

**NAME**

idn2\_lookup\_u8 - API function

**SYNOPSIS**

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

```
int idn2_lookup_u8(const uint8_t * src, uint8_t ** lookupname, int flags);
```

**ARGUMENTS**

const uint8\_t \* src

input zero-terminated UTF-8 string in Unicode NFC normalized form.

uint8\_t \*\* lookupname

newly allocated output variable with name to lookup in DNS.

int flags

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

**DESCRIPTION**

Perform IDNA2008 lookup string conversion on domain name *src*, as described in section 5 of RFC 5891. Note that the input string must be encoded in UTF-8 and be in Unicode NFC form.

Pass **IDN2\_NFC\_INPUT** in *flags* to convert input to NFC form before further processing.

**IDN2\_TRANSITIONAL** and **IDN2\_NONTRANSITIONAL** do already imply **IDN2\_NFC\_INPUT**.

Pass **IDN2\_ALABEL\_ROUNDTRIP** in *flags* to convert any input A-labels to U-labels and perform additional testing. This is default since version 2.2. To switch this behavior off, pass **IDN2\_NO\_ALABEL\_ROUNDTRIP**

Pass **IDN2\_TRANSITIONAL** to enable Unicode TR46 transitional processing, and **IDN2\_NONTRANSITIONAL** to enable Unicode TR46 non-transitional processing.

Multiple flags may be specified by binary or'ing them together.

After version 2.0.3: **IDN2\_USE\_STD3\_ASCII\_RULES** disabled by default. Previously we were eliminating non-STD3 characters from domain strings such as `_443._tcp.example.com`, or IPs `1.2.3.4/24` provided to libidn2 functions. That was an unexpected regression for applications switching from libidn and thus it is no longer applied by default. Use **IDN2\_USE\_STD3\_ASCII\_RULES** to enable that behavior again.

After version 0.11: *lookupname* may be NULL to test lookup of *src* without allocating memory.

**RETURNS**

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

**SINCE**

0.1

**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/>

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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/>