+2007
PUNCTUATION SPACE	U+2008
THIN SPACE	U+2009
HAIR SPACE	U+200A
LINE SEPARATOR	U+2028
PARAGRAPH SEPARATOR	U+2029

NARROW NO-BREAK SPACE	U+202F
MEDIUM MATHEMATICAL SPACE	U+205F
IDEOGRAPHIC SPACE	U+3000

The MONGOLIAN VOWEL SEPARATOR is the odd one out: It was originally classified as whitespace but lost that status in Unicode 6.3.

Whitespace is permitted in the C initializer format *anywhere*, not just after commas. Strange but true.

Going the other way is much simpler: If a Windows Runtime function returns a `Guid`, the JavaScript version returns lowercase hex with dashes (no braces or parentheses).

[Raymond Chen](#)

**Follow**

