

**NAME**

idn2\_to\_ascii\_4i2 - API function

**SYNOPSIS**

```
#include <idn2.h>
```

```
int idn2_to_ascii_4i2(const uint32_t * input, size_t inlen, char ** output, int flags);
```

**ARGUMENTS**

const uint32\_t \* input  
zero terminated input Unicode (UCS-4) string.

size\_t inlen    number of elements in *input* .

char \*\* output  
pointer to newly allocated zero-terminated output string.

int flags       optional **idn2\_flags** to modify behaviour.

**DESCRIPTION**

The ToASCII operation takes a sequence of Unicode code points that make up one domain label and transforms it into a sequence of code points in the ASCII range (0..7F). If ToASCII succeeds, the original sequence and the resulting sequence are equivalent labels.

It is important to note that the ToASCII operation can fail. ToASCII fails if any step of it fails. If any step of the ToASCII operation fails on any label in a domain name, that domain name **MUST NOT** be used as an internationalized domain name. The method for dealing with this failure is application-specific.

The inputs to ToASCII are a sequence of code points.

ToASCII never alters a sequence of code points that are all in the ASCII range to begin with (although it could fail). Applying the ToASCII operation multiple effect as applying it just once.

The default behavior of this function (when flags are zero) is to apply the IDNA2008 rules without the TR46 amendments. As the TR46 non-transitional processing is nowadays ubiquitous, when unsure, it is recommended to call this function with the **IDN2\_NONTRANSITIONAL** and the **IDN2\_NFC\_INPUT** flags for compatibility with other software.

**RETURNS**

On successful conversion **IDN2\_OK** is returned; if the output label would have been too long **IDN2\_TOO\_BIG\_LABEL** is returned, or another error code is returned.

## SINCE

2.1.1

## REPORTING BUGS

Report bugs to <help-libidn@gnu.org>.

General guidelines for reporting bugs: <https://www.gnu.org/gethelp/>

Libidn2 home page: <https://www.gnu.org/software/libidn2/>

## COPYRIGHT

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## SEE ALSO

The full documentation for **libidn2** is maintained as a Texinfo manual. If the **info** and **libidn2** programs are properly installed at your site, the command

**info libidn2**

should give you access to the complete manual. As an alternative you may obtain the manual from:

**<https://www.gnu.org/software/libidn/libidn2/manual/>**