What's the difference between UuidFromString, IIDFromString, CLSIDFromString, GUIDFromString…

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A GUID and a CLSID and an IID are all the same as a UUID, but there are separate functions for converting a string into a GUID, CLSID, IID, and UUID. Are they all equivalent? If not, what's the difference? And which one should I use?

The basic form for a UUID string is `xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx` where each `x` is a hexadecimal digit, case-insensitive. (I personally prefer all-uppercase.) All of the parsing functions under discussion use this basic form as their basis of exploration. Some functions expect the basic form to be enclosed in curly braces; others do not.

Let's start with `UuidFromString`. It takes a string in basic form *without* curly braces. As a special case, if you pass `NULL` instead of a valid string pointer, the function still succeeds and sets the result to `GUID_NULL`.

Next up is `IIDFromString`. This function takes a string in basic form *with* curly braces. It also has the behavior that passing `NULL` as the string results in success and `GUID_NULL`.

Slightly more complicated is `CLSIDFromString`. In addition to accepting a brace-enclosed string (which is treated as a GUID), it also accepts a ProgId. In the ProgId case, it returns the CLSID associated with that ProgId. For example, if you ask for `Paint.Picture`, it will return the GUID `{D3E34B21-9D75-101A-8C3D-00AA001A1652}`. As with the other functions, passing `NULL` is valid and results in `GUID_NULL`.

Last is `GUIDFromString`. This function is one of those "Not guaranteed to be supported beyond Windows Vista" functions, so you should probably steer clear. (Another clue that calling it is probably a bad idea: The function is not exposed in any header file or import library.) But if you insist: It accepts a brace-enclosed string, and `NULL` is *not* allowed. Furthermore, it ignores any garbage after the trailing brace. This function was not intended for public consumption, so these strange quirks are not entirely unexpected.

Let's summarize in a table, since that seems to be popular. I added a final column describing whether the function available in A/W variants or is Unicode-only.

Function	Expected format	NULL allowed?	Character set support
`UuidFromString`	`xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx`	Yes	ANSI and Unicode
`IIDFromString`	`{xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx}`	Yes	Unicode only
`CLSIDFromString`	`{xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx}` `ProgId`	Yes	Unicode only
`GUIDFromString`	`{xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx}*`	No	ANSI and Unicode

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